Accounting Historians Journal

Volume 33
Issue 1 *June 2006*

Article 23

2006

Accounting Historians Journal, 2006, Vol. 33, no. 1 [whole issue]

Published by
The Academy of Accounting Historians

Praeterita
Illuminant
Postera

The Accounting Historians Journal

June 2006
Volume 33, Number 1

Research on the Evolution of Accounting
Thought and Accounting Practice

Published by
The Academy of Accounting Historians

Praeterita
Illuminant
Postera

The
Accounting
Historians
Journal

June 2006
Volume 33, Number 1

Research on the Evolution of Accounting
Thought and Accounting Practice

The *Accounting Historians Journal*
Volume 33, Number 1
June 2006

2006 OFFICERS

2006 TRUSTEES

In addition to publishing the *Accounting Historians Journal*, the Academy publishes *The Accounting Historians Notebook*, Monographs, and reprints of Accounting History Classics. Annual membership dues, including subscriptions to the *Accounting Historians Journal* and *The Accounting Historians Notebook*, are $45 (U.S.) for individuals, $75 (U.S.) for institutions and libraries and $10 for students. Inquiries concerning membership, publications, and other matters relating to the Academy (other than submission of manuscripts to the *Accounting Historians Journal*) should be addressed to Kathy H. Rice, The Academy of Accounting Historians, The University of Alabama, Box 870220, Tuscaloosa, AL, USA 35487.

Praeterita
Illuminant
Postera

The *Accounting Historians Journal*

June 2006
Volume 33, Number 1

AHJ EDITORIAL STAFF

The *Accounting Historians Journal* is a refereed, scholarly journal published semiannually in June and December, printed by the Birmingham Printing and Publishing Company, 3101 6th Avenue South, Birmingham, AL 35233. ISSN 0148-4182. *AHJ* does not assume responsibility for statements of fact or opinion made by its contributors.

ACCOUNTING HISTORIANS JOURNAL

Volume 33, Number 1 **June 2006**

CONTENTS

Point/Counterpoint

ACCOUNTING HISTORIANS JOURNAL

Statement of Policy

The *Accounting Historians Journal* is an international journal that addresses the development of accounting thought and practice. *AHJ* embraces all subject matter related to accounting history, including but not limited to research that provides an historical perspective on contemporary accounting issues.

Authors may find the following guidelines helpful.

1. Authors should provide a clear specification of the research issue or problem addressed and the motivation for the study.

2. Authors should describe the method employed in the research, indicating the extent and manner in which they intend to employ the methodology. Manuscripts are encouraged that draw on a variety of conceptual frameworks and techniques, including those used in other social sciences.

3. Manuscripts that rely on primary sources should contain a statement specifying the original materials or data collected or analyzed and the rationale used in selection of those source materials. Authors should provide the reader information as to how these source materials may be accessed.

4. Authors who use a critical or new theoretical framework to examine prior historical interpretations of the development of accounting thought or practice should include a discussion of the rationale for use of that framework in the manuscript.

5. In performing all analyses, authors should be sensitive to and take adequate account of the social, political, and economic contexts of the time period examined and of other environmental factors.

6. While historians have long debated the ability to assign causation to particular factors, we encourage authors to address and evaluate the probable influences related to the problem or issue examined.

7. Authors should clearly state all their interpretations of results, and the conclusions they draw should be consistent with the original objectives of and data used in the study. Interpretations and conclusions should be clearly linked to the research problem. Authors also should state the implications of the study for future research.

ACCOUNTING HISTORIANS JOURNAL

Guide for Manuscript Submission

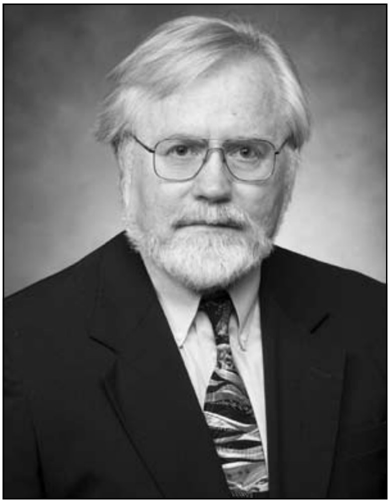
Manuscripts for review should be submitted by e-mail attachment to fleischman@jcu.edu and formatted in Microsoft Word. The identity of author(s) should not appear on the attached file — only on the accompanying e-mail transmission. Additional correspondence may be sent to Professor Richard Fleischman, Department of Accountancy, John Carroll University, University Heights, OH 44118 (telephone: 216-397-4443). There is no submission fee, although authors are urged to consider joining The Academy of Accounting Historians by completing the membership application form on the inside of the back cover. Papers which have been published, accepted for publication elsewhere, or are under consideration by another journal are not invited. The *Accounting Historians Journal* will accept a variety of presentation formats for initial submission as long as the writing style is reflective of careful scholarship. Notwithstanding, authors should attend to the following guidelines:

1. An abstract of approximately 100 words on a page that includes the article's title but no identification of the author(s) .
2. A limited number of content footnotes.
3. A limited number of tables, figures, etc., appended at the conclusion of the text, but whose positioning in the narrative is indicated.
4. References are to appear in brackets within the text. Specific page numbers are mandatory for all direct quotes but are optional otherwise.
5. A bibliography of all references cited in the text.

Upon acceptance or an invitation to revise and resubmit, authors will be sent a style sheet which must be followed conscientiously for all subsequent revisions of the paper. Once the article is accepted, the editor will request the submission of a diskette prepared in Microsoft Word. If time permits, authors will be sent galley proofs. However, the inclusion of additional material will be severely limited.

Authors will be provided with 3 copies of the *AHJ* issue in which the manuscript is published. Reprints may be ordered by arrangement with the publisher.

IN MEMORIAM: CELEBRATING THE LIFE OF BILL SAMSON



WILLIAM DONALD SAMSON (1947-2005)

Bill was a big man. Yet, even in Alabama's football stadium, you would know of his presence, hearing him without seeing him. He was an asset to every gathering. Richard Vangermeersch recollects how Bill and Joni were the lives of the party, from Australia to the U.K., and all points between.

Bill was a man of fierce loyalties – to Joni, of course, to Alabama, to accounting history and the Academy he once headed, to the multitude of his friends. Who else would have been able to make accounting history a front page story of the *Wall Street Journal*? Who else could have shamed his more conservative co-authors on the U.S. railroading project into wearing engineering caps at their presentations? Perhaps Bill's reverence for his mentor, Paul Garner, exemplifies his loyalty and his respect for the past.

Bill was one of the biggest hearted men I have ever had the privilege to know. Just ask the stray cats and dogs he and Joni rescued and welcomed into their home. Whenever I had occasion to visit Tuscaloosa, they took grand care of me.

The two articles that follow are offered as a tribute to Bill's remarkable contributions to accounting history. The first is the latest of a lengthy stream of archival research undertaken by Bill, Dale Flesher, and Gary Previts to extend to accounting history Alfred Chandler's belief that the U.S. transcontinental railroads were in many ways the first corporations of the modern type. The second paper, of a totally different genre, is the product of one of Bill's most heartfelt projects – to convince accounting educators of the possibilities for using Theresa Hammond's *A White-Collar Profession* for the dual purposes of generating awareness of accountancy's diversity issues while, at the same time, creating an interest in the profession's past.

Bill, we will miss thee.

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 3-24

Dale L. Flesher
UNIVERSITY OF MISSISSIPPI
Gary J. Previts
CASE WESTERN RESERVE UNIVERSITY
and
William D. Samson
UNIVERSITY OF ALABAMA

EARLY AMERICAN CORPORATE REPORTING AND EUROPEAN CAPITAL MARKETS: THE CASE OF THE ILLINOIS CENTRAL RAILROAD, 1851-1861

Abstract: This study of the annual reports of the Illinois Central Railroad (IC) from the 1850s supports a conclusion that the statements, as to form and content, were developed to serve the needs of two classes of investors and to inform the general community of the activities of the company. The need to report to the public as to the success of the company's role in its "social contract" to develop the state required details of a demographic nature, which were provided by the land commissioner. Operating results provided evidence of the ability to service the debts held by European investors and to inform British venture capitalists of the extent of the company's operations. This communication with the distant capital providers was a new development in financial reporting as the capital-intensive railroads experienced management and ownership separation on a scale not seen before. In summary, the IC provided annual reports more detailed and informative than those of other corporations of the period because of a need to provide European investors with evidence of management's activities.

INTRODUCTION

From as early as the 1850s, the Illinois Central Railroad (IC) published annual reports aimed at both the general, non-investing, American public and the European (primarily British) capital markets, which represented the majority of investors. Although the IC, because of the way it was founded, was a unique corporation that had a greater responsibility to the general public than do most for-profit corporations, its reporting provides an excellent example of duality reporting at its finest since its annual reports addressed the needs of both audiences.

The IC, sometimes called the "Main Line of Mid-America," was America's first coast-to-coast railroad system, extending from Lake Michigan in the north to the Gulf of Mexico. The IC was also America's first land-grant railroad, and thus an experiment in social economy. The transportation that the IC provided was the intended product of the U.S. Congress when northern senator Stephen Douglas of Illinois and southern senators Jefferson Davis of Mississippi (later president of the Confederate States) and William R. King of Alabama (later vice president of the U.S.) joined forces to provide an unprecedented form of federal subsidy that could link agricultural markets and shipping points in the emerging population centers in the Midwest and Mid-south.

The subsidy, in the form of federal land grants, was to shape the modernization of America's frontier. America's rich interior land was almost worthless without the access to markets that railroads were to provide. To opponents Senator King remarked [Carstensen, 1963, p. 128]:

> We are met by the objection that this is an immense grant – that it is a great quantity of land. Well, sir, it is a great quantity; but it will be there for five hundred years; and unless some mode of the kind proposed be adopted, it will never command ten cents.

This paper, based on the IC's corporate annual reports from the 1850s, analyzes the impact of the land grants (public investment) and more traditional private investment, primarily by British investors, on the railroad and the corresponding development of the American frontier. These corporate reports provided not only financial details to benefit the British capitalists who invested in the road, but also a longitudinal view of the results of the company's impact on the development of Illinois and related markets. Further, the farmers and merchants who were to be the principal customers and beneficiaries of the IC's services were also parties interested in the information provided in these increasingly detailed and complex annual reports. The analysis begins with the IC's first report and ends with the onset of the Civil War.

The remainder of this paper is organized as follows. The first section identifies the principal research questions, followed by a review of the origins and background of the IC. A section on the land-grant legislation of 1850 is provided to give the reader historic perspective. Next, the economic development and capital sourcing plan, especially as it pertains to its influence on financial statements for the period 1851 through 1861, is examined. An assessment of the content of the shareholder reports relative to the communication of operating objectives and economic development to the European investors follows. The paper concludes with observations about the research questions, including implications for further research.

RESEARCH QUESTIONS

The IC annual reports of the 1850s were quite detailed and information laden. Therefore, the principal research question addressed in this paper is, why did the IC management publish the type and amount of information found in them? In short, what dictated the form and content of these early corporate reports? Such reports were neither mandatory nor common among other types of entities. Other railroads, including the Pennsylvania, dating from 1847, and the Baltimore and Ohio, commencing in 1827, produced quite different reports in terms of style, content, and form.[1] By undertaking this archival investigation of an antebellum corporate enterprise, the hope is to add to the knowledge of the role of information provided to British capital markets during a period that has been seldom studied.

Although the IC is an important company to study for purely historical reasons, it is also important for contemporary reasons. Recently, the IC agreed to a merger with the Canadian National Railway Co., which creates a railway system extending from Halifax in the east, Vancouver and Seattle in the west, to New Orleans in the south, with Chicago as the geographic center. A further 15-year alliance with the Kansas City Southern Railway, which operates Mexico's Transportation Ferroviaria Mexicana, will produce a 25,000 mile rail network to capture fast-growing cargo traffic stimulated by the North American Free Trade Agreement. Again in the 21st century, the "Mainline of Mid-America" is being positioned to become the "Mainline of North America." More importantly, examining the financial disclosures of the early railroads gives insight into how new technology impacts accounting and corporate reporting. A parallel between the railroad revolution and the Internet revolution can be drawn.

---

[1]Noteworthy is the fact that railroads, even in their earliest years of development, presented lengthy annual reports with many tables and exhibits laden with data. Thus, the IC was not unique among railroads in this regard. By contrast, the annual reports of industrial companies fifty years later were "postcard" size with very little detailed information since such data were considered "proprietary."

BACKGROUND

The federal land-grant legislation of September 1850 marked the first time that public lands from the U.S. federal government were to be used to aid in the construction of a private rail line [Stover, 1975, p. 15].[2] Senator Stephen A. Douglas was the main supporter of the bill in Congress, with help in the House from Abraham Lincoln. An original bill in 1848, limited to public lands in Illinois, was narrowly defeated. In 1850, Senators King and Davis amended the bill to extend the grants to the southern states. With this new source of support, the bill passed the Senate in May and the House in September. Initially, there was concern that President Taylor would veto the bill because of his possible sympathies for New Orleans. Taylor was a plantation owner from Louisiana, and the bill appeared to favor Mobile over New Orleans. However, Taylor died in July 1850, shortly before the bill was approved by Congress. Fillmore became president and signed the bill on September 20, 1850, within three days after it had passed the House [Stover, 1975, pp. 19-21].

As noted in Senator King's statement in the introduction, the main argument in support of the legislation was the opinion that the federal land was worthless without a railroad in the vicinity, and no railroad would build where there was no population. However, if a portion of the land were given to the railroad, in checkerboard fashion, the remaining land still owned by the government would become far more valuable. Thus, the sale of the land could be used to finance the railroad, which in turn made both the railroad's land and the government's land more valuable. In reality, Congress viewed the land grants not as subsidies, but as investments to make federal land marketable.

As the Illinois legislature began meeting in 1851, there were three rival groups vying for the right to build the railroad in Illinois and receive the federal grant of over 2.5 million acres. The winning group, composed of Eastern capitalists, was led by Robert Schuyler ("America's Railroad King") and Robert Rantoul [Stover, 1975, p. 26]. This group's earlier successful development of the New York and New Haven Railroad seemed to be an important ingredient, given the need for the involvement of credible and experienced management. In return for the rights to the federal grant, the Schuyler/Rantoul group agreed to pay

[2] State governments had previously used land grants to support canal building [Baskin and Miranti, 1997, p. 133].

the state a tax consisting of a percentage of gross receipts. This tax, set by the legislature at seven percent, exempted the corporation from paying Illinois state and local taxes.[3] Eventually, the revenue from this tax enabled the state to pay off its debts from an ill-fated internal improvements program of 1837. The IC was officially chartered on February 10, 1851, when the Illinois governor signed the charter bill after passage by both houses of the legislature.

The IC is the only major rail carrier in the U.S. that operated under its charter name for more than 150 years. Chartered on February 10, 1851, parts of the IC system date back even further. For example, the West Feliciana Railroad in Mississippi, chartered in 1831 as the first railroad west of the Appalachians, became a part of the IC in 1892 [Stover, 1975, p. 228]. As noted previously, the IC was the first land-grant railroad in America. The land-grant details specified that the states of Illinois, Mississippi, and Alabama were granted a right of way through the public lands for the construction of a railroad to extend from the western end of the Illinois and Michigan Canal to Mobile, Alabama, by way of Cairo, with a branch to Dubuque, Iowa, by way of Galena and another to Chicago [Gates, 1934]. The Mobile and Ohio Railroad would be the southern land grant railroad to complete the link of the Great Lakes and Gulf Coast when the lines met on the Ohio River at Cairo.

Notable political and popular figures were associated with the IC. Its corporate attorney in the 1850s was Abraham Lincoln. Some of Lincoln's most famous cases were on behalf of the IC, and his son later became a director of the company. The promoters and senior managers of the early IC included many linked to important names in American financial circles. Jonathan Sturges (1782-1863), a founding director who participated in the syndicate to incorporate the IC, had learned business in the counting houses of Boston, and eventually formed his own investment concern [Johnson and Supple, 1967, p. 22]. Sturges' youngest daughter Amelia married J. Pierpont Morgan in 1861. Tragically, she suffered from tuberculosis and died on their hon-

[3] This exemption had far-reaching implications. When McLean County tried to assess the IC's property, corporate attorney Abraham Lincoln took the case to the State Supreme Court where the local exemption for both land and operating property was validated. The result was that buyers of railroad lands were content to delay payment on land notes for as long as possible so the land would stay under IC ownership and be exempt from taxes. As long as the landholders were willing to pay interest, the IC management was willing to be lenient with respect to payment terms [Decker, 1964, p. 13].

eymoon abroad [Baughman, 1966]. Another daughter of Sturges married William H. Osborn, who was to become a dominant figure in the IC from 1853 to 1882 [Cochran, 1953, p. 422]. Osborn, who became involved in 1853 when President Robert Schuyler "retired," is identified as the president of the IC as early as 1855 [Brownson, 1915, p. 41]. Popular and folk heroes identified with the IC abound. Samuel Clemens (Mark Twain) piloted IC steamboats on the Mississippi and Ohio Rivers from 1859 to 1861.[4] Train engineer "Casey" Jones died on the IC's "Cannonball Express" train wreck at Vaughn, Mississippi, in 1900. George B. McClellan and at least 19 other Civil War generals served as corporate officers of the IC either before or following the war. In fact, the 1857 annual report identifies McClellan (later Lincoln's opponent in the 1864 presidential election) as the only vice president [Stover, 1975]. Another future general, Ambrose Burnside (the inventor of sideburns), was the treasurer in 1860.

Within four years of being chartered, the IC had more than 600 miles of track, making it by the mid-1850s the longest railroad in the world, bisecting Illinois from Chicago to Cairo and veering westward at Galena into Iowa.

FINANCING THE IC

The incorporators' plan for financing the IC was simple and, to insiders, most attractive. They anticipated using the land grant as security for a bond issue, primarily to European investors, the proceeds of which would pay for construction. Thereafter the bonds could be paid off with proceeds from the sale of the land, whose value was enhanced by the passenger and freight transportation provided by the railroad. This plan would permit the incorporators to own the railroad and to operate it with minimal investment.[5] It was outlined in a letter in 1851 from one of the incorporators to a Boston business associate as follows [Johnson and Supple, 1967, pp. 134-135]:

> The fact is that it is expected to pay for the whole Road by the sale of lands – It would be rather a singular thing if it should turn out that this company should own a Road … and cost the stockholders [the present ones]

---

[4]Before a bridge could be built across the Ohio River, the IC exchanged freight shipments with the M&O via steamboat. Thus, coast-to-coast rail service was available even before the two lines were connected via the Ohio River Bridge.

[5]The leveraged buy-out artists of the 1980s merely were mimicking the business model of the "Railroad King" who won the bid to build and operate the IC.

nothing. … Come … see for yourself – all depends on the selling of the Bonds. Please keep this to yourself.

In March 1851, the IC board of directors held its first meeting, elected Schuyler as president, and authorized a deposit of $200,000 with the State of Illinois to guarantee good faith on behalf of the incorporators. The $200,000 came from the sale of stock to the 13 incorporators[6] [Stover, 1975, pp. 28-30]. The incorporators wanted to keep their cash investments at a minimum, and they would later respond to assessments of their stock that would far exceed their original plan or intention. Bond sales were slow, particularly in Europe where investors, especially in Great Britain, were wary of the State of Illinois because it had missed interest payments on several loan agreements related to the financing of earlier public works projects. However, by adding options to buy stock, large quantities of bonds were eventually sold in mid-1852 in both the U.S. and in Europe [Stover, 1975, p. 35].

In the fall of 1851, IC president Schuyler had dispatched Robert J. Walker, a former secretary of the treasury during the Polk administration, to England to sell IC mortgage construction bonds. Walker had many wealthy friends in Great Britain. He was to receive a one percent commission per dollar of debt placed. David Neal, an IC vice president, sailed with Walker on the *Atlantic*, the finest and fastest Cunard line ship. Upon reaching Liverpool, Neal continued to Holland to try to place the IC bonds with Amsterdam and Rotterdam investors. It was initially felt that the bonds would be easily placed because of the 2.5 million acres of land serving as collateral for the debt. Unfortunately for the IC, the missions of Walker and Neal failed miserably. No bonds were sold. Europeans wanted nothing to do with any security with "Illinois" on it, given the investors' experience with their 1837 Illinois bonds, $15 million of which were still outstanding and in default [Stover, 1975, pp. 32-35].

Another reason that the IC bonds could not be placed was that the IC was headed by Robert Schuyler, a "gambler, not a railroad man" in the eyes of the Europeans who had prior investment experiences with Schuyler railroads. Second, William H. Swift, a West Pointer and former army officer, was advising the British investment house of Barings Brothers that the IC land, which backed the bonds, was being appraised at too high a

[6]Actually, the incorporators subscribed to $1,000,000 of stock, but the initial assessment was for only 20% of the stock subscribed [Stover, 1975, p. 32].

value by company officials [Stover, 1975, p. 33]. In actuality, the 2.5 million acres were probably not worth more than $3 million in 1851, but company estimates placed their future value (1856) at a hundred times greater, an appraisal that seemed extremely far-fetched at the time but was to prove accurate. In addition to Barings, the House of Rothschild also turned down the offer to buy IC bonds. Walker and Neal returned to America in December 1851 without a single bond sold.

Spring 1852 brought new hope to the IC. First, $4 million of bonds were sold to U.S. investors. These bonds carried a seven percent interest rate with an option to buy ten shares of stock for each $1,000 bond. This latter feature made the bond sale successful. The IC directors realized that the equity had to be increased since the ownership interest could not be limited to only 13 investors. During the same time that the bonds were sold, the Michigan Central Railroad subscribed to $2 million of IC notes in exchange for the right to use the IC rail line into Chicago after it was built. The Michigan Central had no access into Chicago and was desperate. Consequently, despite the disdain that its management had for the over-leveraged IC, the Michigan Central helped the IC start its construction.

With this start-up capital raised, David Neal and George W. Billings sailed to England in March 1852 to try again to sell IC bonds. This time the English investment syndicate headed by Charles Devaux & Company bought $5 million of IC bonds. The interest rate was six percent and the owner of each $1,000 bond was given the option to acquire five shares of IC stock. Again, it was that option that made the loan attractive to the Devaux syndicate. In addition, extant copies of the bonds (see Exhibit 1) indicate that the investors were allowed to pay in the loaned amount in ten quarterly installments starting in August 1852 and ending on October 1, 1854. This payment schedule coincided with the IC's need for financing its construction progress. With the bond issue fully subscribed by August 16, 1852, Neal and Billings set sail for America knowing that the IC had the financing that would guarantee the construction of the railroad [Stover, 1975, p. 35].

The IC's construction began, but scandal soon overtook the organization. Schuyler, the IC's absentee, part-time president, was its first wreck even before the trains began running. Between the fall of 1853 and the summer of 1854, Schuyler found that holding the dual roles of both the president and the transfer agent for the New York and New Haven Railroad, in addition to his presidency of the IC, was too tempting, and he succumbed

Accounting Historians Journal, Vol. 33 [2006], Iss. 1, Art. 23

EXHIBIT 1

Illinois Central 1852 Installment Bond


ILLINOIS CENTRAL RAIL-ROAD COMPANY.

PROVISIONAL CERTIFICATE.

No. 1700

Provisional Certificate for One Construction Bond of $1000.-

or at 4s. 2d. Sterling, per Dollar, £208. 6. 8. Sterling.

This Certifies, That the Bearer of [illegible] will be entitled to receive Sixty Dollars, at the office of the Company, in New-York, or at the Exchange of 4s. 2d. of Messrs. [illegible] Bernards & Co., Lombard Street, London, at the option of the holder, the sum of £12. 10. 0. Sterling, per annum, payable half yearly on the 1st April and 1st October. The Construction Bonds of the ILLINOIS CENTRAL RAIL-ROAD COMPANY, are payable in 1875, at par in the City of New-York, or in London, (at the Exchange of 4s. 2d.) by the sum of £208. 6. 8. Sterling, at the option of the holder, and are also redeemable at any time at a premium of Twenty per cent. (at the same exchange if redeemed in London,) on notice given by the Directors of the Company. The Bonds are secured by a Mortgage on the Railway, Station Lands, &c., and by Two Millions of acres of [illegible] give the Bearer of them a preference in all the proceeds of the Railway.

The Bearer of the present Provisional Certificate, has paid 136 Dollars or at 4s. 2d. for the Dollar, £28. 6. 8. and engages to pay 864 Dollars, or at same exchange £180 still remaining due, in nine [illegible] of 96 Dollars, or £20 each, payable every three months as follows,

1st OCTOBER, 1852, 1st JANUARY, 1853, 1st APRIL, 1853, | 1st [illegible], 1853, 1st OCTOBER, 1853, 1st JANUARY, 1854, | 1st APRIL, 1854, 1st JULY, 1854, 1st OCTOBER, 1854,

The Bearer has also the right to pay up the whole or any part of the Instalments not due, on which interest will be paid at the rate of Six per centum per annum as above provided. After the payment of the last Instalment, these Provisional Certificates will be exchanged for the definitive Construction Bonds, having the half yearly interest warrants attached, but until that exchange has been effected, the payments of interest will be made on the presentation of the Provisional Certificates, which will be accordingly stamped.

In the event of the nonpayment of any of the Instalments at the stipulated times, interest will be chargeable thereon at the rate of Six per cent. per annum, and after a delay of Two months, the Company shall have the right of selling by duplicate such Provisional Certificate on which one or more payments shall be in default.

Office of the Illinois Central Rail-Road Co.

New-York, August 16, 1852.

Secretary. President.

Second Instalment, $96, at 4s. 2d., £20 due 1 October, 1852, has been duly paid.

Third Instalment, $96, at 4s. 2d., £20 due 1 January, 1853, has been duly paid.

Fourth Instalment, $96, at 4s. 2d., £20 due 1 April, 1853, has been duly paid.

Fifth Instalment, $96, at 4s. 2d., £20 due 1 July, 1853, has been duly paid.

Sixth Instalment, $96, at 4s. 2d., £20 due 1 October, 1853, has been duly paid.

Seventh Instalment, $96, at 4s. 2d., £20 due 1 January, 1854, has been duly paid.

Eighth Instalment, $96, at 4s. 2d., £20 due 1 April, 1854, has been duly paid.

Ninth Instalment, $96, at 4s. 2d., £20 due 1 July, 1854, has been duly paid.

Tenth Instalment, $96, at 4s. 2d., £20 due 1 October, 1854, has been duly paid.

CANCELLED CANCELLED CANCELLED CANCELLED

to selling unauthorized shares of the New York and New Haven stock and pocketing the proceeds. When Schuyler became ill in early July 1854, Morris Ketchum, the locomotive builder and one of the IC's founders, took over Schuyler's duties and uncovered his misdeeds. Schuyler resigned from all of his posts and fled to Canada. Even though the IC was not involved in the fraud, European investors were shaken. By late August 1854, IC bond prices had fallen to 62% of their face amount with the stock plummeting as well [Stover, 1975, pp. 35-36].

The commencement of operations, however, soon led investors to forget the Schuyler matter. During the next two years, European ownership of IC securities increased. The price of the IC securities rebounded as the farmland sales in Illinois were being promoted throughout the European continent. By 1856, 80,000 shares of IC stock ($100 par value) and $12 million of bonds were held by European investors, primarily British. The bonds, because of the right to subscribe to stock, were an attractive but speculative investment. In particular, the subscription price of $20 controlled the $100 par stock. This was a highly leveraged way of speculating in the completion of the railroad. The British ownership of IC securities amounted to over 50% of the outstanding subscribed shares; Dutch and American investors each owned 15%. Thus, within the U.S., the IC was viewed as a foreign-owned corporation. Among the largest IC shareholders were noteworthy Englishmen such as Richard Cobden, William Gladstone, John Bright, and Samuel Cunard (the shipping magnate).[7]

Investors were caught off guard on August 10, 1854, when the IC demanded a $5 per share call against the common stock subscribers. This call was followed by another $5 per share call on December 10, 1854. These calls for additional capital contributions were a surprise because the shareholders had subscribed to the IC stock believing that their $20 down payment for each $100 share would be the extent of their investment. This understanding had been based on the early leverage strategy employed by the initial directors. Actually, the 1854 assessments were due to cost overruns on construction

By 1857, IC stock was selling for $120 per share, and bonds were selling at par or higher. According to the *American Railroad Journal*, "no other Company enjoyed the unlimited confidence of money lenders of England and America to the same extent," as the IC [Corliss, 1951, p. 92]. This rapture was quick to change. The Panic of 1857 affected all companies in America. Illinois land speculators who had borrowed to buy federal land on the expectation of rising land prices were hard hit. This, in turn, led to bank foreclosures and land sales at distressed prices. The European investors became concerned about the value of their collateral, the two million unsold acres that the IC held. The value of the land from the federal grant again became an important issue to European investors. By September 1857, there had been more calls on equity investors for capital. At the same time,

[7]Gladstone, Cobden, and Bright were all members of the British Parliament at various times in their careers. Gladstone, a former Chancellor of the Exchequer, became prime minister in 1868. In his early career, he had been junior lord of the Treasury and under-secretary for the colonies. In 1844, he had been responsible for the passage of a railway bill. Cobden and Bright were defeated in the 1857 election, and Gladstone was put out of office that year because of the change in prime ministers. As a result, all three seemed to have leisure time available to deal with IC issues.

both stock and bond prices had dropped about 50% during the year. This led to British investors forming the London Protective Committee. William Gladstone, a former Chancellor of the Exchequer, was elected the head of the group. The IC's 1858 annual report to shareholders noted, with respect to these London meetings [IC, March 16, 1859, p. 2]:

> ...no direct representative of the company, intimate with its affairs and fully cognizant of the various ramifications of its interests, is present to take part in the discussions, can hardly fail to be injurious to the general interests, and the Directors respectfully suggest to the English Shareholders that at least sixty day's notice of any such meeting and its objects, be given, that, if possible, one of their number may be present.

From the time the first bonds had been issued in 1852, the British shareholders had exerted a powerful influence on the affairs of the IC, but the Panic of 1857 caused the overseas investors to seek even more control over the company's operations. The 1858 annual report stated that two gentlemen from the London Protective Committee had visited Chicago to examine the company's books. It is likely that they also inspected the railroad's assets, including the constructed line and the unsold acres of land. Apparently, this visit was positive for both sides, and the result was an attempt to arrange a line of communication between management and the English investors [IC, 1857, p. 2].

In 1859, Gladstone appointed Richard Cobden to come to America to evaluate the true condition of the IC. Cobden was reportedly impressed with what he saw. After seeing the quality of the company's lands, Cobden wrote back to England of his support for President Osborn and his endorsement of the fiscal policies of the company [Stover, 1975, p. 37]. In return for his support, Cobden had a town named for him in southern Illinois as did other British shareholders Lawrence Heyworth and Sir Joseph Paxton [Corliss, 1951, p. 92]. The 1859 annual report [IC, 1859, p. 1] noted:

> At the urgent request of the London Committee, the Directors deferred calls [assessments] in 1858 and 1859, although they believed then, as they do at the present moment, that the fact of this Company situated as it is, with unassessed capital, presenting itself as a borrower for short periods, at high rates of interest, has been the chief reason for the depreciation of its securities in public estimation.

The "interference" with the London Protective Committee was then discussed [IC, 1859, p. 2]:

> *London Committee:* The experience of the past year has confirmed the Board in the opinion expressed in the last annual report, that it is not practicable to act with sufficient promptness and efficiency in concert with a Committee of Shareholders in London, inasmuch as a decision upon the Company's affairs cannot be speedily arrived at by correspondence: therefore the Board will consider their relations with the Committee as terminated, unless otherwise directed at the next meeting of the Shareholders. We are informed that a majority of the present Committee concur in this opinion.

EARLY CORPORATE REPORTING, 1851-1861[8]

At a time when the patterns and expectations about the content of published annual reports were not well established, the IC was thorough in its reporting. In retrospect, the European investors should have been able to get a reasonable understanding of the company's operations from the published reports. The stockholder report series began with a three-page report dated November 20, 1852. That report covered the activities from the founding of the company on February 10, 1851 through November 1, 1852. A rudimentary receipts and expenditures statement and a budget (ways and means) statement are all that accompany the single-page letter of President Schuyler.

This first report provides few clues about the capital formation and construction issues that would develop in the years to follow. This is not unexpected given the fact that most of the issues had not yet been worked out and probably no real plans had yet been developed. The next report (from approximately November 1852 to December 31, 1853) has not been located although it is listed in the catalog at the Newberry Library. The next available report, which contains financial statements for 1854, although dated January 1, 1855, is addressed to the Directors of the Road. There were 441 shareholders identified as subscribing to 127,690 shares as of that date. The statements provided in the 1854 report are identified with the capital letters A, B, C, and D. The four are (A) a type of balance sheet, (B) a form of expenditures statement, (C) a unique interest fund state-

[8]The IC annual reports are available at the Newberry Library in Chicago [see Mohr, 1951, for holdings], the Williams Library at the University of Mississippi, and the Bruno Library at the University of Alabama.

ment, and (D) a budget (ways and means) reporting the status of bonded indebtedness.[9] The latter two appear to respond to the terms of the mortgage bond indenture agreement of June 23, 1852, between the IC and the bond trustees. The terms of the agreement, as detailed in sections six, seven, and eight of the indenture, appear to establish a special account for the funding of interest payments. Steps were taken to prioritize interest payments, including assigning operating revenues for that purpose as needed and earmarking 250,000 acres of land as security for the payment of interest.

By the end of 1855, the first full year of operations, the report had expanded to over 50 pages of fine print. The financial statements are provided on four pages (pp. 13-16) and follow the pattern of the previous year but without the alphabetic designators. Although there was no external auditor, the statements for years after 1854 were examined and approved by a three-man audit committee of the board of directors.

The need to produce such summary statements from detailed records, as found in these early years, versus using the records themselves seems clear. There was no "income statement" because operations did not begin until late 1854. Also, the company did not begin public land sales until October 1, 1854, although, as indicated earlier, land had been pledged as security on various bond issues and to secure the interest fund.

A full balance sheet appears for the first time for the year ended 1856. Each line of the balance sheet is keyed to abstracts, identified as A through H and printed immediately below the balance sheet, that provide details on the capital stock, the construction bonds, the free land bonds, and the other keyed lines on the balance sheet; e.g., short-term debt (scrip) and floating (working capital) liabilities. The statement set concludes with a novel determination of net earnings, which is then reconciled with the interest fund to assure adequacy of that account. The next year's statements follow this pattern of reporting, and a

[9] Alphabetic designation of reports, it should be observed, was found to be a common practice in the Baltimore & Ohio Railroad statements beginning shortly after it was established in 1827 [Previts and Samson, 2000]. However, the B&O statements are different in content. So it does not appear that the IC was simply following the pattern of other established roads, but more likely was responding to the information needs of the British creditors who were concerned about the integrity of their interest payments and the related principal. Lardner [1850, p. 424] referred to detailed reports with numbered statements in his 1850 book on railway economics. He stated that such practices were not typical in Britain, but were used by Belgian railroads.

resume of cash transactions (a cash-flow statement with full particulars) is added. With minor exceptions, through the year ended 1861, the form and content of the IC financial statements seem to follow what was established by 1856, with a balance sheet detailing the assets committed to the interest fund as the principal statement. The IC's income statement, designated as the "Interest Fund Account" (see Exhibit 2), was not carried to stockholders' equity, but to an account essentially equivalent to "Bondholders' Equity." Again, this was an indirect capitulation to the British venture capitalists and their claims to the earnings streams of the company. The concept is in sharp contrast to proprietary theory, which would call for the residual to be credited to owners' equity.

Comparative columns are added in some instances in the annual reports, such as for expenditures, so that trends between years, starting in 1852, can be studied. In fact, the reports are useful benchmarking documents with many examples of five-year trends.

The 1857 report contains an opening statement that asserts that the annual report is indeed a report to provide information useful for investment decision making [IC, 1857, p. 1]:

> The Directors submit herewith the Reports and Statements of the Officers of the Company in charge of the several Departments of its business, to which the careful examination of the Shareholders is invited, as affording sufficient data to enable each proprietor to form his own judgment as to the value of his investment and the details of its administration.

Many examples can be found of analyses of managerial decisions; for instance, the 1859 report [IC, 1859, p. 6] includes a study of the advantage of burning coal over wood. Finally, the economic development of the region is highlighted.

REGIONAL ECONOMIC DEVELOPMENT REPORTING

Beginning with 1854, the tenor of the annual reports began to change with respect to the information content about the railroad's impact on economic development. The 1854 report referred to the growth of new towns along the line and the financing by bankers of coal fields in the vicinity of the railroad. Economic development was occurring and following the path of the railroad. The report [IC, 1854, p. 1] states that:

> The Prairie lands of Illinois are the garden of North America, and when peopled will become the granary of

EXHIBIT 2

IC Interest Fund Account, 1856

ABSTRACT I. INTEREST FUND ACCOUNT.

CREDIT BY RECEIPTS FROM OPERATION:

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Passengers	$60,986 30	$58,978 31	$84,676 43	$106,357 85	$100,443 56	$107,568 51	$93,995 17	$87,459 60	$110,651 12	$112,377 51	$51,682 52	$50,831 45	$1,064,978 46
Freight	78,555 99	57,872 46	77,819 90	86,443 65	86,075 49	82,393 85	77,169 96	118,108 05	109,505 82	111,397 03	85,567 10	67,578 31	1,037,987 55
Extra Baggage	158 84	296 80	429 74	782 10	1,444 01	1,199 50	965 31	721 51	647 82	509 55	796 54	657 81	8,584 49
Mails	4,649 06	4,649 07	4,649 07	4,645 93	4,645 93	4,645 93	4,686 90	4,686 90	4,686 90	4,649 25	4,649 26	4,649 26	55,898 46
Express	1,957 50	1,957 50	1,957 50	1,957 50	1,957 50	1,957 50	1,998 52	1,998 88	1,998 83	1,500 00	1,028 58	1,628 58	22,858 54
Rents	502 98	502 98	502 98	502 98	502 98	502 99	486 83	486 83	456 84	924 06	224 06	950 07	7,285 58
Rent of Road	3,035 57	2,796 07	4,119 87	5,501 81	6,955 66	9,685 96	9,525 10	8,130 98	10,677 46	9,242 33	8,646 26	6,514 63	84,881 70
Rent of Engines and Cars										2,625 01	2,625 01	2,625 02	7,875 04
Storage and Dockage	199 58	199 58	199 58	199 58	199 58	199 59	271 09	271 09	271 09	588 91	588 91	581 17	3,069 75
Totals	$150,040 84	$126,752 77	$174,355 07	$206,341 41	$202,224 02	$208,093 89	$189,099 18	$221,893 82	$238,925 88	$244,123 65	$187,058 19	$145,655 25	$2,293,964 57

To this add amount credited Operation by Construction Account, being for conveyance of Construction Materials, charged at one cent a ton per mile	24,496 29
Also, Fuel and Supplies used on Construction Engines, the same having gone into Operation Expenses	22,050 00
Also, Balance of Profit and Loss Account	16,658 20
Gross earnings from all sources, 1857	$2,357,208 06

LESS OPERATION EXPENSES:

Insurance		$5,017 96
General Expenses—		
Sundry Expenses	$30,882 93	
Advertising	2,467 64	
Stationery and Printing	25,277 84	
Telegraphing	5,023 44	
Foreign Agencies	34,209 05	98,360 90
Maintenance of Way—		
Repairs of Road	$351,405 79	
Repairs of Bridges	11,929 43	
Repairs of Hand Cars and Road Tools	10,801 18	374,136 40
Station Expenses—		
Station Agents and Clerks	$80,090 38	
Station Labor	86,142 64	
Station Expenses	38,512 68	
Pumping Water	29,078 35	
Switchmen and Watchmen	32,357 72	
Repairs of Station Buildings	13,558 66	
Repairs of Water Works	11,647 16	300,987 59
Maintenance of Machinery—		
Repairs of Machinery in Shops	$20,289 23	
Repairs of Passenger Cars	52,684 45	
Repairs of Freight Cars	88,944 42	
Repairs of Coal Cars	6,736 37	
Repairs of Passenger Engines	62,805 13	
Repairs of Freight Engines	79,889 49	310,850 00
Forward		$1,089,361 94

Train Men— Forward		$1,089,361 94	
Passenger Conductors and Brakemen	46,445 94		
Freight Conductors and Brakemen	44,776 00		
Passenger Engineers and Firemen	38,545 73		
Freight Engineers and Firemen	51,853 08		
Cleaning Engines	29,701 40	211,322 15	
Supplies—			
Oil	$44,674 23		
Tallow	1,846 54		
Waste	5,847 41		
Baggage Checks and Badges	1,334 28		
Hauling Supplies	6,518 09	60,220 55	
Salaries		78,437 68	
Fuel—			
Preparing Fuel	$101,635 38		
Wood	158,112 00		
Coal and Coke	21,860 74	281,608 12	
Legal Expenses		6,162 20	
Snow Expenses		25,135 26	
Operating St. Charles Air Line		1,914 84	
Claims—			
Damages to Persons	$3,278 98		
Damages to Property	4,313 05		
Damages to Stock	16,275 85		
Lost and Damaged Frieght	14,850 95		
Lost Baggage	1,716 02	40,429 85	
Repairs of Fencing		1,639 05	1,791,231 14

Leaving net earnings for 1857, from Operations of Road		565,971 92
From this deduct Charter Tax	145,645 84	
And balance shown at debit Interest Fund account, per last Report	28,852 60	174,498 44
		$391,473 48
Add amount arising from sales of Interest Fund Lands, etc., as per Land Office Report		300,529 44
Net balance at credit, as shown in General Balance Sheet		$692,002 92

> the Mississippi. The Illinois Central R.R. passes through the best of them, bringing them within easy reach of a market. Its lands also include large and valuable Coal fields.

When rail operations began, management presented financial information in great detail, including monthly revenues and costs at each depot along the line. Revenues by depot were also listed by the nature of the item shipped. The 1855 report included a spreadsheet with 32 columns for the transportation of different types of commodities, including wheat, rye, hogs, whiskey, apples, butter, cheese, and coal. Such detail, in ever-declining print size, continued throughout the pre-Civil War era. By 1860, the spreadsheet had 42 columns, all prepared without benefit of computer. The IC management also provided extensive commentary on the economic environment within which the company operated. For instance, in the 1855 report, a table listed every station along the line, with columns for the population, the number of houses, and the number of churches, schools, stores, hotels, mills, factories, and physicians in 1850 and 1855 [IC, 1855, p. 3]. The 1855 report went on to mention the growth in the importance of coal traffic on the railroad: "We are fully persuaded that the coal traffic will become one of the most important elements of profit to this road" [IC, 1855, p. 4]. The report also included a forecast of $2.5 million of income for 1856 and a prediction that the road could be operated for fifty percent of its gross revenues.

Given that the IC owned a great deal of land, it was only appropriate that the annual report discuss the sale of land to settlers, which amounted to $5,598,577.83 for 528,863 acres, or over $10 per acre in 1855. The 1855 report also mentioned that since the 1851 grant, the federal government had disposed of nearly three million acres of land within 15 miles of the company's tracks, and that the counties adjacent to the railroad had experienced a population increase of over 250,000 between 1850 and 1855 [IC, 1855, p. 5]. At the time the report was issued in March 1856, the IC had 515 stockholders, mostly British, holding 129,256 shares, each share having thus far been assessed for an average of $20 [IC, 1856, p. 9].

Management identified itself with the economic development in the region in the 1855 report with the following paragraph [IC, 1855, pp. 10-11]:

> …an examination of the statistics of the progress of the country since it has been opened by railroad com-

> munication, evidences the great value of the Company's lands, from which, in the opinion of the Board, the entire cost of the road will be realized, leaving free of cost to the Stockholders, the revenues of this great highway, which unites the waters of the Northern Lakes, with those of the Ohio and Mississippi, soon to be joined at Cairo by the Mobile and Ohio Railroad, … and will, when completed, form the great avenue of communication from the Northern States, to the important cities of the Gulf of Mexico.

The above comment was after the 1854 assessment call on stock subscribers, yet management still was maintaining that the entire cost of the road would be paid for from land sales, leaving the revenues "free of cost to the Stockholders."

In the annual report section entitled the "Report of the Land Commissioner," there were indications that the report might have some public relations or marketing objectives, a factor not atypical from modern annual reports.[10] It was noted that some of the company's land "is rolling, undulating like the waves of the ocean under the influence of a gentle breeze" [IC, 1854, p. 42]. Other pages celebrated the fertility of the soil, the massive deposits of coal and other minerals, and the fact that the lands were well watered. This line of argument concluded with the impact on economic development [IC, 1854, pp. 43-44]:

> In no other instance, probably, have such abundant benefits flowed from like causes. To the Government, the lands were comparatively valueless; to the State, they were in no way profitable; to the farmers, their productiveness was of no avail, while the quarries of stone and marble, and mines of coal with which the lands abound, were wholly undeveloped. … This Company took these lands thus comparatively valueless…, and by the expenditure of about twenty millions of dollars, imparted vitality to the whole matter by the construction and equipment of this road.

In the event that stockholders, many of whom were in far off England, failed to understand the underlying meaning of the preceding statements, a concluding paragraph attributed to the company president bragged [IC, 1854, p. 46]:

> The gain to the State has been a largely increased popu-

[10] For a study of the public relations and marketing aspects of annual reports, see Graves et al., 1996.

> lation of industrious, intelligent, and enterprising citizens, chiefly producers, a very heavy increase of taxable property, an immense acquisition of trade and capital, and seven per cent of the gross receipts of this road, which will soon go far towards relieving the people from all taxation for State purposes.

President Osborn was publicizing the economic progress of the state being served by the company, thereby promoting the IC's cause. Whether this was for the purposes of encouraging further land sales or merely an attempt to appeal to the penurious interests of European investors cannot be known.[11] Nevertheless, it should have accomplished both purposes.

The 1856 annual report continued the story of economic development, with analyses by the directors of changes that had occurred in virtually every town along the line. For Kankakee, it was noted that the population had swelled to 3,000 and that "this will become a smart inland town, being beautifully situated; eligible lots are worth $750 to $1,200. It is difficult to realize that 3 years since the tract of timber, about 900 acres, on which the town is located, was sold at $15 per acre." For most towns and villages, the report was glowing with respect to development. For Cairo, it was noted that land prices had doubled from the preceding year [IC, 1856, p. 2].

Much of the 1857 annual report was devoted to the problems the company had faced due to the Panic of 1857, a major snowfall in January and February, and record floods late in the year. All of these dislocations slowed railway operations. Still, there was room for continued discussion of economic development. For example, it was noted that on the west side of the tracks from Calumet to Mattoon, a distance of 150 miles, there had been erected 639 dwellings, 400 out-buildings, 114 orchards, and 56,352 plowed acres, none of which existed a few years earlier [IC, 1857, p. 9].

The question remains as to why IC management elected to publish such detailed annual reports, given that they were not

[11] The European investors, noting the extensive and "lavish" IC advertisements for land in their newspapers and magazines had been concerned about the "waste" of money. However, the ads did seem to support the outcome of drawing large numbers of European immigrants as the availability of rich, cheap farm land was appealing in a place where land was held by the nobility and the landless worked for this gentry. Victims of the Irish potato famine were also targets of the ads. The IC reports were intended to soothe the European investors' concern that the ads were a waste of money.

mandated to do so by the corporate charter. It appears that both subsequent contracts, (1) the bond indenture with British investors and the corresponding need to establish organizational legitimacy, and (2) the need to promote land sales, were addressed by the form and content of the annual reports. Such detail also might have been a way of signaling directors and distant investors that management had control over operations. To this end, writing to J. Newton Perkins, the treasurer, in July 1856, Osborn observed [Cochran, 1953, p. 423]:

> I do not think any of them [directors] are aware of what an immense machine this is to handle and I do wish them to understand more fully the details of this enterprise. I am left alone to this business and have no time for my family and for those hours of leisure which the other gentlemen enjoy.

If Osborn thought the directors did not understand the extent of operations, he surely had even stronger feelings about the distant European venture capitalists.

Management was desirous of reporting more than financial numbers. In the broadest sense of corporate reporting and communication, the accounting that occurred went "beyond the numbers" to include evidence relating to economic development. Management indeed believed that the IC was the core of economic development in the Midwest, and that development was a virtue for which the IC should be recognized. Ultimately, the IC was the source of many precedents. Later land-grant railroads adopted the IC's classification and appraisal system as well as its contract and credit systems. In addition, the IC's colonization and advertising techniques were later used by other land-grant railroads [Decker, 1964, p. 101].

SUMMARY AND CONCLUSIONS

This study of the earliest annual reports to shareholders of the IC supports a conclusion that the statements, as to form and content, were developed to serve the needs of two classes of statement users, European investors and politicians, on the one hand, and the general community on the other. The balance sheet orientation and the interest fund emphasis indicate the need to provide the European bondholders with the data required by the bond indenture. A preliminary and supportable premise of this work is that the bond indenture was the legal agreement and document that drove the development of the IC's financial report content. At the same time, the European stockholders demanded more information than would an investor who could see the trains passing by on a daily basis, or who could see land being sold and farms and towns being developed. Further, the need to report to the public as to the success of the company's role in its "social contract" to develop the state required the details of transactions of a demographic nature, which were provided by the land commissioner. Operating details, on a station-by-station basis, also served as evidence of the impact of the railroad's service in areas that had heretofore been wilderness. In modern parlance, the details of the reports might be rationalized by the need to establish organizational legitimacy [see Deegan, 2002; Milne and Patten, 2002].

Alternatively, a critic might suggest that instead of trying to impress readers with the quality of reporting, management was merely trying to defend itself against investor criticisms with a quantitative response in the form of detailed analyses of routine items. The large quantity of data helped to hide recognition of conceptual issues for which management either had no answers or for which publication would cast the company in an unfavorable light, such as the deduction of depreciation expense.

During the 1850s, the IC was more than a railroad; it was the change agent in a major social experiment, an attempt by government to foster economic development by using raw, fertile land to motivate not only corporate investors, but to attract a productive population as well. The glue that held this experiment together was the financial capital provided by European investors. This experiment, as detailed in the narrative of the annual reports to shareholders, proved successful, at least that is the conclusion based on the information provided by IC management. Population and agricultural productivity swelled, despite major disturbances, including the Panic of 1857.

This project has assisted in identifying several reporting practices that had not heretofore been acknowledged. Examples are the early use of cash-flow statements, the identification of "net earnings," and extensive social economic reporting. Perhaps a more important example is the British investors' practice of sending representatives to America to examine (audit?) the IC during the late1850s. To what extent this can be compared to the external audit of today is conjecture at this point, as well as whether this was the start of British auditors coming to America on behalf of English investors as occurred extensively several decades later. In any event, the dispatch of representatives of British investors was reassuring for those providers of capital as to the soundness of the IC assets, the progress made by the railroad's development program, and the reality of its financial numbers. Given Schuyler's scandalous departure and the volatile and speculative economic condition of the "Wild West," the use of an inspector/auditor representative seems most prudent given that the investors' agency problem was magnified by distance. Finally, while not original with the IC, additional assurance of proper control over funds was ensured by the use of the audit committee of the board of directors.[12]

The examples in the preceding paragraph are not necessarily to be construed as "firsts." However, these early uses support an *a priori* belief that the corporate form of business, and the need to please distant European investors, served to justify and instigate such reporting practices. Further study, employing a larger set of antebellum railroad reports, is needed to support this assertion. For example, the Mobile and Ohio Railroad, the IC's southern sister, first issued British notes in 1854 through George Peabody, commencing the M&O's relationship with the London capital market [Samson et al., 2003, p. 338]. The M&O annual reports seem to be equally informative as those of the IC.

Finally, this study represents an initial inquiry into the annual shareholder reports of the IC. This major corporation, which began as an economic development project to some and a leveraged land speculation to others, appears to have enjoyed success by the end of the period under study. Sharing in this success were European investors who made up the majority of the IC's owners and creditors. More than just sharing in the success, the European investors were seemingly responsible for the detailed financial reporting of the IC. The need to satisfy investors in another hemisphere led to detailed financial reporting at the IC and at future railroads that emulated it. This narrative ends with 1861, as by then the nation was engaged in a violent Civil War whose outcome would change the character and role of the IC and other railroads. That is another story.

REFERENCES

Baskin, J.B. and Miranti, P.J. (1997), *A History of Corporate Finance* (New York: Cambridge University Press).

Baughman, J.P. (1996), "J.P. Morgan, 1837-1913," in Chandler, A.D., McCraw, T., and Tedlow, R. (eds.), *Management Past and Present* (Cincinnati: South-Western College Publishing): 2-53.

Brownson, H.G. (1915), *History of the Illinois Central Railroad to 1870* (Urbana: University of Illinois Press).

Carstensen, V. (ed.) (1963), *The Public Lands* (Madison: University of Wisconsin Press).

[12]For more on the early use of audit committees, see Flesher et.al., 2005.

Cochran, T.C. (1953), *Railroad Leaders 1845-1890* (Cambridge, MA: Harvard University Press).

Corliss, C.J. (1951), *Main Line of Mid-America: The Story of the Illinois Central* (New York: Creative Age Press).

Decker, L.E. (1964), *Railroads, Lands, and Politics: The Taxation of the Railroad Land Grants, 1864-1897* (Providence: Brown University Press).

Deegan, C. (2002), "The Legitimizing Effect of Social and Environmental Disclosures: A Theoretical Foundation," *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3: 282-311.

Flesher, D.L., Previts, G.J., and Samson, W.D. (2005), "Auditing in the United States: A Historical Perspective," *Abacus*, Vol. 41, No. 1: 21-39.

Gates, P.W. (1934), *The Illinois Central Railroad and Its Colonization Works* (Cambridge: Harvard University Press).

Graves, O.F., Flesher, D.L., and Jordan, R. (1996), "Pictures and the Bottom Line: The Television Epistemology of U.S. Annual Reports," *Accounting, Organizations and Society*, Vol. 21, No. 1: 57-88.

Illinois Central Railroad Company (1851-1863), *Annual Reports*.

Johnson, A.M. and Supple, B.E. (1967), *Boston Capitalists and Western Railroads* (Cambridge: Harvard University Press).

Lardner, D. (1850), *Railway Economy* (New York: Harper & Brothers).

Milne, M.J. and Patten, D.M. (2002), "Securing Organizational Legitimacy: An Experimental Decision Case Examining the Impact of Environmental Disclosures," *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3: 372-405.

Mohr, C.C. (1951), *Guide to the Illinois Central Archives in the Newberry Library (1851-1906)* (Chicago: Newberry Library).

Previts, G.J. and Samson, W.D. (2000), "Exploring the Contents of the Baltimore and Ohio Railroad Annual Reports: 1827-1856," *Accounting Historians Journal,* Vol. 27, No. 1:1-42.

Samson, W.D., Flesher, D.L., and Previts, G.J. (2003), "Quality of Earnings: The Case of the Mobile and Ohio Railroad in the 19th Century," *Issues in Accounting Education*, Vol. 18, No. 4: 335-357.

Scott, D.R. (1931), *The Cultural Significance of Accounts* (New York: Henry Holt & Co.).

Stover, J.F. (1975), *History of the Illinois Central Railroad* (New York: Macmillan).

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 25-52

William D. Samson
UNIVERSITY OF ALABAMA
Cheryl L. Allen
MOREHOUSE COLLEGE
Richard K. Fleischman
JOHN CARROLL UNIVERSITY
and
Ida B. Robinson-Backmon
NORTH CAROLINA A&T UNIVERSITY

USING *A WHITE-COLLAR PROFESSION* IN ACCOUNTING COURSES: APPROACHES TO ADDRESSING DIVERSITY

Abstract: Accounting educators no doubt agree that diversity is an important and much neglected part of accounting education. They further recognize that it is difficult to incorporate this important topic into the accounting curriculum. This paper describes the efforts of various professors to expose business and accounting students to the evolution of diversity issues related to the accounting profession by using the book *A White-Collar Profession* [Hammond, 2002]. *A White-Collar Profession: African-American CPAs Since 1921* is a seminal work which presents a history of the profession as it relates to African-American CPAs and documents the individual struggles of many of the first one hundred blacks to become certified. This paper describes efforts of faculty at four different colleges to utilize this book in their teaching of accounting. Instructors found that students not only developed an enhanced awareness about the history of the accounting profession, but that other educational objectives were advanced, such as improved communication and critical thinking skills, increased social awareness, and empathy for others. African-American students, in particular, embraced the people in the book as role models, while most every student saw the characters as heroic in a day when the accounting profession is badly in need of role models and heroes. This is encouraging given the profession's concern with diversity and the attention and resources directed at increasing the number of minorities entering the profession.

Acknowledgments: Special thanks to Theresa Hammond for her involvement and generous help in this project. Also helpful were the comments of Rob Ingram given on an earlier draft of this paper. Thanks to Cheryl McWatters who shepherded the article through the review process and to an *AHJ* anonymous reviewer. The authors, of course, assume full responsibility for the contents of this paper.

INTRODUCTION

Throughout its history, America has struggled with the issues of discrimination despite its renown as a cultural melting pot. A number of groups have received treatment ranging from less than fair to extraordinarily harsh with regard to justice, economic opportunity, social acceptance, and equality based on race, religion, sexual preference, and gender. The accounting profession has contributed to this shameful history as minorities have encountered obstacles blocking their way to licensure as CPAs [Hammond, 2002]. *A White-Collar Profession* documents the struggles of many of the first one hundred African-American CPAs to enter the accounting profession by recounting their efforts to achieve licensure. It comes at a time when the profession is at a low-point, in desperate need of attracting qualified minorities. The nation is re-examining issues of race and opportunity in areas such as college admission criteria and the role of affirmative action and preference [Euben, 2001; Gudeman, 2001; Downing et al., 2002].

This paper describes the experience of the authors in using *A White-Collar Profession* at various colleges and in various ways. The objective of this paper is to share these experiences with instructors who might be reluctant to incorporate such an assignment into their accounting courses. A range of institutions of higher education is represented in this article: 1) a predominately white, large, public university in the deep south; 2) an historically black, public college; 3) an historically black, private college; and 4) a small, private, urban, Catholic, northern university. The instructors' approaches differed at each institution as did the courses and the level of students. While the impact the book has had upon students varied somewhat, the authors have all found *A White-Collar Profession* valuable as a supplementary text for their courses and its overall impact as consciousness raising.

In the next section of the paper, the objectives of incorporating the book into an accounting course are described. This is followed by a discussion of alternatives for using *A White-Collar Profession* in accounting courses. In the succeeding sections, the four instructors describe their experiences: what took place, the approaches used, and the student reactions observed. The final section of the paper considers the concerns reluctant readers may still have in adopting this book.

SUMMARY OF THE BOOK

A White-Collar Profession has as its focal point the under-representation of African Americans in the public accounting profession. Currently, fewer than one percent of certified public accountants are African American, a marked contrast to other large professions in the U.S., including those with more rigorous educational requirements (see Table 1).

TABLE 1

African-American Representation in Three Professions

Year	Lawyers	Doctors	CPAs	Total Population
1930	0.8%	2.5%	0.03%	9.7%
1960	1.0	2.0	0.1	10.5
1997	2.7	4.2	0.75-0.99	12.3*

* as per the 2000 Census
Source: Hammond, 2002, p. 2

The book chronicles how the history of the profession was one of the major determinants of today's shortage of African-American CPAs. Until the late 1960s, very few white-owned CPA firms, including the "Big Eight," had hired any African-American staff. Most states required experience working for a CPA as a prerequisite for licensure, thereby posing a difficult challenge for those who wanted to enter the profession. Drawing on oral histories of one-third of the first one hundred African-American CPAs, Hammond narrates the stories of the persistence, talent, and determination that eventuated in their success.

A key characteristic of the book is its focus on the stories of individual CPAs rather than on the details of accounting work or statistics about exclusion. The book also covers the changes in the profession resulting from the civil rights movement and the consequent passage of the Civil Rights Act of 1964, which forbade employment discrimination on the basis of race. The major, white-owned CPA firms began to hire African-American employees, and accounting departments at historically black colleges mushroomed as students availed themselves of the new opportunities. While progress continued through the 1970s, the representation of African Americans in the major firms declined through the 1980s and stagnated in the 1990s. According to the latest AICPA data, African Americans today average only one per thousand partners in major CPA firms.

OBJECTIVES IN ASSIGNING THE BOOK

The authors posit that incorporating *A White-Collar Profession* will help move an accounting course beyond the more mundane functions of covering text materials, reviewing homework problems, and lecturing on mind-numbing FASB standards. The book offers instructors the opportunity to inject the history of the profession which both the Bedford Committee Report [1986, p. 183] and the Accounting Education Change Commission (AECC) [1990, pp. 310-311] urged should be part of accounting graduates' understanding of the discipline. One theme of the book relates the efforts on the part of the first one hundred black accountants to achieve licensure as CPAs. While the episodes of discrimination are harsh, the success stories are uplifting. Considering the image problem the CPA profession is currently facing, this struggle is an inspiring story about persistence, hard work, determination, ambition, focus, and sacrifice to reach a goal. Indeed, "ambition and persistence" are personal qualities which the Bedford Committee [1986, p. 183] specified for accounting education to develop in students. Unsolicited comments from student participants indicate that this message has inspired some students who were struggling in accounting. The implication is, the book tells the stories of heroes with whom students of all races can identify as models of accomplishment.

The book allows students to see diversity developments in the profession, making them aware of the human side of accounting and "the evolutionary nature of society" [Bedford Report, 1986, p. 181]. As will be described subsequently, assignments can contribute to the development of written and oral communication skills [Bedford Report, 1986, p. 182; AECC, 1990, pp. 305, 311] and teamwork [AECC, 1990, p. 311]. Critical thinking skills can be engaged and ethical/moral issues raised through assignments related to the book [AECC, 1990, p. 311]. Student comments, oral and written, reflect the degree to which the attitudes of a significant number of students were changed by reading the book. This observed phenomenon fits the objectives of both the Bedford Committee and the AECC. The Bedford Committee [1986, p. 183] cited "empathy" and "sensitivity to social responsibilities" as two explicit "personal capacities" that it recommended be "fostered" in teaching. Similarly, the AECC [1990, p. 311] sought "an awareness of personal and social values" and "sensitivity to social responsibilities" be developed in accounting graduates. The use of this book meets these educational goals heretofore infrequently addressed in accounting courses.

The authors found another strength of the book is to make readers more sensitive to issues of race and problems of discrimination. Thus, *A White-Collar Profession* is an excellent means to meet the AACSB International's criterion for introducing diversity into the curriculum [AACSB, 2003]. This AACSB accreditation standard dovetails with the goals of the Bedford Committee and the AECC to raise the social consciousness of students. The authors believe that the book helps fill a void that current pedagogy is not addressing. In the follow section, the authors who have incorporated *A White-Collar Profession* in their teaching of traditional accounting classes describe their experiences. A variety of methods were used as were the types of institutions, students, and classes. From this discussion, the reader should gain insights (and confidence perhaps) as to how the book might be utilized in an accounting course. Noteworthy are the opportunities to accomplish additional objectives such as enhancing oral or written communication skills, developing team-working skills, engaging students in critical thinking, and dealing with the subject of discrimination in the CPA profession from an ethical perspective.

THE MOREHOUSE CONNECTION

You do not have to turn a page to find the Morehouse connection to *A White-Collar Profession*! The picture on the front cover of the book is that of Mr. J.B. Blayton, the first African-American CPA in the State of Georgia and the founding father of Morehouse's Department of Economics and Business Administration. When Professor Hammond spoke about her book at Morehouse College, she was accompanied by Mrs. Willie Boyd (Saddler), assistant to Mr. Blayton during his tenure at Clark-Atlanta University, where he became known as the "Dean of Negro Accountants." The audience was very interested in the stories Mrs. Boyd shared with them about Mr. Blayton. Much of the two-hour program was spent talking about him and his role in encouraging students to become CPAs.

At the presentation, I got the idea to use the book in my accounting class as a means of exposing students to the extent of Morehouse's influence. J.B. Blayton personified that impact. He had audited the books of the famous civil rights organization, the Southern Christian Leadership Conference. He had been highly involved in defending Dr. Martin Luther King Jr. against false tax evasion charges which might have derailed the civil-rights movement. In the 1930s, he had met with Secretary of Labor Francis Perkins to discuss President Roosevelt's New Deal programs from an African-American perspective. In addition to Blayton, Charles Beckett, also a Morehouse graduate, is among the first one hundred African-American CPAs.

Morehouse College, the nation's only private, historically black, four-year, liberal-arts college for men, is located three miles southwest of downtown Atlanta. Approximately one thousand students are enrolled in a business major, with about 250 students taking accounting principles yearly. Accordingly, this class provides the opportunity to introduce all business students to Blayton's contribution and the Morehouse legacy. I also thought that exposing them to the history of blacks in the accounting profession might help recruiting efforts directed at minority students. Learning about the struggles of these first African-American CPAs might ignite a sense of pride and inspire students to become a part of the profession that many pioneers had spent many years trying to enter. On the other hand, I worried that assigning the book had the potential to hurt recruiting efforts. Would sophomores be deterred from becoming accounting majors because of the struggles depicted in the book? I contemplated making the assignment only to my auditing class since the career paths of senior accounting majors were already determined. Ultimately, I decided to assign the book to my principles class during the subsequent spring semester.

The Assignment: Students enrolled in my two managerial principles of accounting classes were assigned to read the book during their spring break. At that time, they had completed one of four major examinations. The students were aware that ten percent of their grade would be based on a special assignment. About two weeks prior to spring break, I instructed the students to bring money to pay for the cost of their special assignment. On the last day of class before spring break, the students completed a pre-test questionnaire (see Appendix 1). Upon completion of the survey questionnaire, each student who had paid for a copy of the book received it, along with the assignment requiring them to read the book and to submit a three-to-five page paper describing their reactions. The paper was due ten days later on the first day of class following spring break. The rationale for limiting the reading time was to help mitigate potential threats to the internal and external validity for measuring the book's impact on each student.

During the first class meeting following spring break, I collected the students' reaction papers. We did not discuss the book during this session. During the very next class meeting, I administered the post-test questionnaire which was identical to the pre-test survey. I was able to match the two surveys because the students included their names on each. Given the low level of sensitive information contained in the questionnaire, I did not view this as a material threat to the internal validity of the responses. Students who did not purchase a book or did not complete both questionnaires were excluded from the sample. Fourteen students were excluded based on the criteria, leaving a sample size of 29.

TABLE 2

Sample: Morehouse College

Total enrolled		43
Less:	Did not complete before	3
	Did not complete after	5
	Did not complete either	2
	Did not purchase book	4
Total Sample		29

Results of the Survey: The Questionnaire: Appendix 1 contains the entire questionnaire. The questions varied over a range of areas. Some questions required the students to rank on a ten-point Likert scale their (a) knowledge of accounting history, (b) attitude toward diversity, and (c) appreciation of the importance of the accounting profession. Other questions required the students to rank their agreement with statements assessing their determination to achieve goals. A ten-point Likert scale was used for all questions.

Panel A of Table 3 reports some descriptive statistics for the sample. The 29 African-American males had a mean age of 20. The majority (19) of the participants were sophomores with a major other than accounting. Most of the students knew what CPA stood for (26) and reportedly knew an African-American CPA (22) before reading the book. However, after reading the book, more students reported knowing an African-American CPA (27), resulting in a significant increase, $p < .05$. Panel B of Table 3 reports frequencies for the two perception questions. Students' perception of the number of African-American CPAs did not change significantly after reading the book. Many thought that the number ranged from less than 1,000 to 5,000

(23 and 21 respectively); several more felt the number to be greater than 5,000 but less than 10,000. Only two students believed that there are more than 10,000 African-American CPAs. Before the reading, a majority (19) of the students thought that 1% to 5% of CPAs in the country were African American. More (25) subscribed to this perception after reading the book.

TABLE 3

Results: Morehouse College

Panel A: Mean Descriptive Statistics	Before	After
Mean Age	20	20
Know definition of CPA	26	29
Know a CPA	22	27
Know African-American CPA	22	27
Panel B: Frequency Responses – Non-Scaled Questions	Before	After
12. Perception of number of African-American CPAs in the country?		
a. 10,000 or more	3	2
b. < 1,000	7	9
c. < 10,000 but >5,000	3	6
d. 1,000 - 5,000	16	12
13. Perception of % of African-American CPAs in the country		
a. 1% to 5%	19	25
b. >5% but < 10%	7	3
c. > 10% < 25%	2	1
d. more than 25%	1	0

Table 4 reports the mean responses of the participants to the scaled questions contained in the questionnaire. The mean difference reported is based on the students' pre- and post-test responses to each question. The difference is used to evaluate the impact of the book on the students' perceptions and attitudes. The results show that the book had significance across several parameters. Without question, the book greatly enhanced the students' knowledge of the history of accounting, particularly the history of African Americans in the accounting profession. Their knowledge of the history of accounting moved from the one-to-five to the four-to-ten range. The mean difference is computed by subtracting the response after reading the book from the response before reading the book. Thus, the non-positive mean difference of -3.28 indicates that the students' responses after reading the book were greater than the response before the reading. In this case, students reported that they were more knowledgeable about the history of accounting after reading the book. The mean difference is significant (p < .001). Similarly, students' knowledge of the history of African Americans in the accounting profession increased significantly (mean difference = -5.01; p < .001) after reading the book. The mode response before reading the book was 1 and 3; the post-reading mode response was 8. The mode response regarding tolerance of diversity was 10 in both the pre- and post-survey responses, suggesting that the book did not impact this factor. Perhaps the high pretest score forestalled any revealed improvement from the book; perhaps a flaw in the survey's structure masked a real influence. A similar problem occurred at the University of Alabama with the pretest survey question related to working with others who were different from themselves (age, gender, and race).

TABLE 4

Mean Responses: Morehouse College

Questionnaire **Rank yourself (scale 1-10)**:	**Before**	**After**	**(p-value) of Mean Difference**	
14. knowledge of the history of the accounting profession	3.5172	6.7931	-3.2759	(.000)
15. knowledge of the history of blacks in the accounting profession	2.4138	7.4828	-5.0690	(.000)
16. willingness to work as group members on teams with members who are different from yourself as to gender, religion, race, and culture.	8.9310	8.8276	.1034	(.742)
17. determination to complete this course	9.7931	9.5862	.2069	(.206)
18. appreciation for the importance of this course	8.6552	9.1034	-.4483	(.030)
19. appreciation for the importance of the accounting profession	8.8621	9.2414	-.3793	(.094)

TABLE 4 (continued)

Agree (scale 1 to 10):	**Before**	**After**	**(p-value) of Mean Difference**	
20. make up mind easily	6.9310	7.3103	-.3793	(.459)
21. make decisions slowly	5.1379	5.8621	-.7241	(.017)
22. denied something really wanted	8.6071	8.7500	-.1429	(.708)
23. will probably drop a class before graduation	5.2759	5.8966	-.6207	(.350)
24. would consider dropping a class	5/3103	5.8276	-.5172	(.390)
25. would consider dropping accounting	2.3103	2.4138	-1.034	(.794)
26. usually get what I ask for the first time I ask	4.6897	4.4828	.2069	(.586)
27. would drop a class if: the professor said I lacked the required skills and background	2.7241	2.4138	.3103	(.272)
28. pursue my goal no matter how long it took to achieve it.	8.9655	8.0345	.9310	(.010)
29. would drop a class if: required workload for the class was too time consuming	3.2069	3.0345	.1724	(.655)
30. would register for a class even if: professor is known for being difficult	7.4828	7.8276	-.3448	(.414)
31. would become discouraged from pursuing goal if: I did not have any money	3.0690	2.8966	.1724	(.627)
32. would become discouraged from pursuing my goal if: It took more than 5 years to achieve	2.4483	2.8966	-.4483	(.256)
33. discouraged from pursuing goal if: required school workload was too difficult	2.7931	2.6552	.1379	(.743)
34. discouraged from pursuing goal if: If it took longer than 20 years to achieve	4.3448	4.0690	.2758	(.499)

Students had a heightened appreciation for the managerial principles course after reading the book ($p < .05$). Although not at the conventional level, they also reported having a greater appreciation for the accounting profession after reading the book ($p < .10$). They agreed strongly with the statement related to pursuing a goal (mean response = 8.96); however, their conviction diminished somewhat after reading the book (mean response = 8.03). The mean difference of .93 is significant, $p = .01$. Finally, the book seemingly had an impact on the students' assessment of their decision-making ability. Before reading the book, students felt that they made decisions more hastily. Subsequently, they revised this assessment and reported that they make decisions more slowly ($p = .017$).

Student Reactions: Most students openly expressed verbal and nonverbal disappointment and disbelief that I assigned this reading during their spring break. However, after class resumed, at least two students stopped by my office to thank me for making the assignment. I could feel their excitement and sincerity. Students were disappointed that I did not allow them to continue discussing the book during the first class back. However, I did commit to allowing them to discuss their reactions at a later time. That evening at a company-sponsored reception, a recruiter informed me that several of the students in attendance used the book as an "ice-breaker." The company representatives were impressed.

I reviewed the students' written reactions to the book. The papers were graded primarily on content and completeness. About 25% of the participants merely prepared book reports rather than describing their own reactions. The remaining students gave candid reactions to the book. "Uplifting," "enlightening," and "inspiring" were words commonly used by the students. Some expressed that they were angered, amazed, and saddened by the events chronicled in the book. Most described early African-American CPAs as persistent, intelligent, strong, and focused, and believed that these qualities should be instilled in all. Understandably, almost all of the students indicated that prior to reading the book, they were unaware of the racism to which African Americans had been subjected in the accounting field. A resounding message was an increased appreciation for the importance of accounting and respect for those choosing to pursue a career in accounting.

Many comments were insightful, indicating that the struggles in the book mirrored the struggles of the general population of African Americans. Two students included reference to a line from a poem written by Langston Hughes – "life for me ain't been no crystal staircase." A number of students expressed admiration of the African-American CPAs for sticking together, noting the importance of mentoring. While a few students perceived that the book will help attract African-Americans to the accounting profession, many expressed that they were reluctant to pursue a career in accounting given the historic struggles. One student wrote: "It is wiser to pursue a career that has been thoroughly explored." Another comment suggested that the early discrimination of blacks in the field has resulted in the lack of mentors, and, thus, the lack of awareness in the African-American community of the accounting profession. The "oppression of blacks in the past may have led to African-Americans' disinterest in accounting." Many acknowledged progress, but noted that the profession has a long way to go. In an introspective comment, one student wrote, "although against our nature, we (students) have been pacified to a point such that we tend to shy away from that which requires practice and work." Others tried to imagine being in the shoes of the "firsters," and wondered if they could have persevered.

Most striking to me were the somewhat naïve comments expressed by the students. In general, the students did not understand why the exceptionally intelligent persons highlighted in the book were not hired given the fact that they possessed the appropriate credentials. They were genuinely surprised that being at the "top of your game" was not enough! They were amazed that certification (i.e., passing the exam) did not guarantee a job. Some students thought of racism as only an informal system. However, after reading the book, they viewed racism in accounting as more deeply ingrained since firms and key organizations were the primary culprits. They were appalled at the open insensitivity of the firms and organizations; particular reference was made to the use of jokes and racial slurs recorded in the minutes of the national organization. One student could not fathom professional societies holding meetings in "all white" hotels; it seems he was surprised that segregated hotels existed. I got the impression that my students had been sheltered from the discrimination that many of my era had either experienced, lived first-hand, or had been told about.

The book, *A White-Collar Profession*, proved to be an extremely meaningful assignment. The students' awareness of African Americans in the profession seemingly softened their attitude toward accounting. When reviewing the students' written comments, I found overall that the written reactions were consistent with the responses noted in the pre-test, post-test questionnaires. Further, I observed that many were curious about why these facts were not well known, especially among blacks. The most common reaction among the students was that the book should be assigned in future classes. I concur.

THE JOHN CARROLL EXPERIENCE

John Carroll University, a Catholic and Jesuit University located in the fashionable eastern suburbs of Cleveland, Ohio, has a very small minority population. The university reports a minority percentage of 9.2%[1] for undergraduates of whom 4.3% are African Americans. The situation in the Department of Accountancy is significantly lower as illustrated by the fact that of the 53 Intermediate Accounting students who participated in this assignment, only one was an African American.

It was within this context of a predominately Caucasian environment that Professor Hammond's book, *A White-Collar Profession*, was assigned as collateral reading. The student's knowledge of and reactions to the book were tested through the mechanism of a take-home essay that constituted 20% of the final examination in my Intermediate Accounting I course. The specific question upon which the essay was based follows:

> Write an essay of two-three pages in which you discuss why you think *A White-Collar Profession* was assigned to you as collateral reading. Support your position(s) with specific references (quotes and page numbers) from the book. Do you feel that the book provided you with an appreciation of how diversity issues have plagued the accounting profession historically? Do you feel that it is fair to condemn the accounting professionals of the past for prejudicial attitudes that seemingly have a greater relevance in the present?

I expected that the students' resentment over a rather time-consuming assignment at the end of a difficult class that already had required more than its fair share of effort would result in a negative response to the book. On the other hand, I considered that this dire expectation would be tempered by the natural propensity on the part of our students to attempt to please their professors and, thus, to write what they thought I might want to hear. To mitigate these threats to the validity of the responses, I

[1] This figure is inclusive of Asian students.

urged the students to provide an honest reaction and informed them that the department had designated an independent reader (a graduate student, who teaches English composition) for this particular course since it is deemed writing intensive. Thus, I would not see the papers until after the grades had been assigned.

I completed an informal and unscientific word-content analysis of the 53 essays submitted by the above-mentioned accounting students. Immediately evident and personally gratifying was a total absence of complaints about the assignment. In point of fact, several students confessed that they had had serious doubts about the relevance of this exercise in the context of a methodology-oriented course such as Intermediate I, but that these reservations were quickly dispelled as they had gotten into the reading. Some saw the value of learning about the history of the profession that they were aspiring to enter.

The message that came across loudest and clearest in the essays was an appreciation for having been made aware of the struggles African Americans endured in gaining some measure of acceptance into accountancy. From my perspective as reader, I tried to distinguish between those students who simply averred they were made aware of the African-American plight from those who seemed to express gratitude for having been made aware. The revelation that no knowledge had become some knowledge is not particularly powerful. Why should 20-year-old students, or even their 60-something professor for that matter, know of such things? The more poignant demonstration from my perspective lies in the fact that the information is taken to heart, either through an overt revulsion to accounting's past on racial issues or through an indication that the profession needs to move forward proactively to right past wrongs. My sense was that 40 of the 53 students took a stronger stance than merely recounting the more powerful episodes of prejudice and claiming that they had not been aware of such happenings in the past.

I specifically asked the question in the essay assignment whether it was "fair to condemn" past accountants for prejudicial actions that were more antithetical to present mores than to those that existed back then. This question has been one that has impacted contemporary accounting historiography, particularly in separating "critical" historians from the more "traditional." Critical historians aspire to using their narratives of the events of the past as a catalyst for changing the present. Traditional historians see themselves more as non-partisan purveyors of information. I anticipated that my students would universally think it unfair to ascribe blame, but the results indicated a more equal division of opinion. Twenty-three concluded that condemnation was unfair, while sixteen took a harder line. However, a lack of knowledge of U.S. history may have aversely affected an informed evaluation of this question. For example, a number of papers actually commented that the timing of the early African-American struggle for licensure militated against a prejudice-free thinking since the country had just emerged from slavery.

One final point I looked for in reading these essays was whether the students indicated any degree of satisfaction that the racial issues in the accounting profession had dissipated as a result of the improvements of recent years compared to the struggles of the protagonists in Professor Hammond's book. Again, I found the results surprising. Thirty-three students made statements to the effect that the profession had not yet done nearly enough and that there was a long way to go before African Americans were dealt with fairly as accounting professionals. Only ten students felt comfortable that the situation was much improved, and that the evils of the past had been handled satisfactorily. In summation, I am of the opinion that assigning *A White-Collar Profession* was an extraordinary experience for both my students and for me. A substantial group of wealthy, Caucasian students showed me an immense and unexpected empathy for a suppressed minority.

AN EXPERIENCE IN HISTORY AT NORTH CAROLINA A&T UNIVERSITY

North Carolina A&T State University, a public, historically black university has approximately 11,000 students and is located in the small, metropolitan city of Greensboro, North Carolina. Given that the university's School of Business and Accounting Department are AACSB-accredited, an assignment using *A White-Collar Profession* was a means by which the AACSB's diversity requirement could be satisfied.

The semester-long project was assigned to 37 cost accounting students, who were all African American. Additionally, articles that profiled minorities in the accounting profession [Benson, 1981; Hayes, 1986; Ostrowski, 1986] were also assigned; these articles provided background, support, and further emphasis on topics described in *A White-Collar Profession*.

The students formed groups by self-selection, and each group was assigned at least two chapters of Hammond's book. The group was then responsible for summarizing and presenting these assigned chapters to the class. These presentations became the highlight of the semester. Groups presented in the closing minutes of each class meeting; the discussion/debate became lively and stimulating. Because each chapter focuses on a different theme (or time period), the student presentation comments were generally unique to each session. Communication skills were developed and "thinking on the feet" was practiced during these sessions as students were not shy in their exchanges.

In addition to the group work, each student was also required to submit an essay describing how the book affected his/her perception of the accounting profession. Questions were provided to guide the development of the essay. These questions centered around the book's impact on the student and included the following: (1) did the book make students uncomfortable with their pursuit of accounting careers? (2) did the book influence the role that the student saw himself or herself playing to change the profession? (3) did the book impact the student's present or future endeavors? (4) what aspect of the book did the student dislike or disagree with? The essay, the article summary, and the group presentation constituted 15% of the course grade.

The following summary represents the impact of the Hammond book on students' perceptions of the accounting profession, discrimination, and their responsibility/role as accountants.

- Students felt overwhelmed (and a few were aggravated) by the struggles that the trailblazers endured.
- A few students perceived that the system (earlier discriminatory policies and practices) was insurmountable and stated that, "I would have just given up" and "selected another career." Others felt that they would have become extremely radical and aggressive in their pursuits.
- All students agreed that this is a history that was relevant to them. Many felt that the knowledge prepared them for discrimination that they could encounter as an accounting professional.
- Many of the students had worked as interns and had related their experiences to those events in the book. Most felt that there genuinely had been diversity improvements in the profession. However, the scarcity in the number of minority partners and senior managers observed during their internship made them conclude that "the profession still has a long-way to go, to reach a truly diverse profession."

- The students were especially pleased in finding people of the same race becoming CPAs with whom they could identify. For the students, being able to relate to black CPAs was important. Other than the few instructors and recruiters, students did not know many black CPAs. Learning about the first one hundred African-American CPAs made the book experience enjoyable. Students recognized these individuals as role models; the book became a means for the students to live vicariously the lives of these heroic pioneers and brave leaders who became the first black CPAs.
- The accomplishments of these CPAs seemed to inspire students to be more motivated academically to succeed.
- Several of the students wanted to become "good role models" and "recruit more African Americans into the profession." Most voiced that the black pioneers paved the way for them and "now they must continue the path for tomorrow's students."

To conclude the project, at the end of the semester, Dr. Hammond spoke to the class and other accounting majors. The students asked why she decided to write about African Americans, and what advice she would give to aspiring young "accountants." The background she gave regarding her motivation and the writing process of the book, such as scheduling interviews with the book's characters, augmented the students' interest in pursuing not only accounting, but also their dreams.

THE EXPERIENCE AT THE UNIVERSITY OF ALABAMA

Alabama has a long history of slavery and segregation to overcome. Forty years ago, Governor George Wallace stood in the university doorway attempting to block the first African-American student from registering at the University of Alabama. The civil rights marches, the Ku Klux Klan, and black church bombings are all part of that history. Much progress has been made in ending discrimination and improving race relations from the terrible decades of the 1950s and 1960s. Yet, at the University of Alabama, the goal of complete integration remains illusive as illustrated by the lack of integration by social fraternities and sororities despite all manner of encouragement and pressure from the university's administration to do so.

CPA hiring practices in Alabama have been questionable with respect to recruiting minority students for entry-level staff positions. The problem seems particularly acute at non-"Big

Four" firms. The number of black students graduating in accounting has been very small until recently, however, so the issue of discrimination from the employment perspective remains unclear.

I assigned *A White-Collar Profession* as a supplementary textbook in my three sections of tax accounting (first semester juniors), approximately 90 students, of whom 15% were African American and 3% were other non-Caucasian. Except for an occasional reminder to read the book, I did nothing else related to the topic. I gave the students very little guidance except to have the book read before Thanksgiving. There would be a 30-minute test, worth 10% of their course grade, given during the class before Thanksgiving. This test would consist of one general discussion question. In addition, students were invited and encouraged to attend a presentation by the author, Theresa Hammond, who would speak on the Thursday evening prior to the test. I offered a two-point bonus (two percent of final grade) for attending, plus, of course, the promise of greater insight on the upcoming quiz. I also promised to distribute a handout at the presentation with a list of possible discussion questions to aid and guide their study (see Table 5). Those students missing the presentation could pick up the question sheet at my office on the following school days.

I selected questions #2, #7, and #8 to ask on the test, a different question for each of my three sections. The results of the test were excellent. Of 91 students, I gave 85 As, four Bs, and two Cs. I confess to my apparent grade inflation without embarrassment since the answers were so good.

TABLE 5

Sample Questions Taken From *A White-Collar Profession*

1) Which profession has an even worse record than accounting as far as percentage employment of black Americans?

2) In what ways did Arthur J. Wilson, Jesse B. Blayton, Sr., Mary T. Washington, Lincoln J. Harrison, Walter Harris, Theodora Rutherford and the others described in the book become CPA heroes?

3) What barriers to becoming CPAs did blacks face in the 1920s to 1960s?

4) What barriers to becoming CPAs do blacks face in the 21st Century?

5) What groups, other than African Americans, have been discriminated against in becoming CPAs?

6) What is the book's conclusion about the CPA profession's past, present, and future as to opening its doors to African Americans?

7) What *cracks* in the barriers to becoming a CPA allowed the first blacks to achieve their goals? [How did these few succeed at accomplishing this dream?] What were the common keys in the success stories?

8) Describe the type of accounting practice that black CPA firms operated. What types of clients did these firms have? What type of work did the firms perform? Analyze and explain what drove these practices in this direction.

The students' reaction to the assignment was overwhelming. At the presentation, the students not only had questions but many, particularly the black students, brought their books for Professor Hammond to autograph. One very good (white) student confessed to her that this was the first book he had ever read cover to cover! A (white) female student (from Georgia) asked me after Hammond's presentation if next semester we could have one of the first one hundred black CPAs come and talk at one of our Beta Alpha Psi meetings. I was floored! I had to confess to her that I had not even given that idea a thought myself, nor had I a clue, for the moment, where any of the first one hundred was living. But I thought it was a wonderful idea.

In addition to the quiz responses, two black students left me notes telling me how much the book had meant to them. One, who was struggling in both accounting courses she was taking, realized that hard work and persistence were the keys to success as demonstrated by the CPAs in the book. The second student told me how moved she was by the struggle of those first one hundred black CPAs. The book touched her deeply, and she thanked me for assigning it as part of the course.

At the end of the semester, I suggested that students might donate *A White-Collar Profession* to their public or high school libraries back home. One student volunteered that she had given it to her father to read; he is partner in the Washington, DC office of one of the "Big Four" CPA firms, an Alabama graduate, and a loyal supporter of our program.

In the subsequent semester, I assigned the book in my masters-level, tax-planning course.[2] The book was again used as sup-

---

[2] In the course, I ran pre- and post-test surveys of five questions each which I hoped would capture the impact of the book on students' knowledge of the history of the profession, their willingness to work with and accept those who are different from themselves, and their willingness to overcome obstacles. The history of the profession question showed the impact of the book. However, the questions related to the students' acceptance of others failed to measure change since every student rated him/herself the maximum on the pre-test survey. Because of how students rated themselves on the pretest … (that each was very willing to work with people who were from different cultures, religion, race, age, or of gender than the student), the post-test score did not reflect any improvement.

plementary reading, with a three-page paper due the last week of the course in which the students explained why they thought I had assigned this book and what made this book relevant to the course. This paper represented ten percent of the course grade. In the tax-planning course, I had 15 students of whom eight were masters of tax students, six were masters of accountancy students, and one was getting her Ph.D. in economics. The papers, with the exception of one, were very thoughtful and insightful. The answers, as I anticipated, were very different since there was a multitude of reasons to justify using *A White-Collar Profession*. The papers reflected that the students had genuinely learned a great deal from the book, raising their awareness of the history of discrimination within the profession, an issue to which they confessed of being totally unaware. Despite the "failure" of the pre-test, post-test survey to capture the impact of the book (see footnote two), the papers the students submitted revealed that much had been learned by reading the book and that their attitudes had been impacted as well.

DISCUSSION

Accounting educators no doubt agree that diversity is an important and very neglected part of accounting education. They further recognize that it is difficult to incorporate this important topic into the accounting curriculum. This paper describes the efforts of various professors to expose business and accounting students to the evolution of diversity issues related to the accounting profession by using *A White-Collar Profession* [Hammond, 2002].

A White-Collar Profession presents a history of the profession and biographies of the first blacks who overcame huge obstacles to become CPAs. While some find the book disheartening in that the profession was racist in blocking African-American entry into the profession, the stories about those first black CPAs who succeeded are inspirational and uplifting. It is also interesting to see where the profession is today in terms of accepting African Americans into the profession. One view is that the profession has not gone nearly far enough; for example, there are only a handful of partners in the Big Four firms who have come from minority groups. Another view would hold that while the accounting profession has a way to go to be truly open and diverse, it is making progress. Thus, the book is relevant and interesting for presenting an important topic that transcends coverage in accounting textbooks.

This paper provides a description of the outcomes of assigning the book in various accounting classes at a range of institutions of higher education (see Table 6). This paper also contains sample questions that are a good resource for professors who may use the book. These questions can serve as the catalyst for an out-of-class essay assignment or an in-class exam or quiz. All of the participants had minimally completed the first principles course, and thus had some previous knowledge of accounting. Participants perceived the assignment as valuable and relevant. Many expressed appreciation for having had their eyes opened to the events depicted in the book. Many of the Caucasian students at one institution expressed empathy for the pioneers highlighted in the book; however, their opinions were mixed regarding the fairness of ascribing blame for the discriminatory behavior of the past. The book seemingly provoked some soul-searching among the African-American male students. Many African-American participants felt a strong sense of pride and were motivated to work harder. Perhaps most notable is the overt willingness of both the Morehouse and Alabama students to work with others. However, anecdotal evidence suggests that the students' ability to accept diversity may be correlated with their naïveté about racism in general and the profession in particular. The Morehouse and John Carroll experiences provide evidence of this phenomenon. Thus, it is just as important to determine if their response would differ after learning of the discriminatory practices reported in the book. In particular, despite past history, toleration of differences is a way of life to which the participants are seemingly accustomed and plan to continue. In our view, the profession should view this revelation as positive, particularly in the case of African-American males.

We encourage other instructors to consider using this book in similar ways so that more students would be exposed to the issues that the book raises and the inspiring stories the book conveys about the history of the profession. However, we realize that there may be some concerns about using the book in an accounting course. A possible reason for not using the book could be a concern about the imposition upon the students' time. Certainly, time both in and out of class is a precious commodity with so much material to cover and with outside interests competing. Another concern is the cost of a supplementary text, particularly since the course textbook is already costing students $100 or more not to mention other costs such as outlines, study guides, or software materials. At $16.95, we believe the cost is well worth the price.

TABLE 6

Summary of Assignment by Institution

	Morehouse	**John Carroll**	**NC A&T State**	**Alabama**
Course	Managerial Principles	Intermediate Accounting	Cost Accounting	1) Tax Accounting 2) Tax Planning
Major	Business	Accounting	Accounting	1) Accounting 2) Masters-Accounting
Participants	Sophomores	Juniors	Juniors	1) Juniors (90) 2) Masters (14)/Ph.D.(1)
Gender	All Male	Co-ed	Co-ed	Co-ed
Race	100% African American (29)	99% Caucasian (53)	100% African American (37)	82% Caucasian (73) 15% African-A (14) 3% Other (3)
Length of Assignment	ten days	Three weeks	Semester	Semester
Essay	Yes	Yes	Yes	Yes
In-class Test	No	No	No	Yes
Points	10%	20% of final exam	15%	10%
Pre/Post- Test	Yes	No	No	Yes
Institution	Private	Private	Public	Public
System	Semester	Semester	Semester	Semester

Perhaps more to the point than these concerns about time and cost, instructors might be reluctant to utilize the book because of an unwillingness to take chances, to do something different, to take on an unfamiliar topic, to tackle an "uncomfortable" issue, or to deal with the profession in anything but a glowing light. We believe that effective teaching must go beyond the technical aspects of the textbook. It should inject questions without definite answers and cover issues that produce thought on the part of students. Intellectual honesty requires that academics have students consider the problems of the profession, as well as its successes. Above all, students represent the profession's best hope of curing its long-term deficiencies and meeting its future challenges. Our students will be the ones who will make accounting better than what it is today.

Other concerns about using *A White-Collar Profession* center on students' reaction to the assignment, specifically the book's relevance to the subject matter of the course. Again, our own experience found student reaction to be overwhelmingly favorable. The comments volunteered, oral and written, have been "thank yous" for this assignment. While not all students reacted this way, many did, and in such an overwhelmingly positive way, that we feel concerns about student reaction are unfounded.

A limitation of the study is that the pre-test, post-test methodology was not uniformly used by all professors. As a result, the statistical measurements regarding the impact of the book may not be generalized to other groups. However, using *A White-Collar Profession* as a supplementary text in accounting classes offers many ways of exposing students to issues that face the profession and raises the awareness of diversity in students' thinking. We report both anecdotal and empirical evidence that the participants in this study proved more willing to work with colleagues different from themselves, perhaps so inspired by the book although there is no way of knowing for sure. We find this to be extremely encouraging since the majority of the participants are accounting majors. In addition to an increased awareness of the history of the accounting profession, some students gained a greater appreciation for their accounting course and the accounting profession.

REFERENCES

Accounting Education Change Commission (AECC) (1990), "Objectives of Education for Accountants: Position Statement Number One," *Issues in Accounting* E*ducation*, Vol. 2, No. 2: 307-312.

American Accounting Association, Committee on the Future Structure Content and Scope of Accounting Education (The Bedford Committee) (1986), "Future Accounting Education: Preparing for the Expanding Profession," *Issues in Accounting Education*, Vol. 1: No. 1: 168-195.

American Assembly of Collegiate Schools of Business (AACSB) International (2003), *Eligibility Procedures and Standards for Business Accreditation: A Statement about Curriculum Contents* (St. Louis: AACSB).

Benson, C. (1986), "Blacks in Accounting," *Ebony,* March: 86-92.

Downing, R., Lubensky, M., Sincharoen, S., and Gurin, P. (2002), "Affirmative Action in Higher Education," *Diversity Factor*, Vol. 10, No. 20: 15-20.

Euben, D. (2001), "Show Me the Money: Pay Equity in the Academy," *Academe*, Vol. 87, No. 4: 30-36.

Gudeman, R. (2001), "Affirmative Action and the University: Race, Ethnicity and Gender in Higher Education Employment," *Academe,* Vol. 87, No. 1: 81-83.

Hammond, T. (2002), *A White-Collar Profession: African-American CPAs since 1921* (Chapel Hill: University of North Carolina Press).

Hayes, J. (1986), "An Eye to the Future," *New Accountant,* February: 18-24.

Ostrowski, M. (1986), "Minorities in Accounting," *New Accountant,* February: 7-12.

APPENDIX 1
Survey Questionnaire: Morehouse College

ACHIEVING YOUR GOAL
The purpose of this questionnaire is to collect information about your perception and knowledge of the accounting profession. Also, some questions relate to your attitude towards goal seeking achievements in the context of completing course requirements and overcoming barriers. Please provide thoughtful and candid responses to each of the questions that follow. **Responses do not affect your grade!!** Feel free to make notes in the margin and **do not hesitate to ask questions.**

Section I
1. Age _______

2. Classification: a. Freshman b. Sophomore c. Junior d. Senior

3. Major: a. Finance b. Accounting c. Marketing e. Management f. Other (specify)____________

4. If your major is other than accounting, **did you** consider a major in accounting? _____Yes ______ No

5. If your major is other than accounting, **would you** consider a major in accounting? _____Yes ______ No

6. What school year did you enter college?

7. What year do you plan to graduate? ________________________

Section II.
8. Do you know what CPA stands for? ________ Yes _________ No

9. Do you know a CPA? ________ Yes _________ No

10. Do you know any African-American CPA's? ________ Yes _________ No

11. Have you ever dropped a class? ________ Yes _________ No

Section III. **Please circle the response that best represents your perception.**

12. How many African-American CPAs do you think there are in this country?
    a. 10,000 or more
    b. < 1,000
    c. < 10,000 but greater than 5,000
    d. 1,000 - 5,000

13. What % of total CPAs in this country do you think are African-American?
    a. 1% to 5%
    b. >5% but less than 10%
    c. > 10% but less than 25%
    d. more than 25%

Section IV.

14. On a scale of 1 to 10 rank your knowledge of the history of the accounting profession.

(1 = not knowledgeable 10 = very knowledgeable)

1 2 3 4 5 6 7 8 9 10

15. On a scale of 1 to 10 rank your knowledge of the history of blacks in the accounting profession.

(1 = not knowledgeable 10 = very knowledgeable)

1 2 3 4 5 6 7 8 9 10

16. On a scale of 1 to 10, rank yourself as to your willingness to work as group members on teams with members who are different from yourself as to gender, religion, race, and culture.

(1 = not willing – seeks to avoid having members of the team that are diverse)

(10 = very willing – seeks out opportunity to have diverse members of the team that are diverse)

1 2 3 4 5 6 7 8 9 10

17. On a scale of 1 to 10, rank your determination to complete this course

(1 = not very committed, will see if I can pass this course without putting forth a lot of effort)

(10 = very determined – willing to do whatever it takes)

1 2 3 4 5 6 7 8 9 10

18. On a scale of 1 to 10, rank your appreciation for the importance of this course

(1 = low appreciation) (10 = high appreciation)

1 2 3 4 5 6 7 8 9 10

19. On a scale of 1 to 10, rank your appreciation for the importance of the accounting profession

(1 = low appreciation) (10 = high appreciation)

1 2 3 4 5 6 7 8 9 10

Section V.

On a scale of 1 to 10, rank your agreement with the following statements.

1 = do not agree 10 = very much agree

20. I make up my mind easily.

1 2 3 4 5 6 7 8 9 10

21. I make decisions slowly.

1 2 3 4 5 6 7 8 9 10

22. I know how it feels to be denied something you really want.

1 2 3 4 5 6 7 8 9 10

23. I will probably drop a class before I graduate.

1 2 3 4 5 6 7 8 9 10

24. I would consider dropping a class.

1 2 3 4 5 6 7 8 9 10

25. I would consider dropping accounting.

1 2 3 4 5 6 7 8 9 10

26. I usually get what I ask for the first time I ask.

1 2 3 4 5 6 7 8 9 10

27. I would drop a class if: The professor told me that I lacked the skills and background required.

1 2 3 4 5 6 7 8 9 10

28. I would pursue my goal no matter how long it took to achieve it.

1 2 3 4 5 6 7 8 9 10

29. I would drop a class if: The workload required for the class was too time consuming.

1 2 3 4 5 6 7 8 9 10

30. I would register for a class even if: The professor was known for being difficult.

1 2 3 4 5 6 7 8 9 10

31. I would become discouraged from pursuing my goal if: I did not have any money.

1 2 3 4 5 6 7 8 9 10

32. I would become discouraged from pursuing my goal if: It took more than 5 years to achieve.

    1 2 3 4 5 6 7 8 9 10

33. I would become discouraged from pursuing my goal if: The workload required in school was too difficult.

    1 2 3 4 5 6 7 8 9 10

34. I would become discouraged from pursuing my goal if: If it took longer than 20 years to achieve.

    1 2 3 4 5 6 7 8 9 10

Section VI.

35. Do barriers **motivate** you (increase your determination to achieve your goal)?

    Yes _______ No _______

36. Do barriers **discourage** you (decrease your determination to achieve your goal)?

    Yes_______ No________

37. If you wanted to achieve a goal, would it matter how long it took?

    Yes ____ No _____

Comments: ____

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 53-87

Seong Ho Jun
ACADEMY OF KOREAN STUDIES
and
James B. Lewis
UNIVERSITY OF OXFORD

ACCOUNTING TECHNIQUES IN KOREA: 18TH CENTURY ARCHIVAL SAMPLES FROM A NON-PROFIT ASSOCIATION IN THE SINITIC WORLD

Abstract: Little is known about pre-1900 East Asian accounting techniques. A double-entry method of accounting may date from the 11th century in Korea, but extant commercial ledgers are no older than 1854. However, extensive accounts of cooperative associations survive from the early 18th century. The Mun Clan Association accounts are examined to reveal their organizing principles and accuracy. The accounts demonstrate a highly accurate system that was intermediate between single-entry and double-entry accounting. While they are not from a commercial house, the accounts display sophisticated bookkeeping techniques designed to maximize rationality within a Confucian moral economy.

INTRODUCTION

In recent years, the Academy of Korean Studies (Han'guk Chŏngsin Munhwa Yŏn'guwŏn)[1] has gathered and published many private records and documents from post-1600 Korea, but there has been little research on these documents from the perspective of accounting and economic history. This paper examines a double-entry method used in the accounts (1741-1883) of the (Namp'yŏng) Mun Clan Association (MCA),[2] an organization that is still active in Chŏlla Province. The MCA is representative

Acknowledgments: We are grateful to Anthony Hopwood and Elaine Tan of Oxford, the Korean Accounting Institute, two anonymous referees, and the editor for comments and suggestions that helped to improve the paper significantly. We also thank the Korea Research Foundation for supporting Seong Ho Jun's research.

[1]The Korean name was changed in February 2005 to Han'gukhak Chung'ang Yŏn'guwŏn, retaining the English name Academy of Korean Studies.
[2]Please refer to the Glossary (Appendix A) for original script and characters.

of a major civil-society organization in pre-20th century Korea, the cooperative, mutual-aid society (*kye*).

Although a study in accounting history, the research on which this paper is based had roots in economic history. Information on commodity prices, labor costs, land and rental costs, and a number of other types of basic data have been collected in order to build models of Korean economic history. In the course of exploiting the data, decisions had to be made about their trustworthiness, leading to an analysis of the accounting principles at work. A high degree of sophistication and accuracy is evident, thus providing confidence in the quality of the extracted data [Jun and Lewis, 2005, 2006].

The MCA accounts were far more elaborate than simple, single-entry records. They reveal a complex linkage across several separate commodities used as currency, including unhulled rice, milled rice, and copper coin. Transactions in the ledgers were recorded in two different places. Many of the basic principles of the double-entry method are apparent – personification of accounts, dual entry, integration, and periodicity. All the ledgers contain only real accounts; nominal accounts and profit-or-loss statements are absent. A concern for controlling losses is evident, while a corresponding lack of emphasis on profit-making reflects the dominant ethic, the Confucian "moral economy." The paper features, in order, a literature review, a discussion of the moral economy concept, a description of the MCA ledgers, and a summary of the findings.

LITERATURE REVIEW

The Sinitic world of East Asia is the oldest, continuous civilization on the planet, but very little is known of its accounting practices or economic history. However, accounting historians have attempted to address this lack of knowledge in recent years. Auyeung [2002, pp. 3, 5-7, 10-12; Auyeung and Ivory, 2003, pp. 9-12] offers an overview of traditional Chinese and Japanese accounting practices. There are a number of useful studies on accounting in China [Huh, 1979; Hsu, 1991; Gardella, 1992; Lin, 1992, 2003; Aiken and Lu, 1993, 1998; Chen, 1998; Gao and Handley-Schachler, 2003] and several on Japan [Nishikawa, 1956, 1977; McKinnon, 1994; Nisikawa, 1994; Someya, 1996]. There is at least one study on Korea [Yun, 1977]. It can be argued that most of these efforts suffer from insufficient detailed evidence to explain traditional usages before the adoption of western methods. An exception is Aiken and Lu [1998]. Many studies ignore historical or interpretative problems, though again, there are welcome exceptions [Gardella, 1992; Aiken and Lu, 1993, 1998; Chen, 1998; Auyeung, 2002; Auyeung and Ivory, 2003]. All previous studies are primarily concerned with governmental practices or commercial establishments.

Commercial activity in East Asia has a long history, but premodern Korean mercantile records are few. In fact, there are no known surviving commercial accounts dated earlier than the mid-19th century. Nevertheless, it is often asserted that Korean merchant houses in Kaesŏng City traded with China and Arabia and developed, as early as the mid-Koryŏ period (11th-13th centuries), a double-entry method known as the *sagae Songdo ch`ibubŏp* (four-sided Kaesŏng ledger method). Information on the system is available in Korean [Hyŏn, 1916; Hong, 1962; Kang, 1978; Yun, 1978, 1984; Cho, 2000], Japanese [Zenshō, 1968; Yoshida, 1988,[3] 1999], and outlined in English [Yun, 1977]. The system is "four-sided" because it recorded the receiver's name, the giver's name, the commodity or cash received, and the commodity or cash disbursed. Fundamentally, the method required a dual entry for each transaction.

The four-sided method may have been centuries old, but direct evidence for it is more recent so that its "origins" remain a matter for speculation [Yoshida, 1988, pp. 147-150]. Yoshida [1988, pp. 137-140; 1999, p. 73] points out that all studies rely primarily on a few privately obtained account books, a 1916 accounting primer, and early 20th century ledgers (1898-1906) kept by the Taehan Ch'ŏn'il Bank in Seoul.[4] Yoshida [1999, p. 68] notes that some privately obtained account books held at the Kobe University Library concern a Kaesŏng merchant dating back to 1854. None of these documents can confirm the alleged mid-Koryŏ origins of the method. The 1916 primer and the ledgers from 1898-1906 have been analyzed in detail, but the older books are not well known and offer no direct evidence of a method in *general* use predating the opening of Korean ports to modern trade in 1876.

The 1916 primer deserves further explanation. By the late 19th and early 20th centuries, there was widespread dislocation as Korean society lurched headlong into the international

[3] Yoshida [1988, pp. 133-134] offers an extensive review of Japanese scholarship on this issue.

[4] The Taehan Ch'ŏn'il Bank was founded in January 1899. It has been known by many names; e.g., Chōsen Sangyō Bank (1911), Han'guk Sang'ŏp Bank (1950), combined with Han'il Bank (1998), Han'pit Bank (1999), absorbed by P'yŏnghwa Bank (2001), and Uri (Woori) Bank (2002).

market economy. Because the double-entry methods of the West had not yet penetrated Korean commerce and because there was general disarray in the Korean accounting world, a standard method was sorely needed.[5] In 1916, Hyŏn consulted with two Kaesŏng merchants and authored a primer describing their four-sided ledger method. Hyŏn's primer outlines an indigenous, double-entry method in which he defines terms and offers examples. There are modern elements in the primer, such as the use of Japanese terms [Yoshida, 1988, p. 139], the use of *yen* and *zeni* (Japanese monetary denominations), and the use of the zero as a place marker. Moreover, the question of Chinese influence deserves consideration. The presentation of accounts on the pages of the 19th century Korean commercial ledgers is similar to the style in the illustrations that accompany this paper. Because entries are not made in a similar fashion to Chinese entries with a single page divided into top and bottom [Aiken and Lu, 1998, pp. 228, 232], and because the terminology is completely different, it seems that the Korean methods were not derived from Chinese accounting. Nevertheless, there are striking similarities to the Chinese *Lóngmén* bookkeeping system, a prime topic for future investigation.

Although we have Hyŏn's exposition of this indigenous practice, the problem remains that there are few available specimens of accounts that predate the 1850s that can confirm the general use of the method. Zenshō [1968, p. 119] reports that, in 1921, when he was conducting a study of Korean accounting for the Japanese colonial authorities, he saw account books in a library in Kaesŏng City dating from the 1770s that used a four-sided ledger method, but he was only able to obtain books from the Gūanxù period (1875-1908) for his personal collection and analysis. In addition, a North Korean researcher [Hong, 1962] has investigated accounts from at least 1798, which are part of the Kaesŏng City Museum archives [Hong, 1962, p. 58; Yoshida, 1988, p. 155, note 44]. Hong [1962, pp. 54, 59] also refers to accounts from the early 1820s in the Kaesŏng University of Politics and Economics (Songdo Chŏngch'i Kyŏngje Taehak). These account books may still be extant in Kaesŏng (presently in North Korea), but it has not yet been possible to gain access, much less to verify their existence.

The extant accounts of commercial and banking organiza-

[5]The period from 1876 to 1910 or 1920 in Korea may offer a parallel case for the Weberian analysis of late Qing Chinese accounting by Auyeung and Ivory [2003] comparing "formal" and "substantive" rationalities.

tions from the mid-to-late 19th century are reputed to be based on a dual-entry system, but Yoshida [1999, p. 72] merely says that the 1854 debit and credit ledgers in Kobe University Library are "sister ledgers" (*shimai chōbo*) and that they alternately record debits and credits for the same period. Yoshida does not supply sufficient detail to confirm the method used, and we have not been able to examine these books ourselves. While there are questions about the principles underlying the system, the current understanding is represented by Hong [1962, pp. 57-58], Zenshō [1968, p. 119], Kang [1978, p. 89], Yun [1978, p. 99, 1984, p. i], and Yi [2001, p. 3], who argue that the four-sided ledger system is comparable to the Venetian "double-entry" system, is possibly older, and perhaps even more elegant.

On the other hand, Cho [2000, pp. 300-302] argues that the extant materials do not justify describing the system as double entry. He doubts that such a sophisticated system was possible in East Asia where Arabic numerals were not used and the Chinese script lacked the zero. Yoshida withholds judgment on the principles at work and objects to Korean claims to the "world's oldest double-entry method" when based on evidence no older than 1854.

Promoters of such claims often link their assertions to developmental economic models arguing for the indigenous appearance of capitalism in Korea [Hong, 1962, pp. 50, 54-57]. Yoshida [1999, p. 74] correctly criticizes the conflation of a supposedly medieval dual-entry method with arguments about the early appearance of capitalism in Korea. Linking sophisticated accounting systems in East Asia to capitalism, something that is ill-defined at best for these different historical and social orders, does no more than echo the host of 19th and 20th century claims for European exceptionalism in developing capitalism based on double-entry accounting [Weber, 1927, p. 275; Spengler, 1928, p. 490; Braudel, 1983, p. 573; Gardella, 1992, pp. 317-319].

Nevertheless, the system described in Hyŏn's 1916 primer and the practices that appear in surviving ledgers certainly present us with a number of questions about accounting method. In this paper, we will not discuss the method outlined in Hyŏn's primer because there is the possibility that it was influenced by Japanese systems and does not reflect traditional methods. In order to confirm the existence of an indigenous Korean system and to ascertain its principles, it is necessary to identify older examples from various organizations, both commercial institutions and non-commercial establishments. This paper examines a case that clearly predates direct Korean contact with the West or with the West as mediated by Japan from 1876.

The ledgers of the MCA represent some of the oldest accounting books available. They are the accounting records of a non-profit, cooperative association. The shared terminology between Hyŏn's 1916 text, the MCA ledgers, and other similar material also recently made available[6] is striking and suggests the widespread use of a traditional style of accounting. The predominance of the accounts of non-profit organizations corroborates qualitative information on the general attitudes of pre-20th century Koreans. Merchant houses were socially inferior and treated with suspicion. By contrast, cooperative, non-profit organizations were socially acceptable, commonplace, and free of government control. Their accounts have been carefully preserved for centuries.[7]

MORAL ECONOMY

The dynamic between accounting methods and the political and socio-economic environment has been explored by Loft [1986], Hopwood [1987], Hopwood and Miller [1994], and others for Britain, and by Aiken and Lu [1993, 1998], Chen [1998], Bloom and Solotko [2003], and others for China. The notion that accounting methods are merely an inert technology is quite defunct. In pre-1876 Korea, the prejudice against commercial activities and the social acceptance of ubiquitous cooperative associations were aspects of a socio-economic ethic that we refer to as the "moral economy" of pre-modern Korea. Our purpose in this paper is to analyze an indigenous Korean, double-entry *method*, not to offer deterministic cultural explanations for its use. However, we find that the concept of moral economy is useful in explaining significant parts of the *content* of the accounts presented below and of the *method* applied. We cannot yet show how the method *shaped* organizational and societal change since our sample is too narrow, but we can show how the method clearly *responded* to societal concerns.

[6]There are similar data available from the Haenam Yun clan (1846-1882), also from Chŏlla Province, and from the Yongsan Sŏwŏn (Yongsan Academy, 1700-1705) in Kyŏngsang Province. For the Haenam Yun clan, see Han'guk Chŏngsin Munhwa Yŏn'guwŏn (ed.) [no date], library microfilm no. 35-003212 and no. 35-003213. For the Yongsan Sŏwŏn, see Han'guk Chŏngsin Munhwa Yŏn'guwŏn (ed.) [2000, pp. 721-809].

[7]Clan account books in China have been mined as rich sources for the history of prices but not yet analyzed for their accounting method. For example, rice prices from clan records for 1684 to 1802 have been published by Tanaka [1986].

Many scholars have outlined moral economies in other historical settings [Polyani, 1944; Wolf, 1969; Scott, 1976; North, 1977; Popkin, 1979; Thompson, 1993], but few have examined the concept's applicability to China, much less Korea. Certainly, in Korea (and northeast China), the dominant moral ethic (Confucianism) was an ideological construction that fit an agricultural economy as practiced in a volatile ecological zone plagued by severe winters and devastating summer flooding. Unlike the north China plain, Korea is very mountainous and had no comprehensive state-run irrigation works, so a "hydraulic society" with extensive centralized powers did not arise [Wittfogel, 1957]. The political philosophy of Confucianism, particularly the Neo-Confucianism that appeared from the 13th century, was the systematic exposition of a moral economy and was well suited to Korean environmental constraints. It preached a social contract of localized mutual interdependence, ultimate government responsibility for subsistence, and interpersonal relations based on sincerity and clarity with fair and accurate accounting in transactions. These are a few of the practical reasons why Confucianism excoriated commerce. Gao and Handley-Schachler [2003, pp. 49-50] point out the overlap between Confucianism and Buddhism in their distrust of the profit motive. To a Confucian, profit pitted individuals against the collective. To a Buddhist, profit led to the illusion of material desire and the perpetuation of suffering. Of course, such normative principles did not preclude a concern with cost and profit in production [Ji, 2003]; yet, the pursuit of profit was a stigmatized activity.

Indications of the concerns and practices of a Confucian moral economy can be glimpsed in the MCA accounts – relief for economically weaker members, insurance for all, and no apparent concern with profit. In other words, the 18th century context for the books examined below is one in which local society was deeply imbued with cooperative principles, nearly every individual was part of a web of cooperatives, and commerce was a socially despised activity. However, the disparagement of commercial activities did not mean the absence of rational, accurate accounting. Non-commercial, non-governmental institutions were commonplace, and many of these were organizationally complex and concerned with maintaining, expanding, and bequeathing corporate assets.

To determine what accounting system was in general use in Korea or even what passed for rationality in connection with economic matters, it makes little sense to focus on fringe activities practiced by commercial organizations that operated from socially inferior positions. Nonetheless, Western scholarship on Sinitic civilization (China, Korea, and Japan) has long been dominated by teleologies that assume social and historical change arises from commercial activities and is inherently progressive. Both Marxists and Weberians share this bias. While Marxists refer to the "sprouts of capitalism" in a feudal society [Ji, 2003. p. 73], Weberians seek out "cultural impediments to overseas innovations" [Aiken and Lu, 1998, p. 221].

The Western, economic-determinist approach to accounting has resulted in by-passing the larger body of accounting practices common to non-profit cooperative societies. The very strengths of the traditional Confucian societies have long been portrayed as impediments. For example, Auyeung [2002, p. 14] lists the Chinese obstructions to the rapid adoption of Western accounting techniques as "centralized political power, a society resistant to change, an anti-merchant mentality and narrow-based learning." "Rational" is a term reserved for Protestant societies [Auyeung and Ivory, 2003, p. 19]. The assumption is, all choices are equal; the mystery is, why did Confucian societies fail to make the rational choice and emulate Europe? The irony is, Japan and even Europe in the 19th century were in the throes of transforming feudal chaos into functioning structures that would offer stability and the power to mobilize resources and labor. Developments such as centralized governments, societies able to manage change and produce stability, standardized education, and sufficient state power to control and tax merchants had already taken place in China and Korea. By casting Sinitic tradition in a negative light for not having moved a socially despised fringe ethic to center stage, the West has been blinded to the actual rationality at work directed to solving immediate needs. Here we reference "moral economy" to introduce the dominant ethic as a rational response to circumstances and to strip away the negative images favored by Western academics for more than a century. In our concluding remarks, we will return to the main components of this moral economy to interpret the activities revealed in the MCA books and to explain why the profit motive was missing.

A WORKING DEFINITION OF DOUBLE-ENTRY ACCOUNTING

One task of this paper is to determine whether the books of the MCA were kept in a double-entry fashion or something closely approximating it. For this, we will need to have a working definition of double-entry accounting as a guide. The following notes do not presume to offer an exhaustive definition, but do identify a few principles from more well-known historical studies on the development of European accounting practices.

De Roover [1956, p. 114] specified certain minimum requirements for an accounting system to qualify as double entry:

> …there is no double-entry bookkeeping without the observance of certain strict rules. A necessary prerequisite is that all transactions be recorded twice, once on the debit and once on the credit side. If this requirement is not fulfilled, there is, by definition, no double entry. The principle also involves the existence of an integrated system of accounts, both real and nominal, so that the books will balance in the end, record changes in the owner's equity and permit the determination of profit or loss.

In addition to a ledger that records entries twice, there must be ledgers for real and nominal accounts, a demonstration of balance, and the possibility of determining profit or loss. In striking a balance, there should be no surplus or loss since this would indicate a simple deduction of liabilities from assets [de Roover, 1956, p. 128]. Other evidence is also desirable – day books and journals that post entries to a ledger, some tracing of accounts for expenses (or transaction costs), a capital account, and a balance sheet [de Roover, 1956, pp. 125, 132, 141].

To be called double-entry bookkeeping, Yamey prefers to see a consistent entry for each transaction in two different places, a capital account, and a profit-or-loss account [Littleton and Yamey, 1956, pp. 6-8; Yamey, 1975, p. 722]. More recently, Yamey seems willing to reduce his requirement to dual entry and now agrees with Lane, who wrote, "as a practical matter, in research, [the student] may regard any accounts with duality of entry as being an elementary form of double-entry" [Lane, 1977, p. 187; Yamey, 1992, p. 706]. Recording transactions in two different places allows balancing, and if the balances of various sub-accounts are fed into a general ledger, a capital account and a profit-or-loss account can be easily drawn up. The use of accounting periods and a single monetary unit might be added to these requirements [Nobes, 1994. p. 246].

We will demonstrate that the accounts for the MCA recorded every entry that crossed ledgers in two different places (although not every transaction within ledgers). There was in evidence an integrated system of accounts (although all accounts were real accounts), accounting for expenses (transaction and wastage costs), defined accounting periods (the agricultural cycle), and balanced books. We will discuss personification (independent accounts trading back and forth and independently recording their trades) as the principle underlying and unifying the MCA accounts. The absence of nominal accounts and profit-or-loss statements will be explained by invoking the societal ethics of the moral economy, the context in which these accounts were produced. Before examining the accounts, we will briefly introduce the provenance of our sources.

VILLAGE AND CLAN ASSOCIATIONS

While commercial establishments were rare, mutual assistance associations (*kye*) were common in late Chosŏn Korea (1598-1910). Individual investors pooled resources and then appointed stewards (*yusa*) to carry out their aims. The associations usually had three objectives. The first was to act in the public interest, to provide funds for public works, education, and the relief of the poor. The second aim was insurance and mutual aid, providing for marriage costs (*honin-kye)*, funeral costs (*sang-kye)*, and sacrificial rites (*chesa-kye*). The third aim was investment financing, providing for tree planting (*song-kye*), irrigation (*po-kye*), and for the lease of oxen and ploughs (*nong'u-kye*) [Shikata, 1976, p. 71].[8] The MCA engaged in all these activities and more.

BOOKKEEPING PRACTICES OF THE MUN CLAN

The account books or *yonghagi* are among the most important archives of the MCA. Six account books covering the period from 1741 to 1927 relating to the main clan association and four account books from 1819 to 1881 concerning a branch clan association are available.[9] The form of Vol. 1 (1741-1765) differs from all the later volumes. It began as a simple record, but by the 1760s, it had assumed a complex form that became the pattern for all later volumes. Vols. 2-6 contain elaborate accounts that record receipts and expenses in a basic dual-entry form.

---

[8]For a description of an 18th century Chinese financial cooperative scheme, see Reiss et al. [1996].

[9]Main Clan: Vol. 1 (1741-1765); Vol. 2 (1779-1805); Vol. 3 (1806-1816); Vol. 4 (1843-1849); Vol. 5 (1850-1871); Vol. 6 (1884-1928); Collateral Clan: Vol. 1 (1819-1826); Vol. 2 (1827-1841); Vol. 3 (1845-1863); and Vol. 4 (1864-1881). All of these are photolithographically reproduced in Han'guk Chŏngsin Munhwa Yŏn'guwŏn (ed.), 1995.

The increasing sophistication of recording after Vol. 1 was likely caused by the growth in the financial scale of the MCA.

Rural Korea in the 18th century was not highly monetized; thus, money was a complex matter. The first use of copper coins (from 1706) appears in a village association record of major local events (1667-1984) [Han'guk Chŏngsin Munhwa Yŏn'guwŏn (ed.), 1955, pp. 217-227]. This record appeared 28 years after the central government had begun in earnest to mint metallic coins (1678). These coins were known as *sangp'yŏng t'ongbo* ("ever-normal circulating treasure"). Mention of these coins indicates that metallic currency was quickly adopted in the countryside of southwest Korea in a context where pre-industrial agrarian change was slow. From studies of northern China, Huang [1985, p. 47] suggests that it took at least three generations before "secular" change (e.g., commercialization and handicrafts development) was apparent, but in southwest Korea, it seems to have taken about a generation for coinage to facilitate exchange practices.

Despite the spread of coinage, accounts were never expressed in a single currency. In fact, receipts and expenses were denominated in three currencies – unhulled rice, minted copper-bronze coins, and milled rice. The rice payments can be considered payments in kind, but they were so universal and standardized that they actually served as money. Unhulled and milled rice functioned as "rice money," consumable and storable specie with a natural loss value. Copper cash was more stable. Introduced widely from 1678, its value generally remained steady until 1866, at which time the government issued a multi-denominational coin with a face value one hundred times the old coin. Chinese money was also imported to Korea at the end of the 19th century when, as per Gresham's law, the older, higher-value coins were withdrawn from circulation. Inflation and chaos resulted and lasted into the 1890s when foreign currencies (Mexican and Japanese) began to circulate with new Korean government issues. Financial and economic stability did not begin to re-appear until 1904 when Japanese policies imposed order [Pak, 1969, pp. 30-91, 116-145; Palais, 1996, pp. 855-876, 924-1001]. Strangely, the MCA accounts during the late 19th and early 20th centuries do not show the introduction of the Japanese *yen* until early 1928 (at the very end of Vol. 6). Until then, the accounts continue to use the old character for copper cash or *yang*. The consistency in the unit of currency probably indicates a desire to maintain accounting consistency. Since Japanese currency was imposed shortly after the annexation of

Korea in 1910, it evidently took about a generation to adopt the new coinage.

The following subsections discuss five separate bookkeeping concepts and methods related to the clan accounts. These topics will be illustrated with exhibits and tables drawn from the source materials.

Developments in the Mechanics of Bookkeeping: Writing in premodern Korea was in the East Asian vertical style, top to bottom and right to left. Not surprisingly, the account books of the MCA were written in this fashion. Account books in double-entry format must have a method to distinguish verbally and visually between debits and credits. Littleton [1956, pp. 232-233] discusses the development of journal nomenclature and form in Europe. European accountants developed technical vocabulary and eventually a visual vocabulary of indentation at least by the middle of the 19th century.[10] By the 18th century, the accountants for the MCA were deploying indentation, special terms, and word order as their technical apparatus.

At first, two different types of written characters, ordinary and large, were employed to facilitate classification, together with an indentation technique. The large character had two usages, marking years and accounts. In the 1741 accounts, large characters marked the year, rental income, and "remaining" cash or rice on hand (see Exhibit 1). By 1744, the use of large characters had disappeared, and the reporting period had changed from an annual report in the twelfth month to biannual reports in spring and autumn.

The most important distinction was between debits and credits, which came to be indicated by special terms, *yu* (留) and then *nae* (內). In the 1741 account (Exhibit 1, indicated by C), we can see *yu,* which means "remaining [assets]." In Exhibit 1, upper and lower sheets, *yu* indicates old grain kept in storage. In the following year, *yu* was disappearing and *nae* was beginning to appear. Within the decade, *nae* became the standard term with the clear meaning of "total income or assets from

[10] Littleton [1956, p. 233] describes the process as follows: "Practice has passed from one definite stage to another: 1. a time of no journal entries, when the full statement of the transaction was probably entered directly in the two ledger accounts concerned; 2. a period (say 1430 to 1550) with a highly technical form of journal entry preparatory to the record in the ledger; 3. a long interval in which the journal entry expressed more or less fully a complete thought; and 4. the modern period – now quite technical in form again – when the focus is the accurate sorting of accounting units."

which expenditures" would be deducted. Exhibit 2 shows that *nae* appears in the 1793 accounts at the end of the second column from the far right in the top of the illustration and again at the end of the third column from the far left (indicated with G). Debits were recorded to the right of *nae* and credits to the left. This use of the term *nae* to divide expenditures from assets was not unusual in East Asia. It was used extensively in Japanese (Tsushima) trade ledgers from the Tokugawa period. Hyŏn's work [1916, p. 25], explaining the methods of the Kaesŏng merchants, depicts *nae* playing the same role.

From as early as the 1740s, the MCA accounts used word order (whether words or numbers came first) to indicate the difference between debits and credits. In Exhibit 2, words begin all debit entries and numbers begin all credit entries. This word order was consistently applied from the mid-1750s. Words followed by numbers indicated a positive entry (income) and numbers followed by words signalled a negative entry (payment). For spring accounts, the debit entries all begin with "balance brought forward (from the previous year)" (*chŏnsu* or *chŏn* as illustrated in Exhibit 2, indicated by F, first appearance 1745), but autumn debit entries often begin with "remaining" (*yu*), as in "remaining from the previous accounting period."

Also, from the mid-1750s, entries for expenditures carried a final character, *ha*. For example, in Exhibit 2 (indicated by H), after the columns that end in *nae*, all expenditure entries end in *ha*, except final entries that express "natural loss" (*ch`uk*, indicated by E). From 1755, subtotals were marked off at the end of sections by the term *isang* (Exhibit 2, indicated by J), but the use is inconsistent until the records resume from 1779, following a gap of 14 years.[11]

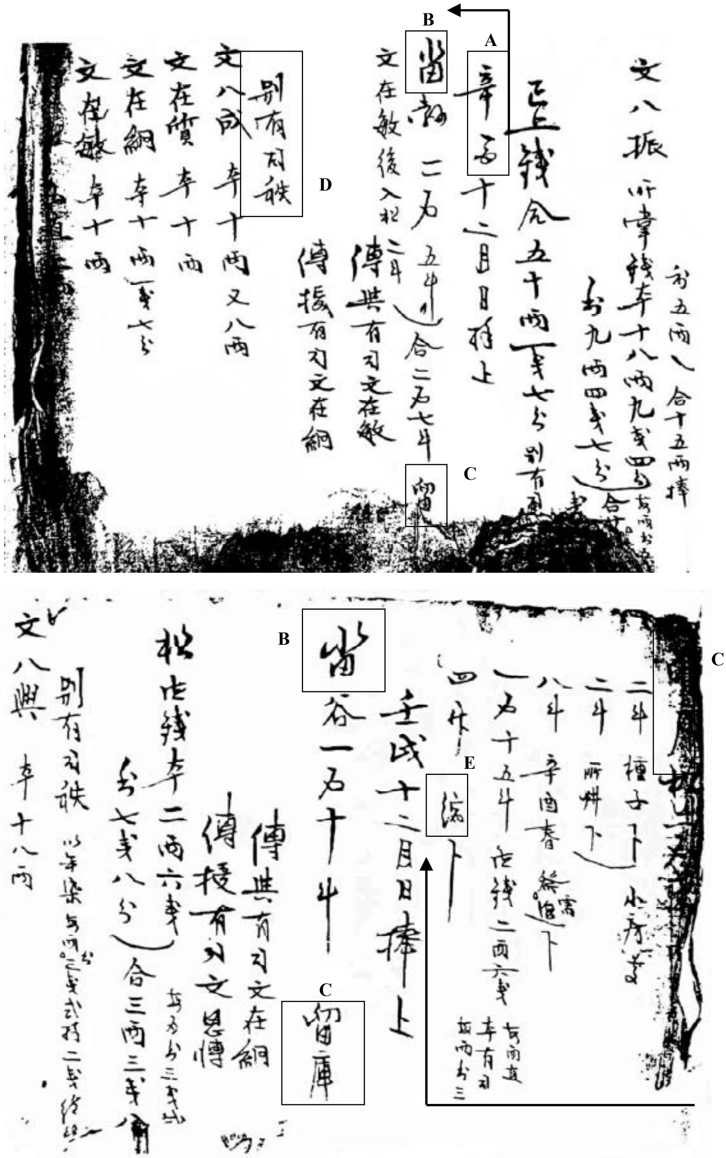
Although the terms *nae* and *ha* appear early to distinguish debits from credits, we do not find extensive indentation until much later. The technique of indentation was developed by the 19th century in English accounting and indicated a separation between debits and credits [Littleton, 1956, p. 232]. Littleton points out that the custom was to indent credits below debits. In Exhibit 1, we can see some experimentation with indentation,

---

[11]Other technical terms that do not appear here should be born in mind. For example, *pong* or *sang* meant receipt, *kŭp* or *ha* (the *ha* that is mentioned above) meant expenditure, *ip* or *nae²* meant incoming. This *nae²* is a different character from the *nae* discussed above and is in the glossary as *nae²*. Finally, *ch'ul* or *kŏ* meant outgoing. These terms are explained in Hyŏn's primer [1916, pp. 18-26]. They all seem to have had native Korean pronunciations (*idu*), but we have given them their common Sinitic pronunciation.

EXHIBIT 1

Mun Clan Ledger (*Yonghagi,* two folio sheets), 1741

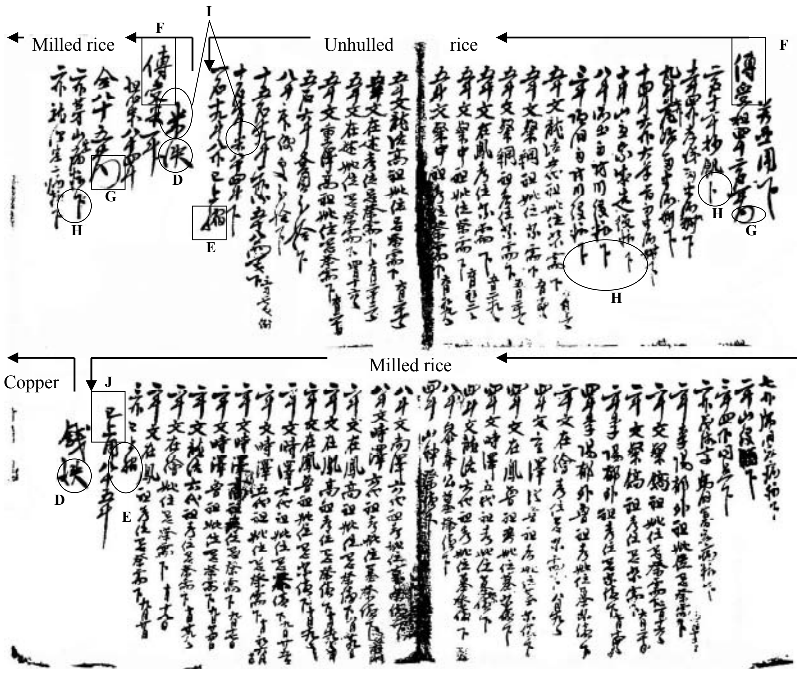


Source: Han'guk Chŏngsin Munhwa Yŏn'guwŏn (eds.) (1995), *Komunsŏ chipsŏng vol. 21* (Collection of documents, vol. 21) (Sŏngnam: Han'guk chŏngsin munhwa yŏn'guwŏn), pp. 576-577.

NB: A: year (1741); B: income (畓); C: remaining (留); D: ledger ([別有司]秩); E: natural loss (縮).

EXHIBIT 2

Mun Head Clan Ledger (*Yonghagi,* two folio sheets) Unhulled rice (舂租秩), Milled Rice (米秩), and the Beginning of Copper Cash (錢秩), Spring 1793



Source: Han'guk Chŏngsin Munhwa Yŏn'guwŏn (eds.) (1995), *Komunsŏ chipsŏng vol. 21* (Collection of documents, vol. 21) (Sŏngnam: Han'guk chŏngsin munhwa yŏn'guwŏn), p. 638.

NB: D: ledger (秩); E: natural loss (縮); F: balance brought forward (傳受); G: from this (total income) (內); H: expenditure (下); I: milled rice (米); J: subtotal (已上).

but consistency does not appear until 1785. Exhibit 2 for the 1793 accounts shows an indentation style that remained consistent for the next century or more with debit-entry columns beginning higher on the page than credit-entry columns. In short, by the 1780s, the above techniques produced pages that textually and visually showed the relationships between entries.

Personal Accounts and a Division of Administration: Yamey offers four possibilities for the origins of double-entry bookkeeping (DEB). Perhaps it was the work of a single gifted inventor or a triumph of the mercantile ingenuity of the Renaissance. A third possibility is that DEB was an accidental technical development from simpler forms that evolved through a process of accretion and adaptation. The fourth possibility is that DEB was a response to "new or growing business needs not satisfied by earlier methods of record-keeping" [Littleton and Yamey, 1956, p. 2]. The differences between the 1741 and the 1793 accounts kept by the head clan (*taejong-kye*) of the Mun Clan indicate that, in this case, techniques grew by a gradual process of accretion and adaptation that employed customary techniques already in use. In the earliest records from 1741, items were already being grouped under appropriate headings, indicating a gestation of accounting methods. By the 1760s, accounts had been separated into their own ledgers.

The books kept between 1819 and 1883 by a branch Mun Clan (*sojong-kye*) show no evolution and display the same sophisticated form perfected by 1793 in the head clan accounts. However, the branch clan accounts display different emphases from those of the head clan. The head and branch clan books show a division of administration. In particular, the branch clan's books contain personal accounts. Personal accounts occasionally appear in the head clan accounts in connection with memorial rites (filial piety), bad debts, and emergencies, but they exist routinely throughout the branch clan records for funerals and expenditures for seed and tillage. The fact that individual or household names were attached to transactions as well as insurance payments is a significant refinement over the head clan accounts. Table 1 contains an extract from the branch clan accounts and presents the unhulled rice ledger for 1819. Lines 10-19, 22-24, and 33 and 36 are all personal accounts with names indicated in bold.

TABLE 1

Original Text and Translation for Unhulled Rice *ch'unjo* (春租) Spring Period (Branch Clan), 1819

<table>
<tr><th>Line</th><th colspan="2">Original text</th><th colspan="2">Translation</th><th>conversion to tu</th></tr>
<tr><td>1</td><td colspan="2">己卯春</td><td colspan="2">1819 spring</td><td></td></tr>
<tr><td>2</td><td colspan="2">傳受租七十三石十八斗八升三合</td><td colspan="2">carried down [from previous fiscal year]</td><td>1478.83</td></tr>
<tr><td>3</td><td colspan="2">一石十五斗松溪祭債下</td><td colspan="2">Song-kye [another association] rite cost</td><td>35</td></tr>
<tr><td>4</td><td colspan="2">一石十斗場巖祭債下</td><td colspan="2">Chang`am [village association] rite cost</td><td>30</td></tr>
<tr><td>5</td><td>二石私乃</td><td rowspan="3">庫直</td><td>Remuneration</td><td rowspan="3">Warehouse keeper</td><td>40</td></tr>
<tr><td>6</td><td>五斗庫基所耕</td><td>Annual production cost [a)]</td><td>5</td></tr>
<tr><td>7</td><td>五斗例給種子</td><td>Seed according to precedent</td><td>5</td></tr>
</table>

<table>
<tr><td>8</td><td colspan="2">十一斗捧上廳盖草</td><td colspan="2">Thatch Posang house</td><td>11</td></tr>
<tr><td>9</td><td colspan="2">七斗庫舍盖草</td><td colspan="2">Thatch warehouse</td><td>7</td></tr>
<tr><td>10</td><td colspan="2">五斗例給種子
再哲</td><td colspan="2">Seed according to precedent
Chae Ch'ŏl</td><td>5</td></tr>
<tr><td>11</td><td>一石私乃</td><td rowspan="2">大元</td><td>Remuneration</td><td rowspan="2">**Tae Wŏn**</td><td>20</td></tr>
<tr><td>12</td><td>五斗例給種子</td><td>seed according to precedent</td><td>5</td></tr>
<tr><td>13</td><td colspan="2">十四斗四升光大畓七斗落半所耕
次先</td><td colspan="2">Kwangdae paddy 7 *turak* half annual production cost
Ch'a Sŏn</td><td>14</td></tr>
<tr><td>14</td><td colspan="2">六斗大草畓二斗落半耕
冷泉宅</td><td colspan="2">Taech'o paddy 2 *turak* half annual production cost
Naeng Ch'ŏn House</td><td>6</td></tr>
<tr><td>15</td><td colspan="2">六斗二升甬洞畓三斗落半所
萬貴</td><td colspan="2">Yongdong paddy 3 *turak* half annual production cost
Mangwi</td><td>6.2</td></tr>
<tr><td>16</td><td colspan="2">四斗堂洞畓三斗落半所耕
興得</td><td colspan="2">Tangdong paddy 3 *turak* half annual production cost
Hŭng Dŏk</td><td>4</td></tr>
<tr><td>17</td><td colspan="2">四斗甬洞畓三斗落半所耕
肖伊</td><td colspan="2">Yongdong paddy 3 *turak* half annual production cost
So Yi</td><td>4</td></tr>
<tr><td>18</td><td colspan="2">四斗東亭畓四斗落種子
小八仙</td><td colspan="2">Tongjung paddy 4 *turak* seed
So P'al Sŏn</td><td>4</td></tr>
<tr><td>19</td><td colspan="2">五斗所土畓四斗落種子推移秋捧次
望湖宅</td><td colspan="2">Sot'o paddy 4 *turak* seed loan to be repaid within autumn harvest time
Mangho House</td><td>5</td></tr>
<tr><td>20</td><td colspan="2">二斗同防川役粮</td><td colspan="2">Food costs for labour when building a dam for flood prevention</td><td>2</td></tr>
<tr><td>21</td><td colspan="2">十斗山直所耕</td><td colspan="2">Grave keeper's annual production cost</td><td>10</td></tr>
<tr><td>22</td><td colspan="2">五斗光大畓半所耕
億伊</td><td colspan="2">Kwangdae paddy half annual production cost
Ōk Yi</td><td>5</td></tr>
<tr><td>23</td><td colspan="2">十三斗八合石朴畓四斗落半所
國山宅</td><td colspan="2">Sŏkbak paddy 4 *turak* half annual production cost
Kuk San House</td><td>13.08</td></tr>
<tr><td>24</td><td colspan="2">五斗孝悌畓堰水役粮
花方宅</td><td colspan="2">Food costs for labour when irrigating Hyoje paddy
Hwa Pang House</td><td>5</td></tr>
<tr><td>25</td><td colspan="2">一石十斗庫使推移秋捧次</td><td colspan="2">Loan to warehouse manager to be repaid within autumn harvest time</td><td>10</td></tr>
<tr><td>26</td><td colspan="2">二石作錢三兩</td><td colspan="2">Traded 2 *sŏk* for [cash] 3 *yang*</td><td>40</td></tr>
<tr><td>27</td><td colspan="2">七石作米五十二斗五升白七斗五升例</td><td colspan="2">Milled 7 *sŏk* [unhulled rice into] 52 *tu* 5 *sŭng* hulled rice at a rate [of 1 *sŏk* unhulled rice yields hulled] white rice 7 *tu* 5 *sŭng*</td><td>140</td></tr>
<tr><td>28</td><td colspan="2">一石書徒求請</td><td colspan="2">Students' request</td><td>20</td></tr>
<tr><td>29</td><td colspan="2">七斗一升三合作錢五錢荒</td><td colspan="2">Traded 7 *tu* 1 *sŭng* 3 *hop* for cash 5 *chŏn* [grain in a year of dearth]</td><td>7.13</td></tr>
<tr><td>30</td><td colspan="2">五石作米四十斗八斗例</td><td colspan="2">Milled 5 *sŏk* 40 *tu* [unhulled rice] into 40 *tu* at a rate [of 1 *sŏk* unhulled rice yields hulled rice] 8 *tu*</td><td>100</td></tr>
<tr><td>31</td><td colspan="2">一斗省墓粮下</td><td colspan="2">Foodstuffs to visit ancestral graves</td><td>1</td></tr>
<tr><td>32</td><td colspan="2">十石十一斗八升錢十六兩九錢四分一兩六錢例</td><td colspan="2">Traded 10 *sŏk* 11 *tu* 8 *sung* for cash 16 *yang* 9 *chŏn* 4 *pun* at a rate [of 1 *sŏk* =] 1 *yang* 6 *chŏn*</td><td>211.8</td></tr>
</table>

33	十斗文必勳氏嚴親初喪賻	Donation for **Mun P'ilhun's** parents' funeral expenses	10
34	十斗永保亭求請	Request for Yongbo pavilion	10
35	三石門契別廳求請	Request for clan association's auxiliary building	60
36	十斗文壽澤氏慈夫人初喪賻下	Donation for **Mun Sut'aek's** compassionate wife's funeral expenses	10
37	十三斗二升五合作米三斗三升	Milled 13 *tu* 2 *sŭng* 5 *hop* [unhulled rice into hulled rice] 3 *tu* 3 *sŭng*	13.25
38	三石作米二十斗一升六斗七升例	Milled 3 *sŏk* [unhulled rice into] 20 *tu* 1 *sŭng* hulled rice at rate [of 1 *sŏk* unhulled rice yields hulled rice] 6 *tu* 7 *sŭng*	60
39	二十一石別廳除	Deducted for auxiliary building	420
40	荒 三石作米二十一斗 七斗例	Milled [grain in a year of dearth] 3 *sŏk* [unhulled rice into] 21 *tu* hulled rice at rate [of 1 *sŏk* unhulled rice yields hulled rice] 7 *tu*	60
41	一石六斗九升七合縮	1 *sŏk* 6 *tu* 9 *sŭng* 7 *hop* **natural loss**	26.97
42	已上用七十三石一斗八升三合	Above expenditures total 73 *sŏk* 1 *tu* 8 *sŭng* 3 *hop*	1461.83
43	十七斗留	17 *tu* **remainder**	17

Source: Han'guk Chŏngsin Munhwa Yŏn'guwŏn (eds.) (1995), *Komunsŏ chipsŏng vol. 22* (Collection of documents, vol. 22) Sŏngnam: Han'guk chŏngsin munhwa yŏn'guwŏn), pp. 5-6.

a) *Sogyŏng* is translated here as "annual production cost." The meaning of the term *sogyŏng* is not yet clear. Pak [1999, pp. 54, 313-314] argues that this term refers to taxation, although the usual tax indicators referred to land area (*kyŏl*, *turak*, etc). The Association was not liable for taxation; the tenant was, so we would not expect to see notations for taxation in the Association's accounts. Based on its appearance continually throughout the accounts for the Mun clan as a credit, the term seems to refer to expenditures for labor (oxen and plowing to prepare the land and lay seed), but may have included a tax subsidy. In the 1741 accounts and in lines 6 and 7 above, we can see *sogyŏng* and seed costs as separate items, listed side-by-side, so *sogyŏng* was not a seeding cost. This sort of item was quite common in initial payments from the unhulled rice ledger. In lines 13-17 and 22-23, we see *pan sogyŏng*, meaning a payment of half of the usual cost of *sogyŏng*. Presumably, the tenant was responsible for the remaining half.

These personal accounts link communal and private concerns. The associations kept such elaborate records because they dealt with joint common property, but the personal accounts demonstrate that individual liability was the norm. Individual names indicate that the village community was not a faceless collective, a commune; rather, its economic stability relied on individual investors and individual responsibility. Goody [1996, p. 7] links individualism and the necessity for accurate accounting.

Individual household responsibility was at the base of production, a fact that becomes apparent when comparing the structure of payments by the head clan (Table 2) with those of the branch clan (Table 3).

Head clan expenditures focus on obtaining copper coins (to purchase specialized items), milling unhulled rice, paying out dividends, and extending funds for ancestral rites, all expenditures that impacted the entire community. Their prominence indicates that the head clan's overarching concern was for the greater community. Branch clan expenditures were more evenly spread over a variety of local, immediate concerns. There were significant productive payments (seeding and tillage costs within personal accounts), but the largest group of expenditures was for unproductive activities, such as students, education, charity, and public buildings.

The differences between the structure of the head clan expenditures and those for the branch clan indicate that the branch clan formed the basic unit of production and supplied most social welfare. The head clan's function was to manage the external relations that affected all members of the MCA. There was clearly a tiered aspect to the management of the village economy highlighted by the fact that personal accounts were mostly to be found in the branch clan's records. The size of the unproductive payments also indicates that surpluses existed which allowed the majority of village members to escape subsistence crises during the 18th and early 19th centuries.

Transaction Costs and Natural Loss: The accounts of the MCA do not contain explicit transaction costs. What we see is the term *ch`uk* (Exhibits 1 and 2, indicated by E), translated as "natural loss." We hypothecate that this term indicated the natural loss of grains to vermin and rot (wastage), as well as the transaction costs involved in milling unhulled rice into white rice. *Ch`uk* was always present in unhulled rice accounts and often present in milled rice accounts, but was not seen in other accounts. Moreover, *ch`uk* entries were not cross-listed and appeared only as a reduction in stocks. While no cross-listing might support an argument against the designation "double entry," the presence of these careful entries indicates great concern for the comprehensive and consistent calculation of balance. For example, Exhibit 1 (E: natural loss) records 4 *sŭng* as a "natural loss." The difference between income and outgo was 4 *sŭng*, but there is no explanation for the deficit, except the term *ch`uk*, which basically means "shrink" or "shortfall." Because no rice was milled, we

TABLE 2

The Structure of Head Clan Expenditures of Unhulled Rice (Spring 1793)

Balance brought down from 1792	Personal accounts (seeding, tillage)	Land accounts (seeding, tillage)	Dividends to membership	Milled	Traded for copper coins	Ancestral rites and grave upkeep	Carry over autumn	Students, education, charity, public bldgs.	Natural loss	Labour for irrigation repairs
841 *tu*	0 *tu*	35 *tu*	106 *tu*	210 *tu*	319.2 *tu*	68 *tu*	0 *tu*	52 *tu*	39.8 *tu*	11 *tu*
99.9 per cent	0 per cent	4 per cent	12.6 per cent	25 per cent	38 per cent	8.1 per cent	0 per cent	6.2 per cent	4.7 per cent	1.3 per cent

Source: Han'guk Chŏngsin Munhwa Yŏn'guwŏn (eds.) (1995), *Komunsŏ chipsŏng Vol. 21* (Collection of documents, Vol. 21) (Sŏngnam: Han'guk chŏngsin munhwa yŏn'guwŏn), p. 638.

TABLE 3

The Structure of Branch Clan Expenditures of Unhulled Rice (Spring 1819)

Balance brought down from 1818	Personal accounts (seeding, tillage)	Land accounts (seeding, tillage)	Dividends to membership	Milled	Traded for copper coins	Ancestral rites and grave upkeep	Carry over autumn	Students, education, charity, public bldgs.	Natural loss	Labour for irrigation repairs
1478.83 *tu*	176.68 *tu*	0 *tu*	0 *tu*	373.25 *tu*	258.93 *tu*	96.00 *tu*	17.00 *tu*	530 *tu*	26.97 *tu*	0 *tu*
100 per cent	11.95 per cent	0 per cent	0 per cent	25.24 per cent	17.51 per cent	6.49 per cent	1.15 per cent	35.84 per cent	1.82 per cent	0 per cent

Source: Han'guk Chŏngsin Munhwa Yŏn'guwŏn (eds.) (1995), *Komunsŏ chipsŏng Vol. 22* (Collection of documents, Vol. 22) (Sŏngnam: Han'guk chŏngsin munhwa yŏn'guwŏn), pp. 5-11.

believe that this "shortfall" was a natural loss due to water and rats. From 1765, *ch`uk* became a regular feature in the accounts.

In the unhulled rice ledger for spring 1793 (Exhibit 2), both "natural loss" (E) and the milling cost of unhulled rice appear (I). Most likely, this natural loss consisted of both real loss and transaction costs. Transactions with rice and the cost of milling almost always went in tandem. Traditionally in rural village markets, there was a *toejaeng-i*, who measured and milled grain for a commission [Kim, 1977, pp. 299-300]. In the milled rice accounts, there is another natural loss, probably due to rats and water. This loss would not have reflected any further transaction costs after milling, so these costs are most likely due to wastage. With our small sample, we can only catch a glimpse of what might have been the relative size of natural losses and transaction costs. Table 4 presents examples extracted from the accounts for 1741 and 1793-1795.

Natural loss from vermin and rot probably ranged from 0.4 to 0.9%, while transaction costs may be estimated at 3.7 to 4.5%. The high cost for spring 1795 (4.9%) may be attributed to the poor crop of the previous autumn.

An awareness of transaction costs indicates an appreciation for total cost accuracy. Even more minute transaction costs appear as the cost of the paper to record a land sale in the copper cash ledger for 1793 (not shown). Implicit transaction costs appear elsewhere in the form of travel expenses to conduct transactions in distant places or to visit government offices.

TABLE 4

Natural Loss and Transaction Ratios

Ledger	ch`uk (縮) ratio	Natural loss / Transaction
1741	0.9 per cent	Natural loss
1793 spring Unhulled	4.7 per cent	Natural loss + Transaction (pure Transaction: 4.3 per cent?)
1793 spring Milled	0.4 per cent	Natural loss
1794 spring Unhulled	4.1 per cent	Natural loss + Transaction (pure Transaction: 3.7 per cent?)
1795 spring Unhulled	3.2 per cent	Natural loss + Transaction (pure Transaction: 2.8 per cent?)
	4.9 per cent[a)]	Natural loss + Transaction (pure Transaction: 4.5 per cent?)
1795 spring Milled	0.4 per cent	Natural loss

[a)] Includes 9 *tu* as "lost".
Source: same as Tables 1 and 2.

Transaction costs in Chosŏn Korea were widely recognized. Because rice was an important commodity, even functioning as money, the Chosŏn state had to be able to detect deviations from rules and customs in order to regulate compliance. Many transaction costs involved in creating and maintaining institutions to regulate rice transactions defy our explanation, but it should be noted that the central government was greatly concerned with eliminating non-standard and excessive exactions on the peasantry. To control this abuse, King Sukjong in 1715 established a standard shape that was not the ordinary simple box but a trapezoid. An ordinary, wide-mouth box allowed the abuse of "heaping measures," whereas a trapezoid, with its narrow mouth, wider bottom, and taller body, helped ensure every measure's exactness and limited "heaping measures" that could be raked off to the official's private benefit.[12]

Personification or a Simple Division of Accounts?:

> The attribution of a living, independent personality to accounts must have had its roots in the very earliest forms of bookkeeping [Jackson, 1956, p. 295].

According to Jackson, the teaching of accounting in England from the 17th to the late 19th century developed from the rote application of procedural rules to a rational application of judgment based on the concept of personified accounts. Double-entry accounting necessitates the separate establishment of independent accounts (e.g., capital, goods, bills receivable, bills payable, cash, etc.) that swap entries back and forth depending on how one wishes to classify the entry. When a transaction occurs between accounts, it is recorded in both account books as either received (to be in debt to another account or debit) or paid out (to be owed by another account or to be in credit). In other words, by personifying each set of accounts in their separate ledgers, complex accounts could be easily handled and errors detected by comparing the entries and totals in the various ledgers. When all amounts and ledgers are reconciled, the books are balanced. If not, then the accountant or auditor has to search for the error. After surveying pedagogical texts from the early 17th to the late 19th century, Jackson [1956, p. 296] points out that "the practice of explaining the entries to be made in the ledger by means of personifying the accounts is found in

[12] King Sukjong issued an order in 1715 to the Board of Taxation that trapezoid measures should be distributed nationally. See Kuksa P'yŏnch'an Wiwŏnhoe (ed.), 1955-1963, *Sukjong sillok pogwŏl chŏngo* 56:1a [1715/02/08 (ŭlhae)].

the very earliest British texts and must be closely linked with the very origin of the system of bookkeeping."

The MCA account books (*yonghagi*) may have been an early example of personification. The first volume of the *yonghagi* runs from 1741 to 1765, and by the spring of 1765, the previous autumn's unhulled rice remainder was carried down to begin a new integrated account structure with separate ledgers marked off by the term *chil* (Exhibit 2, indicated by D). Up to the 1760s, however, the use of *chil* to mark categories was irregular. For example, the ledger for 1741 combined unhulled rice and copper cash accounts, but the copper cash accounts were grouped under a heading (*pyŏl yusa chil*) that meant "[items] specially managed by the bursar" (Exhibit 1, indicated by D). *Pyŏl* means special; y*usa* means the bursar for the clan association, a title that is still used today; and *chil* means order, system, or regularity if read as a Chinese character. When read in a Korean linguistic context, *chil* was a suffix that indicated something had taken on human characteristics and would act out a certain role. *Chil* became the standard suffix that marked out an entire and independent ledger, which had to be reconciled with all other ledgers to achieve a balance. In 1741, the separation had not yet occurred. As time passed, specific commodities, particularly milled rice, yeast cakes, and barley, as well as copper cash, were given their own ledgers with debit and credit transactions as if they were living persons.[13] Since these items came to be seen as agents themselves, references to the bursar (*yusa*) disappeared, leaving only the suffix *chil*. The ledgers, indicated by *chil*, became stewards, acting on behalf of the owner, and traded assets among themselves and outsiders.

In the spring accounts for 1756, we see the first appearance of the technical term *chil* to mark off the part of the accounts devoted to copper cash (*chŏn-chil*). In 1762, *chil* is first used to mark off the accounts devoted to milled rice (*mi-chil*), and it is from this time that a stable personification system that continued until the late 19th or early 20th centuries was in evidence. By the 1793 ledgers, such transactions were extracted from day books and journals and put into their own ledgers, with *chil* attached as a suffix to identify milled rice, copper cash, barley, and yeast cakes.

[13]*Chil* and its use to personify accounts was also described in this way by Hyŏn [1916, pp. 6, 20] when he reported on the methods reputedly handed down from the 13th century and still in use by Kaesŏng merchants in the early 20th century.

The special role of the unhulled rice ledger requires clarification because in Exhibit 2 from the MCA records for 1793 this ledger does not bear the suffix *chil*, while in other contemporary books it does. Ordinarily the unhulled rice ledger was like any other ledger, but it had a particular status because it contained the main income producing accounts. Unhulled rice was the money that grew from the ground and bought copper cash, yeast cakes, and even barley. Unhulled rice likewise bought or was processed into milled rice to obtain yet a different commodity, an edible commodity, so it is not surprising that the MCA accorded it a special ledger.

In the 1793 example, we can see the full development of independent, personified accounts.[14] By 1793, *chil* had been elevated to act as the title suffix for all ledgers, except unhulled rice. The sequence of ledgers was standardized by the 1760s. In the spring, the ledger sequence was unhulled rice (*cho*), milled rice (*mi-chil*), and copper cash (*chŏn-chil*). In the autumn, the order was unhulled rice, milled rice, copper cash, barley (*mongmaek-chil*), and yeast cakes (*kokja-chil*).

The autumn accounts were closed for the year as indicated by the signatures of the bursar and the auditor attesting to the accuracy of the ledger. The auditor was always someone from outside the MCA, indeed from outside the village, invited to provide objectivity. Independent auditing insured accuracy and transparency; trust was the result.

The foregoing discussion begs the question of whether the ledgers reflected personification or simply a division of accounts. What survives today are separate, independent ledgers, not day books or journals. Transaction entries usually were undated but were not randomly entered. Similar entries were grouped together, indicating that there must have been day books or journals. More importantly, the extant ledgers form a framework of bilateral transactions. Although transactions across ledgers were subject to exchange rates or transaction costs, transactions did occur. These transactions were always recorded twice, once in the issuing ledger (negative) and once in the receiving ledger (positive). Because the various ledgers traded among themselves, it may be concluded that they acted as personified agents and transcended a mere division of accounts.

Nominal Accounts: The MCA ledgers do not include a profit-

---

[14]The accounts for 1793 are used because the document is free of damage and clear.

or-loss ledger (*iik-chil*). We can conjecture that the MCA knew of such a practice but seemed to have had no need to calculate profit. Hyŏn's 1916 primer, based on the traditional practices explained to him by two Kaesŏng merchants, lists four ledgers necessary to reach a final balance and to determine profit or loss – liabilities (*kŭpch'a-chil*), assets (*pongch'a-chil*), profit (*iik-chil*), and loss (*sobi-chil*). The 1916 text clearly outlines a double-entry style with the final calculation of profit or loss in a nominal ledger. The MCA ledgers also contained expenditures, receipts, and losses (transaction costs and natural loss), but no profit ledger. The reasons were probably multiple, but fundamentally derived from the difference between mercantile and agricultural needs. The clan association, insensitive to profit, was sensitive to loss. The MCA was interested in expanding its land holdings, repairing its buildings, entertaining its guests, and providing for its membership. Copper cash was but one of three commodities that could obtain or satisfy these needs. Like modern, nonprofit, cooperative societies, the only concerns of the association were to meet the needs of the membership and to prevent losses. The MCA had no need of a purely nominal, profit ledger; all the MCA ledgers were real accounts with no separate nominal accounts.

The Bookkeeping System: Linked Single-Entry in a Double-Entry Framework: Until now, aspects of the bookkeeping in the clan accounts exhibited certain characteristics that approximated double-entry accounting – certain mechanical innovations (vocabulary and appearance) that separated debit and credit entries, the presence of personal accounts, the recognition of transaction costs and natural loss, and the personification of accounts. Ultimately, however, all of these features are merely aspects of form. It is now necessary to explain the accounting periods used and the overall integration of the accounts.

From 1741 to 1744, the MCA's accounting period was one full year. From 1744, the accounts broke the year (lunar twelfth month to lunar twelfth month) in half. The first half ("spring") opened the fiscal year and extended to the harvest, roughly between the sixth to eighth months. The second half ("autumn") stretched from the harvest to the closing of the fiscal year in the spring, thus creating two accounting periods. The development of two accounts periods in a single year necessitated the innovation of a special term to indicate "balance brought forward." Our example (Exhibit 2) of accounts for the spring of the year 1793 starts with the term *chŏnsu* (Exhibit 2, indicated by F), which literally means the "unhulled rice balance brought forward from the last account to open the new account." This term designated the starting balance and brought forward the closing entry obtained from the previous ledger cycle.

The ledgers possessed elaborate technical aspects as all cross-ledger transactions were recorded twice. All ledgers were records of real accounts, with expenditures from them simply deducted from their own capitalization values. Thus, the accounts were not double entry; in fact, they have every appearance of an elaborate set of single-entry accounts linked together to allow cross-referencing and balancing. However, an elaborate single-entry system can closely resemble a double-entry system. Aiken and Lu [1998, p. 230] describe the Chinese Three Feet bookkeeping system as "intermediate" between single and double entry. They point out that this method used double entry for non-silver transactions in which commodities were first converted to silver that was subsequently spent. The silver was recorded twice, once as a receipt from a commodity conversion and once as a disbursement for an expenditure. The MCA accounts are filled with similar examples.

Although the MCA accounts may have been somewhere between single entry and double entry, there was a keen concern with accuracy. One great advantage of double entry is the identification of error. The fact that corrections of errors can be found in the MCA books demonstrates that they were meticulously recorded. Since errors in pre-modern and modern account books in Western Europe are common,[15] their presence here is not unusual, but, compared to other contemporary books, surprisingly few errors have been found in the MCA ledgers. The errors that did appear were often related to outstanding rent or grains borrowed; only occasionally were mistakes made in recording. When a mistake was discovered, notes were added around the entry in the ledger to indicate that it was an error and to explain the ramifications of the error on other ledgers. Such entries demonstrate that the ledgers were not just a list of payments, but rather the pinnacle of an elaborate set of integrated day books and journals. In short, what the records represent is an equity account ledger. Table 5 shows that the incidence of error between 1781 and 1808 for the conversion of rice to copper cash was 2.7%. Between 1846 and 1882, the nearby Haenam

[15] "...medieval [European] balance sheets do not always balance, because the bookkeeper was either unsuccessful or neglectful in tracing and correcting small differences" [de Roover, 1956, pp. 114-115].

Yun Clan books produced an error rate of 12%, indicating that the Mun Clan was more meticulous in its bookkeeping [Han'guk Chŏngsin Munhwa Yŏn'guwŏn, no publication date].

TABLE 5

Error in the Mun Head Clan Account Books for the Period 1781-1808

line	year	season	*tu* (a)/ decimal *sŏk*	total *yang* (b)	correctly calculated for 1 *sŏk* (c = total *yang*/ decimal *sŏk*	actual record (per *sŏk* or per 20 *tu*)	error (e = c - d)
1	1781	spring	820.00/ 41 *sŏk*	67.65	1.65	1.65	0.00
2	1781	autumn	63.20/ 3.16 *sŏk*	6.00	1.90	1.90	0.00
-	-	-	-	-	-	-	-
8	1783	spring	66.00/ 3.3 *sŏk*	10.70	3.24	a)	
-	-	-	-	-	-	-	-
22	1786	autumn	26.00/ 1.3 *sŏk*	4.60	3.54	b)	
-	-	-	-	-	-	-	-
50	1793	spring	319.20/ 15.96 *sŏk*	58.10	3.64	3.70	***0.06***
57	1796	spring	96.00/ 4.8 *sŏk*	11.52	2.40	b)	
58	1796	spring	85.00/ 4.25 *sŏk*	11.70	2.75	2.70	***0.05***
-	-	-	-	-	-	-	-
98	1808	spring	345.00/ 17.25 *sŏk*	29.32	1.70	1.70	0.00
99	1808	spring	180.00/ 9 *sŏk*	15.30	1.70	1.70	0.00
100	1808	spring	320.00/ 16 *sŏk*	28.80	1.80	1.80	0.00
101	1808	autumn	300.00/ 15 *sŏk*	25.50	1.70	1.70	0.00
Error rate = 2.7 per cent (2/73) [1781-1808] the number of errors = 2, the number of total records of 'per market price' = 73							

a) "per market price" is hard to discern due to corruption of the document
b) no marking of per market price
Source: see text.

The MCA accounts were linked together. Since all transactions were not entered twice, the system was not perfect double entry, but because all cross-ledger transactions were recorded twice, the fundamental principle of dual entry for the purpose of cross-referencing was clearly in evidence. Dual entries allow the easy tracking of assets and ease the preparation of trial balances. The fact that errors were found, corrected, and referred back to other books testifies to the complexity and accuracy of the system. We must keep in mind that these were the accounts of an agricultural cooperative, an organization that produced and traded in commodities. If the organization had more complicated assets or if the volume of transactions had been greater, then the accounts might well have developed into a full-blown, double-entry system with nominal accounts. Although we do not yet have mercantile books from before the 1850s, we can see a traditional, dual-entry, indigenous Korean accounting system at work in the books of clan associations from the mid-18th century.

CONCLUSION: THE MAXIMIZATION OF UTILITY IN A MORAL ECONOMY

Our discussion of the MCA accounts raises two points. First, the fact that the accounts were kept by a clan association acting as an agricultural cooperative demonstrates that there was no necessary relationship between sophisticated accounting techniques and commercialism. Efficient bookkeeping was undoubtedly conducive to commercial success, but it was also a useful practice within the Korean moral economy. It was a technology that was applied in both contexts precisely because it was rational and efficient.

Second, the primary purpose of the MCA was mutual support, not profit. This would explain the absence of an integrated profit-or-loss balance. The goal was guaranteed subsistence for all members of the association, and the management of an asset pool that would function to maintain a stable community. If everyone had sufficient food, if there was sufficient surplus for communal needs, and if the surplus could stretch to the expression of social ideals (in particular, the ideal of filial piety), then social stability was achievable. Significant expenditures were made for projects best understood as "for the common good."[16] Loans and expenditures that might be called a form of social welfare, even a redistribution of wealth, were extended in hopes

[16]For example, expenditures for spring sacrifices (Exhibit 1, lower sheet, column 4 from right), a house for the grave keeper and irrigation repairs (Exhibit 2, upper sheet, columns 7-9 from right), sacrifices to the mountain god (Exhibit 2, lower sheet, column 16 from right); Table 1, spring 1819: unhulled rice, lines 3, 4 and 9, 28, 31, 34, 35, 39, and the categories of "land accounts," "dividends," and "labor for irrigation repairs" in Tables 2 and 3.

of enhancing communal survival and reciprocity.[17] Confucian ideology in 18th century Korea rested on personal responsibility but decried personal profit and enshrined community. We find plentiful evidence in these ledgers of extensive economic commitment to this ideal.

In the MCA accounts, there were numerous expenditures for ceremonies that directly related to the dominant social ideology of filial piety as a key pillar of social stability.[18] The performance of filial duties satisfied three needs. First, there was the need for personal emotional expression towards forebears. Second, the education of the young in the principle would eventually instill the responsibility for providing social welfare for the elderly, even the dead. Filial piety was the inter-generational social contract. Third, a filial son would attract community approval as a trustworthy and upstanding member of society. Offer [1997, pp. 450-452] reminds us that Adam Smith stated the purpose of economic activity: "...to be observed, to be attended to, to be taken notice of with sympathy, complacency, and approbation." The pursuit of wealth beyond survival was the "pursuit of *regard*." "The intrinsic benefits of social and personal interaction" or "the satisfactions of *regard*" are a human propensity perhaps stronger than the propensity to "truck, barter, and exchange." Material welfare, then, was not the sum total of human desire.

The 18th century Korean moral economy put little value on speculation and strove for a surplus that could be used to benefit community solidarity through public displays of communal ideals.[19] Lest we risk a descent into romanticism, let us recall that a key element of community solidarity in the southern rice bowl was the maintenance of irrigation facilities.[20] Since the members of the association were consumers as well as producers, their ethics were radically different from those of commercial concerns. They were risk-averse in their pursuit of subsistence and concerned with community rather than personal

[17]For example, expenditures for general distribution (dividends? Exhibit 2, upper sheet, column 11 from left), support of needy dependents (Exhibit 2, upper sheet, columns 1 and 2 from left and lower sheet, columns 1 and 4 from right); Table 1, spring 1819: unhulled rice, lines 10-19, 22-24, and the category of "students, education, charity, public buildings" in Tables 2 and 3.

[18]For example, expenditures for ancestral memorial rites (Exhibit 2, upper sheet, columns 10-19 from right, and lower sheet, columns 5-15 and 17-28 from right).

[19]Speculation would appear in the wider society in the 19th century, but that is another story related to the collapse of the social contract [Jun and Lewis, 2005].

[20]For example, Exhibit 2, upper sheet, columns 8-9 from right.

surplus. In the words of Scott [1976, p. 4], "the peasant household has little scope for the profit maximization calculus of traditional neoclassical economics. Typically, the peasant cultivator seeks to avoid the failure that will ruin him rather than attempting a big, but risky, killing."

To generate subsistence and then surplus required sophisticated technologies to monitor community assets. Without efficient and honest oversight, accounts became corrupted, the social fabric frayed, and the membership, including the accountants, ran the risk of starvation. Therefore, incoming and outgoing goods and money were strictly and rationally audited according to rules determined at the general meetings of the association. The communal value put on honest bookkeeping can be seen in the observance of similar customs in widely differing communities. Certain colleges at Oxford and Cambridge brewed a special "audit ale" to be consumed on the day accounts were audited and merchant accounts settled. Regardless of the effect on accuracy and efficiency, the purpose of the custom was to celebrate a shared, communal economy. A similar custom was practiced on auditing day in Chang`am village when wine was ritually served. The Chang`am Village Association and the MCA had an equivalent to audit ale called *chŏnyosi-chu* ("audit wine"), known to us because it was carefully recorded as an expenditure.

REFERENCES

Aiken, M. and Lu, W. (1993), "Chinese Government Accounting: Historical Perspective and Current Practice," *British Accounting Review,* Vol. 25, No. 2: 109-129.

Aiken, M. and Lu, W. (1998), "The Evolution of Bookkeeping in China: Integrating Historical Trends with Western Influence," *Abacus,* Vol. 35, No. 2: 220-242.

Auyeung, P. (2002), "A Comparative Study of Accounting Adaptation: China and Japan during the Nineteenth Century," *Accounting Historians Journal,* Vol. 29, No. 2: 1-30.

Auyeung, P. and Ivory, P. (2003), "A Weberian Model Applied to the Study of Accounting Stagnation in Late Qing China," *Accounting, Business & Financial History*, Vol. 13, No. 1: 5-26.

Bloom, R. and Solotko, J. (2003), "The Foundation of Confucianism in Chinese and Japanese Accounting," *Accounting, Business & Financial History,* Vol. 13, No. 1: 27- 40.

Braudel, F. (1983), *Civilization and Capitalism 15th-18th Century: The Wheels of Commerce,* Vol. 2 (London: Book Club Associates).

Chen, S. (1998), "The Rise and Fall of Debit-Credit Bookkeeping in China: History and Analysis," *Accounting Historians Journal,* Vol. 25, No. 1: 73-92.

Cho, I. (2000), *Sagae Songdo ch`ibubŏp chŏnsa – uri nara koyubuji ŭi paljach`wi* (The Pre-History of the Four-Sided Ledger Method of Kaesŏng City: Traces of Korea's Characteristic Accounting) (Seoul: Tosŏ ch`ulpan Haenam).

de Roover, R. (1956), "The Development of Accounting Prior to Luca Pacioli, According to the Account-Books of Medieval Merchants," in Littleton, A. and Yamey, B. (eds.), *Studies in the History of Accounting* (London: Sweet and Maxwell): 114-174.

Gao, S. and Handley-Schachler, M. (2003), "The Influences of Confucianism, Feng Shui and Buddhism in Chinese Accounting History," *Accounting, Business & Financial History,* Vol. 13, No. 1: 41-68.

Gardella, R. (1992), "Squaring Accounts: Commercial Bookkeeping Methods and Capitalist Rationalism in Late Qing and Republican China," *Journal of Asian Studies,* Vol. 51, No. 2: 317-339.

Goody, J. (1996), *The East in the West* (Cambridge: Cambridge University Press).

Han'guk Chŏngsin Munhwa Yŏn'guwŏn (Academy of Korean Studies) (ed.) (1995), *Komunsŏ chipsŏng* (Collection of Archival Documents, Vol. 21) (Sŏngnam: Han'guk Chŏngsin Munhwa Yŏn'guwŏn).

Han'guk Chŏngsin Munhwa Yŏn'guwŏn (Academy of Korean Studies) (ed.) (1995), *Komunsŏ chipsŏng* (Collection of Archival Documents, Vol. 22) (Sŏngnam: Han'guk Chŏngsin Munhwa Yŏn'guwŏn).

Han'guk Chŏngsin Munhwa Yŏn'guwŏn (Academy of Korean Studies) (ed.) (no publication date), *Haenam Yun-ssi komunsŏ* (Archival Documents for the Haenam Yun Clan), library microfilm no. 35-003212 and no. 35-003213.

Han'guk Chŏngsin Munhwa Yŏn'guwŏn (Academy of Korean Studies) (ed.) (2000), *Komunsŏ chipsŏng* (Collection of Archival Documents, Vol. 51) (Sŏngnam: Han'guk Chŏngsin Munhwa Yŏnguwŏn).

Hong, H. (1962), "Songdo 4-gae munsŏ e pan'yŏng toen songsang tul ŭi toga hwaldong (The Urban Trading Activities of Kaesŏng Merchants as Reflected in the Four-Sided Kaesŏng Ledgers)," *Yŏksa kwahak,* No. 6: 50-63.

Hopwood, A. (1987), "The Archaeology of Accounting Systems," *Accounting, Organizations and Society,* Vol. 12, No. 3: 207-234.

Hopwood, A. and Miller, P. (eds.) (1994), *Accounting as Social and Institutional Practice* (Cambridge: Cambridge University Press).

Hsu, T. (1991), "Traditional Chinese Bookkeeping Methodology," *Chinese Business History,* Vol. 2, No. 1: 1-2.

Huang, P. (1985), *The Peasant Economy and Social Change in North China* (Stanford: Stanford University Press).

Huh, J. (1979), "The Traditional Accounting System in the Orient Countries – Korea, China, Japan," *The Academy of Accounting Historians Working Paper Series,* No. 22, working paper.

Hyŏn, P. (1916), *Silyong chasu: sagae Songdo ch`ibubŏb* (Practical Self-Cultivation: The Four-sided Ledger Method of Kaesŏng City) (Seoul: Tŏkhŭng sŏrim).

Jackson, J. (1956), "The History of Methods of Exposition of Double-Entry Bookkeeping in England," in Littleton, A. and Yamey, B. (eds.) (1956), *Studies in the History of Accounting* (London: Sweet and Maxwell): 288-312.

Ji, X. (2003), "Concepts of Cost and Profit in Chinese Agricultural Treatises: with Special Reference to *Shengshi Nongshu* and *Pu Nongshu* in the Seventeenth Century," *Accounting, Business & Financial History,* Vol. 13, No. 1: 69-81.

Jun, S. and Lewis, J. (2005), "Why did Korea Fail to Modernize? Views from Economic and Environmental Histories," working paper, Wolfson College, Oxford.

Jun, S. and Lewis, J. (2006), "Wages, Rents, and Interest Rates in Southern Korea, 1700 -1900," *Research in Economic History*, forthcoming, Vol. 24.

Kang, M. (1978), "Merchants of Kaesong," in Chun, S. (ed.), *Economic Life in Korea* (Seoul: International Cultural Foundation): 88-119.

Kim, S. (1977), *Han'guk nongch'on sijang ŭi chedo wa kinŭng yŏn'gu* (A Study of the System and Function of Agricultural Village Markets in Korea) (Seoul: Nong'ŏp kyŏngje yŏn'guso).

Kuksa P'yŏnch'an Wiwŏnhoe (National History Compilation Committee) (ed.) (1955-1963), *Sukjong sillok pogwŏl chŏngo* (Veritable Records of King Sukjong, amended) (Seoul: Kuksa P'yŏnch'an Wiwŏnhoe).

Lane, F. (1977), "Doubles [sic] Entry Bookkeeping and Resident Merchants," *Journal of European Economic History*, Vol. 6, No. 1: 177-191.

Lin, Z. (1992), "Chinese Double-Entry Bookkeeping before the Nineteenth Century," *Accounting Historians Journal*, Vol. 19, No. 2: 103-122.

Lin, Z. (2003), "Chinese Bookkeeping Systems: A Study of Accounting Adaptation and Change," *Accounting, Business & Financial History*, Vol. 13, No. 1: 83-98.

Littleton, A. (1956), "Evolution of the Journal Entry," in Littleton, A. and Yamey, B. (eds.) (1956), *Studies in the History of Accounting* (London: Sweet and Maxwell): 223- 235.

Littleton, A. and Yamey, B. (eds.) (1956), *Studies in the History of Accounting* (London: Sweet & Maxwell).

Loft, A. (1986), "Towards a Critical Understanding of Accounting: The Case of Cost Accounting in the U.K., 1914-1925," *Accounting, Organizations and Society,* Vol. 11, No. 2: 137-169.

McKinnon, J. (1994), "The Historical and Social Context of the Introduction of Double Entry Bookkeeping to Japan," *Accounting, Business & Financial History,* Vol. 4, No. 1: 181-201.

Nishikawa, K. (1956), "The Early History of Double-Entry Bookkeeping in Japan," in Littleton, A. and Yamey, B. (eds.) (1956), *Studies in the History of Accounting* (London: Sweet and Maxwell): 380-387.

Nishikawa, K. (1977), "The Introduction of Western Bookkeeping into Japan," *Accounting Historians Journal,* Vol. 4, No. 1: 25-36.

Nisikawa, N. (1994). "The Accounting Inheritance of the Tokugawa Period," in Yuzawa, T. (ed.), *Japanese Business Success: The Evolution of a Strategy* (London: Routledge): 191-201.

Nobes, C. (1994), "The Gallerani Account Book of 1305-8," in Parker, R. and Yamey, B. (eds.), *Accounting History: Some British Contributions* (Oxford: Clarendon Press): 239-249.

North, D. (1977), "Markets and Other Allocation Systems in History: The Challenge of Karl Polanyi," *Journal of European Economic History,* Vol. 6, No. 3: 703-716.

Offer, A. (1997), "Between the Gift and the Market: The Economy of Regard," *Economic History Review,* Vol. 50, No. 3: 450-476.

Pak, H. (ed.) (1969), *Chŭngbo Han'guk Hwapyesa* (The History of Korean Money) (Seoul: Bank of Korea).

Pak, Pyŏngho. (1999), "Kŏnae wa sosong ŭi munsŏ saenghwal (Outgoing-incoming and Litigation Documents)," in Chŏng, Kubok; Pak, Pyŏngho; Yi, Haejun; Yi, Yŏnghun; and Kim, Hyŏnyŏng (eds.), *Honam chibang komunsŏ kich'o yŏn'gu* (Basic Studies of Documents from the Honam Area) (Sŏngnam: Han'guk Chŏngsin Munhwa Yŏn'guwŏn): 45-130.

Palais, J. (1996), *Confucian Statecraft and Korean Institutions: Yu Hyŏngwŏn and the Late Chosŏn Dynasty* (Seattle: University of Washington Press).

Parker, R. and Yamey, B. (eds.) (1994), *Accounting History: Some British Contributions* (Oxford: Clarendon Press).

Polyani, K. (1944), *The Great Transformation: The Political and Economic Origins of Our Time* (New York: Beacon Press).

Popkin, S. (1979), *The Rational Peasant: The Political Economy of Rural Society in Vietnam* (Berkeley: University of California Press).

Reiss, J., Scorgie, M., and Rowe, J. (1996), "An Historical Example of Discounting in an Early 18th-Century Chinese Financial Scheme," *Accounting, Business & Financial History,* Vol. 6, No. 2: 203-211.

Scott, J. (1976), *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (New Haven: Yale University Press).

Shikata, H. (1976), *Chōsen shakai keizaishi kenkyū,* (A Study of the Social Economy of Korea), Vol. 3 (Tokyo: Kokusho kankōkai).

Someya, K. (1996), *Japanese Accounting: A Historical Approach* (Oxford: Clarendon Press).

Spengler, O. (1928), *The Decline of the West: Perspectives of World History*, Vol. II (New York: Alfred A. Knopf), 1980 reprint.

Tanaka, I. (1986), "Shindai Setsutō sōzoku no soshiki keitai ni okeru soshi engeki no kinō ni tsuite (A Study on the Function of Ritual Drama in Reconstructing Family Relationships in Eastern Zhejiang Province During the Qing Period)," *Tōyōshi kenkyū,* Vol. 44, No. 4: 47-53.

Thompson, E. (1993), "The Moral Economy of the English Crowd in the Eighteenth Century," in Thompson, E. (ed.), *Customs in Common: Studies in Traditional Popular Culture* (New York: The New Press): 185-258, reprint of 1971 article.

Weber, M. (1927), *General Economic History*, translation of *Wirtschaftsgeschichte* (New Brunswick, NJ: Transaction Books), 1981 reprint.

Wittfogel, K. (1957), *Oriental Despotism: A Comparative Study of Total Power* (New Haven: Yale University Press).

Wolf, E. (1969), *Peasant Wars of the Twentieth Century* (New York: Harper & Row).

Yamey, B. (1975), "Notes on Double-Entry Bookkeeping and Economic Progress," *Journal of European Economic History,* Vol. 4, No. 3: 717-723.

Yamey, B. (1992), "Double-Entry Bookkeeping," in Newman, P., Milgate, M., and Eatwell, J. (eds.) (1992), *The New Palgrave Dictionary of Money & Finance* (London: Macmillan): 917-920.

Yi, Y. (2001), *Sagae Songdo chi'bubŏp kaego* (A General Consideration of the Four-Sided Kaesŏng Ledger Method) (Pusan: Sejong ch'ulp'ansa).

Yoshida, M. (1988), "Kaijū boki kenkyō no sai-kentō (A Reconsideration of Research on the Kaesŏng Ledgers)," *Chōsenshi kenkyūkai ronbunshū,* No. 25:133-156.

Yoshida, M. (1999), "Kobe daigaku shozō 'Kaijō boki chōbo' no shiryō-teki kachi (The Historical Value of the 'Kaesŏng Ledgers' in the Kobe University Collection)" *Chōsen bunka kenkyū*, No. 6: 61-93.

Yun, K. (1977), "The Forerunner of Double Entry Bookkeeping: Four-Element Bookkeeping Method in Korea," *Journal of Social Sciences and Humanities,* No. 45: 75-86.

Yun, K. (1978), "Poksik pugi ŭi sŏn`guja – Han`guk ŭi sagae Songdo ch`ibubŏb (The Forerunner of Double-Entry Bookkeeping: The Korean Four-Sided Ledger Method of Kaesŏng City)," *Kyŏngsang taehak nonjip,* No. 6: 99-109.

Yun, K. (1984), *Han'guk hoegyesa yŏn'gu* (Research in the History of Accounting in Korea) (Seoul: Han'guk yon'guwŏn).

Zenshō, E. (1968), "Kaijō no shōnin to shōgyō kanshū (Kaesŏng Merchants and Commercial Customs)," *Chōsen gakuhō,* No. 46: 105-124.

APPENDIX A

GLOSSARY OF TERMS

chesa-kye (祭祀契) association for rituals
chil (秩) ledger
cho (租) unhulled rice
Chŏlla province (全羅)
chŏn (錢) copper cash unit composed of ten *pun*
chŏn-chil (錢秩) copper cash ledger
chŏnsu (傳受) balance brought forward
chŏnyŏsi-chu (傳與時酒) audit wine
ch`uk (縮) natural loss and transaction cost
ch'ul (出) outgoing
ha (下) expenditure
honin-kye (婚姻契) marriage association
hop (合) smallest dry measure
idu (吏讀) use of Chinese characters to write native Korean words
iik-chil (利益) profit ledger
isang (已上) subtotal
ip (入) incoming
kŏ (去) outgoing
kokja-chil (曲子秩) yeast cake ledger
kŭp (給) expenditure
kŭpch'a-chil (給次秩) liabilities ledger
kye (契) mutual assistance association
kyŏl (結) land measure by production output
Lóngmén bookkeeping (龍門) Chinese style from mid-17th century
mi (米) milled rice
mi-chil (米秩) milled rice ledger
mongmaek-chil (木麥秩) barley
nae (內) from this (total income or assets)
nae² (來) incoming
Namp'yŏng Mun clan (南平文氏)
nong'u-kye (農牛契) oxen-leasing association
pan sogyŏng (半所耕) half annual production cost
po-kye (洑契) irrigation association
pong (捧) receipt
pongch'a-chil (捧次秩) assets ledger
pun (分) smallest cash unit
pyŏl yusa-chil (別有司秩) ledger of items specially handled by a bursar
sagae Songdo ch'ibubŏp (四介松都治簿法) term used by modern historians to refer to the accounting system used by Kaesŏng merchants
sang (上) receipt
sang-kye (喪契) funeral association
sangp'yŏng t'ongbo (常平通寶) Korean copper cash coins
shimai chōbo (姉妹帳簿) 'sister ledgers'
sobi-chil (消費秩) loss ledger
sogyŏng (所耕) annual production cost
sojong-kye (小宗契) association of the branch or branch clan
sŏk (石=섬 sŏm) dry measure composed of 20 or 15 *tu*
song-kye (松契) tree-planting association
sŭng (升=되 twe) dry measure composed of ten *hop*

toejaeng-i (되쟁이:升手) village grain handler
taejong-kye (大宗契) association of the head clan
tong-kye (洞契) village association
tu (斗=말 mal) dry measure composed of ten *sŭng*
turak (斗落) land measure by amount of seed required
yang (兩) copper cash unit composed of ten *chŏn*
yen (円 or 圓) modern Japanese currency
Yŏng`am (靈巖) place name
yonghagi (用下記) account ledgers
Yongsan Sŏwŏn (龍山書院) name of a private academy
yu (留) remaining assets
yusa (有司) bursar
zeni (錢) modern Japanese currency, subunit of yen

18th Annual Conference on

Accounting, Business & Financial History

at Cardiff Business School 14-15 September 2006

Announcement of Conference and Call for Papers

Guest Speakers – Josephine Maltby & Janette Rutterford

Theoretical, empirical and review papers are welcomed in all areas of accounting, business and financial history.

The conference provides delegates with the opportunity of presenting and discussing, in an informal setting, papers ranging from early working drafts to fully developed manuscripts. The format of the conference allows approximately 40 minutes for presentation and discussion in order to help achieve worthwhile feedback from those attending.

In the past, many papers presented at Cardiff have subsequently appeared in print in *Accounting, Business and Financial History,* edited by John Richard (Dick) Edwards and Trevor Boyns, or in another of the full range of international, refereed academic accounting, business and economic history journals.

The conference will be held at Aberdare Hall, Cathays Park, Cardiff, CF14 3UX, UK, from lunchtime on Thursday, 14 September 2006 to mid-afternoon on Friday, 15 September 2006.

The fully inclusive conference fee (covering all meals, the conference dinner on Thursday and accommodation) is £130.

Those wishing to offer papers to be considered for presentation at the conference should send an abstract of their paper (not exceeding one page) by 31 May 2006 to:

Debbie Harris, Cardiff Business School, Colum Drive, Cardiff, CF10 3EU Tel +44 (0)29 2087 5730 Fax +44 (0)29 2087 4419 Email. HarrisDL@cardiff.ac.uk

Following the refereeing process, applicants will be advised of the conference organisers' decision on *30 June 2006*.

Sponsored by:

THE INSTITUTE OF
CHARTERED
ACCOUNTANTS
IN ENGLAND & WALES

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 89-124

Jan R. Heier
AUBURN UNIVERSITY MONTGOMERY

AMERICA'S RAILROAD DEPRECIATION DEBATE, 1907 TO 1913: A STUDY OF DIVERGENCE IN EARLY 20th CENTURY ACCOUNTING STANDARDS

Abstract: In June 1907, the Interstate Commerce Commission (ICC) released new reporting rules that would require railroads to change from betterment to depreciation accounting for equipment. The new rules set off a firestorm of protest because the railroads felt they were already recognizing physical depreciation through the current system. The ICC, however, was looking at the concept of economic depreciation to match the cost of equipment with revenue over the life of the asset in much the same way that industry was beginning to account for its fixed assets. Such economic depreciation, it was felt, would give the rate-setting ICC more stable reported incomes to determine return on assets and the investing public a better feel for the results of railroad operations. The debate began in a cordial fashion but deteriorated into bitter name-calling, civil disobedience, and litigation that challenged both the accounting rules and the authority of the ICC to issue and require them. The ICC partially won the debate, yet railroads were able to keep betterment accounting for track structures another 70 years before the full convergence of industry and railroad accounting standards occurred.

INTRODUCTION

After nearly 20 years of ineffective railroad regulation by the Interstate Commerce Commission (ICC), the U.S. Congress in 1906 passed the Hepburn Amendment to clarify several Supreme Court decisions and to force the railroad industry to publish its rate schedules. The new act also gave the ICC legal authority to set "fair and reasonable" rail tariffs and rates. The law authorized the ICC to develop uniform accounting procedures for railroads to meet this new mandate. The ICC quickly issued new accounting and financial reporting rules for all railroads that came under its jurisdiction. Though the rules were similar

Acknowledgments: I would like to thank the former editor Stephen Walker, two anonymous reviewers, the current editor Richard Fleischman, and Melinda Hyche for her meticulous editing of the final draft.

to the ones issued in 1894 and largely ignored by the industry, the railroads were now required to recognize a depreciation expense and a corresponding reserve for their "non-permanent" fixed assets – rail equipment. Protests quickly erupted over the new rules and a fiery debate ensued between the railroad's traditional concept of "physical depreciation" and the ICC's application of a new theory called "economic depreciation." Though the debate solidified the ICC's authority to issue and require specific accounting rules, it eventually compromised and allowed betterment accounting for track and way structures, a compromise that would result in divergent accounting standards between railroads and industry for the next 70 years.

This paper tracks the debate over these depreciation issues from their inception in 1907 to the final disposition by the Supreme Court in 1913. The debate is well documented through the records of the ICC and related articles published in the national press like the *Wall Street Journal* (the *Journal*), the *New York Times* (the *Times*), and the railroad industry's own publication, the *Railway Age Gazette* (the *Gazette*).[1] Prominent public accountants also weighed into the debate on both sides of the issue, indicating an unsettled debate within the profession over the course of the modernization of accounting principles in the U.S. in the early 20th century. Though each source has its own biases, taken together, they give a sense of the passion on both sides of America's great railroad depreciation debate.

BACKGROUND TO THE DEBATE

In 1902, the newly constituted U.S. Steel Company developed innovative financial reporting procedures that included recognition of depreciation charges on fixed assets. Though the concept of physical depreciation of fixed assets had been recognized for nearly three quarters of a century, according to Younkins and Flesher [1984, p. 257], the U.S. Steel disclosures were unique among contemporary firms because they reported depreciation as a separate expense on the income statement. Such an innovation helped to institutionalize the concept of economic depreciation and paved the way for the modern accrual accounting standards currently in use a century later. Because of its mission to control rail rates through the analysis of accounting and other operational data, such an innovation in

[1]First published in 1856, the *Railroad Gazette* absorbed a smaller competitor called the *Railway Age* and changed its name to *Railway Age* in January 1908, with a further name change in July 1908 to the *Railway Age Gazette*.

accounting could hardly have missed the attention of the country's primary railroad regulatory agency, the ICC, and its longtime chief statistician, Professor Henry Carter Adams.

The Desire for a Uniform Railroad Accounting Policy[2]: Since the inception of the ICC in 1887, Henry Adams had attempted to standardize railroad reporting in the U.S., using Section 20 of the Interstate Commerce Act[3] as his authority. The section read, in part, "the Commission may … the purposes of the act, prescribe a period of time within which all common carriers subject to the provisions of this Act shall have, a uniform system of accounts and the manner in which such accounts should be kept."

His first attempt to create uniform accounting rules was in 1894, when the ICC issued *Classifications of Operating Expenses* to guide railroads in their data-reporting requirements. The requirements included modern double-entry accounting practices; however, its modified accrual nature left a limited articulation between the balance sheet and income statement (actually a profit and loss account). Though the American Association of Railroad Accounting Officers (AARAO) was instrumental in developing the pamphlet, the reporting requirements went largely ignored by other regulators and the industry. First, the ICC-instituted National Association of Railroad Commissioners (NARC) balked at their usage because state commissioners felt that the new accounting rules would hinder their ability to control rail rates within their respective jurisdictions. This process led to multiple and conflicting accounting procedures across state jurisdictions that caused confusion among the railroads, leading them to resist the new national standards. Finally, legal rulings and legislative inaction stymied Adams' goal of a uniform accounting system for all railroads. Though Adams and the ICC knew that the nation's railroad reporting practices needed modernization, they could take no action until Congress gave the ICC further authority.

In the meantime, Adams continued to issue minor revisions and clarifications to the ill-fated *Classifications of Operating Expenses* to make the reporting process more understandable. The nature of the accounting, however, changed very little

---

[2]For a review of the development of ICC reporting requirements before 1900, see Heier [1994, pp. 101-110].

[3]*Act to Regulate Interstate Commerce,* February 4, 1887, amended June 29, 1906, 34 Stat. 584.

from the 1894 document. The NARC [1905, p. 30] augured a change when discussing the ICC's clarification in the definition of additions, betterments, and improvements for the AARAO. The clarification read: "Operating Expenses should include all expenditures necessary to keep up the general standard of efficiency." The meaning was clear; the expenses currently reported by the railroads regarding fixed asset usage were not sufficient to give a clear picture of rail operations. The railroads, however, were probably not too concerned with such a course change because the ICC's position (both politically and legally) had not changed, at least not yet.

The Hepburn Amendment: On June 6, 1906, Congress finally acted and passed the Hepburn Amendment to the Interstate Commerce Act. The new act also gave the ICC the legal authority to set fair and reasonable rail tariffs. To meet this new mandate, regulators were authorized to "develop uniform accounting rules, and to prescribe the forms of all accounts, records and memoranda to be kept by carriers" [ICC, 1907b, p.139]. The law now empowered the ICC to have rate setting as its primary mission. A uniform accounting system for railroads became Adams' focus. As one would imagine, the railroad industry was not elated over the new legislation as evidenced by an editorial published in the *Gazette* [January 11, 1907, p. 32]. In a muted and measured tone, the industry expressed the opinion that, "The new rate law gives the Interstate Commerce Commission the fullest authority over railroad statistics and accounts, with the power, not only to prescribe what accounts shall be kept, but to forbid keeping an unapproved statistic."

The rail industry had resigned itself to the fact that the ICC had substantially more power, but it also suggested in the article that slow and deliberate change in reporting requirements would better serve the traveling public and shippers. Though protests would soon erupt over required depreciation charges, the rail industry at this point was more concerned with the ICC's potential inclusion of "out-side" or non-rail income as part of tariff rate calculations. Such an inclusion would disrupt the sensitive rate-of-return formulas that the ICC would be using to set passenger and freight rates. Regardless of what the changes were going to be, it was clear that the industry was going to face new accounting rules soon.

During the transition from the amendment's ratification and the issuance of new uniform accounting standards, the ICC again enlisted the help of the AARAO. Professor Adams acted as the ICC's liaison to a newly created Committee of Twenty-Five. The ICC's annual report [1907b, p. 40] indicated: "Conferences [with the AARAO] developed interesting and instructive differences of opinion on many accounting questions. But it may be said that, with a few exceptions, the results arrived at were in harmony with a consensus of opinion of a majority of its members." The annual report did not disclose the nature of the discussions, but changes in accounting procedures at the large manufacturers, like U.S. Steel, must have been on the minds of the conferees. Depreciation could well have been at the top of this list in light of comments from Price Waterhouse's George O. May [1962, p. 190] who indicated in his memoirs that "in 1906 the straight-line amortization concept of depreciation was in fairly general use in the industrial field."

The ICC planned to issue new financial reporting rules for all railroads that came under its jurisdiction by June 1907. Though the prospective rules were very similar to the ones issued in 1894, the new system would include more accruals that would increase balance sheet and income statement articulation similar to modern financial statements. To foster the modernization of railroad reporting, the ICC also focused on the fixed asset and capital accounts. Like U.S. Steel, the railroads would probably now, in all likelihood, be required to recognize depreciation expense instead of their traditional manner of accounting for fixed assets called betterment accounting. Succinctly put, depreciation represented the systematic expensing of fixed asset costs in contrast to the periodic (or irregular) recognition of expense under betterment accounting.

A Short Explanation of Betterment Accounting: An early discussion of fixed asset accounting and profitability for railroads came in the 1870s from Albert Fink, the superintendent of the Louisville and Nashville Railroad. Fink suggested in an addendum to the 1875 L&N annual report [Fink, 1875, pp. 6-7] that renewal accounts that compared actual repair costs with estimated repair costs to determine annual "due to that year's operations"…[and]…"To make the annual reports of a railroad company of value, the accounts of the company should be so kept as to show the expenses." Fink's methodology would be refined and institutionalized over the next thirty years, and came to be known simply as "betterment accounting." The name of the methodology would evolve into the more theoretically descriptive retirement-replacement-betterment (RRB) accounting, and the Financial Accounting Standards Board (FASB) [1983, Para. 5], at the time of RRB discontinuance in 1983, defined this practice as follows:

> Under RRB, the initial costs of installing track are capitalized, not depreciated, and remain capitalized until the track is retired. The costs of replacing track are expensed unless a betterment (for example, replacing a 110-lb. rail with a 132-lb. rail) occurs. In that case, the amount by which the cost of the new part exceeds the current cost of the part replaced is considered a betterment and is capitalized but not depreciated, and the current cost of the part replaced is expensed. Railroads generally have used RRB for financial reporting.

Unlike the use of modern depreciation accounting, which actually matched fixed asset cost to revenues over a given period, the railroad under betterment accounting did not recoup the cost of the track until replaced. It could happen in some years that no charges to current operating expenses from track usage were matched against revenue if no track was replaced.

By 1907, the methodology described above had been in widespread use and acted as the basis for reporting the account balances of the railroad's two primary fixed asset accounts, equipment and track structures. As the depreciation debate developed, the ICC would take the position that betterment accounting did not reflect the true cost of a railroad's operations because in lean years it would simply not do any replacements or upgrades, a major safety concern for the ICC. The ICC hoped that the upcoming depreciation requirements would provide a more "accurate" rendering of these fixed asset balances through a more systematic matching of fixed expenses with revenue. As the ICC moved towards the rate-of-return basis for evaluating rail rates, it would become clear to the rail industry that depreciation was at the heart of the evolution of the concept of "reasonable rates" and "reasonable returns" as articulated by the 1898 *Smyth vs. Ames* [169 U.S. 466] decision.

Exhibit 1 below shows a hypothetical comparison of rail returns due to the impact of the new 1907 depreciation charges on a railroad's financial results compared with betterment accounting. With betterment accounting intact, the pre-1907 income levels per train mile were lower due to an artificially high expense ratio. This helped the railroads to either maintain a lower return ratio and, consequently, higher tariff rates or justify their request for an increase. It was also possible for the railroads to schedule betterment expenditures to plan or smooth annual income levels.[4] This expense timing was the central problem voiced by the ICC in its 1905 annual report. On the other hand, with the partial accounting for depreciation charges on equipment, the financial position of the railroad may be improved, leading regulators to construe the higher income levels as unreasonable. The railroad could then expect a revision of the rail rates downward to compensate for the "excess income."

EXHIBIT 1

Estimated Change in Railroad Financial Accounting Results

	Accounting before 1907	**Accounting After 1907**
Rail Structure Costs	$2,500,000	$2,500,000
Depreciable Equipment Costs	$ 500,000	$ 500,000
Total Assets	$3,000,000	$3,000,000
Revenues	$1,000,000	$1,000,000
Operating Expenses	$ 400,000	$ 400,000
Rail Structure Betterments	$ 200,000	$ 200,000
Equipment Betterments	$ 150,000	
Depreciation Assume 7.00% X $500,000		$ 35,000
Total Expenses	$ 750,000	$ 635,000
Net Income	$ 250,000	$ 365,000
Train-Miles	10,000,000	
Revenue Per Mile	$ 0.1000	$ 0.1000
Costs Per Mile	$ 0.0750	$ 0.0635
Income per mile	$ 0.025	$ 0.0365
Return on Assets = Income ÷ Assets	8.33%	12.16%

THE ICC ISSUES NEW REPORTING RULES

The Preliminary Debate over the New Depreciation Rules: With little fanfare and with even less guidance, the ICC [1907a], on June 3, 1907, released new accounting rules as an update to the ICC's original document, *Classifications of Operating Expenses.*[5] The first look at the new rules had actually occurred in April 1907 when the ICC issued Circular No. 5 to detail the

[4]For the effects of the ICC accounting changes on income smoothing, see Sivakumar and Waymire [2003].

[5]The newly required equipment depreciation was highlighted essentially through the reorganization and renumbering of an official account classification scheme.

proposed accounting changes and to give the industry due process to comment on them before final publication. The *Journal* [May 21, 1907, p. 3] reported that a large number of railroads had indeed commented on the new rules, especially with regard to depreciation accounting. The written replies to the circular expressed a wide range of views on the formal depreciation account. According to the article, comments regarding Circular No. 5 framed the coming issue by saying, "it may be said that current practice [betterment accounting] allows for depreciation by including renewals or replacements in operating expense and consequently railways do not need a formal depreciation account." The article continued by making the editorial comment that, "It is at least our opinion [that the ICC] question whether or not this is an appropriate method of procedure." It was reported that the railroads felt that "there seems to be no disagreement on the proposition that operating expense should be charged with the full amount of wear incident to the use of the property, and that any excess over that amount should be separately charged to income." These types of comments again signaled the railroad's coming stance that depreciation was physical in nature and not economic, and reinforced the railroads' fear that any depreciation account would degrade the balance of the asset accounts and upset the delicate balance of the return-on-asset ratios.[6]

Even with the preliminary ICC circulars issued in April and May, it still appears that the railroads may have been caught off-guard by some of the new depreciation rules, as evidenced by the silence in the *Gazette* before June on the process leading up to the promulgation of the new accounting rules. In fact, an early article in the *Gazette* [April 19, 1907, p. 507] contained no discussion of depreciation but instead stressed an upcoming rule that would make the railroad's head accountant a sworn agent of the government and the issue of non-rail related income being used in the rate-of-return formulas. In an article published after the issuance of the rules, the *Gazette* [June 21, 1907, pp. 883-884] indicated that the present rules only applied to equipment but that there was a possibility of the application of depreciation rules to track and structures. The article further explained that such a move would make the accounting for track additions or repairs less flexible than the current

[6]It appears that companion circulars were also issued during 1907 for the more contentious issue of classification of "additions and betterments" related to those costs of upgrading permanent fixed assets such as structures and rail beds.

American system that allowed for management decisions related to the recognition of no capital costs in bad years, a safety concern to be sure.

According to Barret [1907, p. 486], a competing publication, *Railroad World,* did express tacit support for the new accounting rules when it wrote, "Hitherto this question has been thrust aside with scanty apology that due attention to repairs, renewals and replacements excuses the omission. At its worst, the omission to make allowance for depreciation leads to unearned payments to capital, to eventual overcapitalization, and finally to bankruptcy." *Railroad World* then expressed concern that any rate-of-return calculations from the ICC must take into account depreciation charges or there would be a reduction in asset values. Although this industry publication was moderately positive about the change to depreciation, it seemed to suggest that the ICC had ulterior safety motives for the change.

Even before the official release of the new accounting rules, Adams and members of the ICC readied the markets, the public, and especially the railroads for the announcement. For example, the *Journal* [May 21, 1907, p. 3] reported on the prospective accounting changes, indicating that they "were to be set up providing for the replacement of property – annual percentages to be left to the carriers." The same article reported that the ICC's aim for the new system of accounts was to "simplify the now complex problem of determining what a railroad is earning." Adams was quoted in an interview as saying, "it was the intention of the commission to draw a clear line between charges [that] merely made good the actual wear and due tear or represented depreciations and such as represented by betterments and additions whether the latter is chargeable directly to income or to capital." Here the argument went beyond the recognition of depreciation, and moved towards a more modern differentiation between capital improvements that would be depreciated and operating expenses that would have a direct effect on the earnings of a railroad.

Adams went on to indicate that in the present railroad accounting system, the definitions of such items as repairs, betterments, and additions did not convey a definite meaning, "hence the necessity of establishing principles of accounting as will enable the commission to determine whether operating expenses as charged on the company's books properly represent the cost of transportation." In the eyes of the ICC, the railroads were now charging only "capital improvements" against current income, which masked the true earnings of the corporation because under betterment accounting there was never a recovery of the original cost of the railroad's equipment through the income statement until replacement. Adams further explained the depreciation provision would better allow for the replacement of property before wear and tear finally forces the issue. Unfortunately, at this point in the interview Adams made a modern theoretical mistake by saying: "Provisions should be made out of earnings of property during the period of its use to replace it....The purpose of depreciation is to provide a replacement fund."

Though it was clear that Adams was moving toward the application of economic depreciation and away from accounting for the physical depreciation of the railroad equipment, he did seem to harbor the perspective that depreciation, though non-cash in nature, would provide a direct funding source for the replacement of equipment. Such an idea may have come from contemporary manufacturers like U.S. Steel, which reported equipment depreciation with extinguishments of debt. For example, in the 1904 U.S. Steel annual report [p. 11], the company stated: "The appropriation of these funds has been made with the idea that, thus aided, the Bond Sinking Funds will liquidate the capital investment in the properties at the expiration of their life." In addition, the report also mentioned: "These funds are used to improve, modernize, and strengthen properties." In the short term, Adams' early misunderstanding of the cash nature of depreciation would cause some confusion in the application of the new rules and overshadow the ICC's purpose better to match railroad expenditures with revenue. Finally, the article also reported that the railroads did not object to the idea of taking expenditures in excess of wear and tear out of earnings, but they were leery that investors would construe a formal depreciation fund as cash available for dividends.

The rationale for the new ICC accounting rules may have gone beyond a more uniform accounting system and may have focused on two other motivations. The first of these may have been to foster safer railroad operations by actually forcing the continued replacement of railroad equipment on a scheduled basis through a change in accounting procedures. A more pernicious consideration may have been the ICC's desire eventually to standardize rail tariffs through railroad valuation. This possibility was made evident in a *Journal* article [May 23, 1907, p.1] that reported a speech by ICC Commissioner, Charles A. Pouty, before the National Association of Manufacturers in which he discussed the ICC's reasons for changing the regulatory rules.

First, Pouty indicated that government itself was on trial, and that regulation must be "sufficiently strong to choke the cry for national operation." The concept of federal ownership and operation of the railroads had become popular as anti-capitalist views began to spread in the U.S. in the early part of the 19th century. Though he did not like the idea of government control and felt the private sector the better place to control rail operations, he did feel that a cabinet-level department of railroads should be set up to oversee rail operations and set national transportation policy.[7] Pouty also explained that the government, and not private individuals, should have over-sight responsibility in rate setting. This appears to have been a criticism of the federal courts and their intervention in ICC decisions on behalf of private litigants. Most importantly for this story, Pouty indicated that, "it is probable that the interstate railways should be valued by the national government." Pouty, the ICC, and the rail industry knew that valuation needed proper (and uniform) accounting data. The news report quoted Pouty as saying: "The popular impression that if the value of our railroads were known it would be easy to adjust rates that a fair return upon that value and only a fair return would be obtained is entirely erroneous. The cost of reproduction is but a single factor which enters just value." Although Pouty never mentioned the subject of the new depreciation rules, he did focus on a set of criticisms regarding the methods railroads used to determine and account for the value of their long-term capital. According to Pouty, railroads could easily hide investments in the form of stocks and bonds in related and sometimes competing railroads.[8]

In a related *Journal* article [May 22, 1907, p. 5], Adams echoed Pouty's comments when he said: "The valuation of railroads on a scientific basis is quite feasible, but the reasonableness of railroad rates is and must be a matter of human judgment exercised beyond the bounds of mere valuation." Adams went on to explain that the individual subjects of railroad capitalization, valuation, and rates are related by giving a convoluted example where income should not be above the amount needed to maintain operations if it is to be deemed reasonable

[7]It would be nearly 60 years later when the Department of Transportation was established by an act of Congress on October 15, 1966, with its first official day of operations on April 1, 1967.

[8]This was a direct reference to the stock manipulation case where E.H. Harriman of the Union Pacific and Rock Island Railroads secretly bought a directly competing line called the Alton Railroad.

income by the Commission. In a more modern sense, he then differentiated between the valuation used to set rates and that of the market valuation of the railroad securities themselves. Market valuation he felt did not equate to regulatory valuation when it came to setting freight and passenger rates.

The popular view in this era was that high railroad market valuations were the result of high and unfair rail tariffs. Through his example, it appears that Adams saw this controversy differently. He felt that the high market valuations and high rates were only tangentially related by the fact that the most profitable railroads also seemed to have the highest market value. In the end, Adams and the ICC would continue to focus on the return on assets to determine the reasonableness of tariffs in keeping with legal rulings. Finally, like Pouty, Adams was laying the groundwork for acceptance of the upcoming accounting rule changes. It was clear that physical valuation of the railroads was on the ICC's agenda, and that the ICC was going to gather the necessary data on the railroad's capital assets needed to complete this task.[9] When asked about progress towards completing the new accounting system, Adams said: "They have progressed much further than I thought they would by this time. Operating revenues and operating expense accounts are practically done and the accountants are pulling together and mean business."

After the official release of the new rules the next week, an article published in the *Journal* [June 7, 1907, p. 6] highlighted the major accounting changes promulgated by the ICC. In general, the required revenue and expense items mirrored those of the 1894 requirements; however, the railroads were now supposed to report those financial results monthly to the ICC, presumably so that the ICC could maintain control over both short-term and long-term tariffs. According to the article, the major change in accounting regulations for 1907 included the requirement for a formal provision of depreciation charges and reserves for all companies covered by the Interstate Commerce Act. This depreciation requirement also differentiated operating expenses and capital improvements by indicating, "The purpose of these depreciation charges is to have the exact cost

[9]As a side note, in a compromise to get the Hepburn Amendment passed, the explicit ability of the ICC to value railroad assets directly was not given; however, it was not expressly forbidden either, a point of contention for years. For a review of the political environment surrounding the development of the ICC and the 1906 Hepburn Amendment, see Miranti [1989].

of a particular month or a particular year, and thus enable a correct statement of net revenue from operations." The article then explained that the new definitions of betterments and additions will also result in keeping the cost improvements out of current operating expenses.

The lack of depreciation of track and way structures had been noted just a week before in the *Journal* [May 29, 1907, p. 6], anticipating the new accounting rules. The article quoted an ICC official who said, "operating expenses must not be burdened with expenditures for additional equipment, tracks, ballast, or additions to the railroad, the purposes of which are to improve the property operated." In addition, the official further divulged: "The chief new feature of these primary accounts is that a depreciation account, set aside for renewal accounts, has been supplied for every item of equipment. [However] there is no depreciation account for way and structures." The article then quoted Adams as saying, "it is impossible to arrive at any final conclusion as to how the rule of depreciation should be applied to roadbed and buildings, and that the subject will be specifically investigated during the coming fiscal year." Adams' trepidation over any change of betterment accounting rules for track and way structures would continue in ICC policy making for years to come due to the ICC's indecision about just how to depreciate permanent structures given conflicting theories of wear and tear and cost matching. The issues would be a focus of railroad depreciation debates lasting into the early 1980s.

THE REACTION TO THE ACCOUNTING CHANGES

Reactions by Industry through the Railroad Press: As expected, protests over the new accounting rules were almost immediate but surprisingly cordial. One of the first was an innocuous attempt by L.F. Loree, president of the Delaware and Hudson RR, to circulate a petition asking the ICC to postpone the implementation of the accounting rules for one year. He made the request, "on the grounds that it will make it impossible for railroads to make comparisons in the results of their operations for the previous year" [the *Gazette*, 1907, p. 869]. In an era of pen and ink accounting systems, a better request would have been for a delay in the implementation of the new rules due to the short period, approximately four weeks, given the railroads to comply with the new regulations. For the ICC, they felt the transition, which was scheduled for the post-June 1907 reporting period, actually gave the railroads one year to implement the new accounting system before the June 1908 reports. Any delay at this point would have pushed its implementation back to 1909.

A *Times* article [June 15, 1907, p.12] provided a better preview of the coming opposition from the railroad industry, reporting that, "efforts are being made by some large railroads to thwart some of the plans of the [ICC] in the matter of standardizing the accounts of all railroads, and for the establishment of such form of accounts as will set forth clearly all financial operations." Rail industry leaders had supposedly gathered to discuss the matter and cooperate on a response. As an interesting side note, both the newspaper and the industry must have misunderstood the new ICC regulations due to an erroneous impression that tracks and roadway were included in the depreciation order. In a surprising revelation, the article pointed out that the other railroad officials put the blame for the ICC's new rules on the Pennsylvania Railroad's decision to use depreciation accounting, an interesting comment considering the Pennsy's later protests.The rail officials felt that Pennsy's move gave the ICC the final impetus to modify its stance on the emerging depreciation issue. Finally, the rail industry also saw that the new rules were probably rooted in politics, with President Roosevelt pushing for the changes. The writer of the article, however, felt the new accounting rules, "set the true [financial] position of railroads, and enable investors…to determine more easily just what each railroad is doing in the matter of maintaining property and the extent earnings are used to improve it." The writer's last argument may have again signaled the ICC's hidden safety agenda.

In an attempt to define the industry's objections to the new accounting rules, the *Gazette* began publishing a series of specific articles about the rules. In an article with the combative title "A Defective Accounting System" [the *Gazette*, June 21, 1907, pp. 883-884], the industry put forth its early arguments against the new system. The three-page technical article (its tone though was that of an editorial) began with an explanation of the process used to develop the new rules including the participation by the AARAO, an issue that would spilt railroad officials later. First, the article criticized the way the ICC used the accountant's recommendations, which "serves to illustrate how easy it is for railroad regulation to go astray and make mistakes unless the persons doing the regulating possess the broadest kind of outlook of the entire situation." Next, the industry saw the ICC as a threat due in part to its politicized nature and its lack of direct experience in rail operations. Finally, the editorial explained that there were only two purposes for keeping accounts. The first purpose was to prevent unauthorized expenditures and the second was to control operations. Essentially, the industry felt that the new rules applied quite well to the first, but failed in their attempt to meet the second purpose for four primary reasons.

First, the railroads rejected the new system based on the structure of accounts because they feared that the new account scheme would commingle labor and material costs for both track and equipment betterments. Next, they went on to point out that the new account system, "interrupts the continuity of rail statistics at a time when statistical details are most needed to point the way to necessary economies and to test the efficiency of operating methods." This continuity issue would continue for some time to come. The roads were also against a monthly reporting of depreciation because they felt that such costs could not be efficiently apportioned on a regular basis because of the irregular pattern of wear and tear. This issue might have been mitigated by a compromise to use units-of-usage (probably based on ton-miles) methodology to determine the depreciation charge. This would have allowed railroads that had operational disruptions due to weather or seasonal business history to deal with equal apportionment problems. Finally, the article explained that the new rules would handicap rail operations and analysis because they would not be able to keep accounts and data not specifically approved by the ICC. This may have referred to operational measures (e.g., cost per ton-mile) that the railroads did not want the ICC to see because this may have lent support to their depreciation theories.

A *Journal* report [August 20, 1908, p. 5] articulated a similar continuity argument when it said that, "railroads are finding a great deal of trouble in compiling their annual reports to conform with all the requirements.… Unless they issue two reports, one after the plan followed in the previous years, and one under the new accounting system, it will be very difficult for the humble stockholder to get an idea of what the company has been doing by comparison with last year." In this same article, a comptroller at a "large New York railroad" was quoted as saying, "it is useless to make any comparison of figures under the new rules with those in the old way… you are bound in the end to get results that are misleading.… We spent a lot of money and put in a lot of night work, but when the results were ready, they were not worth a picayune."

The problems related to the continuity of rail statistics were also explained to railroad stockholders in annual reports. For example, the Louisville and Nashville Railroad (Exhibit 2 below) in its fiscal year 1908 annual report discussed these accounting changes in a tenor that shows its displeasure with the regulations.

EXHIBIT 2

Note on ICC Accounting Change as Presented in the 1908 L&N Annual Report

Uniform Accounting System Prescribed by the Interstate Commerce Commission:

On July 1, 1907, the new system of Accounts prescribed by the Interstate Commerce Commission became effective. Principle changes caused by the orders of the Commission were:

1. *Elimination of Expenditures for Additions and Betterments from Operating Expenses, and,*
2. *The inauguration of formal Replacement Accounts for Depreciation and Renewals of Equipment.*

The changes wrought by the new system should be borne in mind when making comparisons of tables in this year's reports with those in reports of previous years.

[Louisville and Nashville Railroad, 1908, p.13]

In a follow-up editorial to "A Defective Accounting System" [the *Gazette*, September 27, 1907, p. 86], the editor pointed out that the "errors in the new system are on the whole more hurtful than those in the old, and we believe it to be a matter of the greatest regret that at the time a change is made…a change, moreover, which works permanent injury to the continuity of records." In an historical irony, when betterment accounting was finally discontinued by the ICC in 1983, the FASB had to issue a standard (SFAS 73) to deal with continuity of reporting problems.

Another problem raised by this article centered on a perceived uneven application of the rules. For example, the article noted that a northeastern railroad that is no longer growing would have a smaller amount of depreciation charges due to a lower rate of equipment additions. Intuitively this would lead to less expense, higher income, and a correspondingly higher rate of return on assets. A higher return would, of course, lead to a reduction in tariff rates. By comparison, the expanded depreciation charges of a railroad in California that continues to grow due to migration would have a lower rate of return and, thus, get rate relief from the ICC. Such perceived inconsistencies in rate setting, however, had been a regulatory problem at the ICC since its inception in 1887. The infamous "long haul vs. short haul" clauses in the original Interstate Commerce Act that essentially equalized, under the theory of price discrimination, all railroad operations in the country regardless of operational efficiencies. The depreciation charges only exacerbated the problem.

Theoretical Arguments: The *Gazette* [October 11, 1907, p. 90] published "Equipment Depreciation and Renewal," written by the controller of the Union Pacific, William Mahl. In the article, Mahl seemed to imply that there is no depreciation if the railroad is constantly upgrading or replacing its equipment. Making a distinction between physical and economic depreciation, he ends the article by pleading to drop the depreciation requirements in favor of the old "provision for 'renewals' to represent the current cost of replacing all equipment vacated." Mahl point out that, "This change will furnish the Commission with reliable data about the depreciation which has been carried into the operating expenses of the railroads will enable it to order adjustments suitable to each case if any such should be necessary."

Even with the protests, Adams and the ICC issued more accounting regulations in January 1908. These focused on the specific information that the ICC required from railroads every six months, starting in March 1908. The new regulations, however, did not change track and way structure accounting nor did they provide guidance on the actual rates a railroad should use to depreciate its equipment. The one clarification to the 1907 rules noted that the equipment was to be reported on the balance sheet net of depreciation and that the asset book value was to be "reduced periodically to the extent of the depreciation charge." Under the original 1907 regulations, the railroads assumed that the depreciation was a current operating expense, but not necessarily a reduction of book value on the asset. This new regulation unsettled the railroads because of its impact on the return-on-assets ratio and the public's perception of railroad over-capitalization due to a depreciation of equipment that is faster than the payment of bonds.

The *Gazette* [January 16, 1908, p. 54] reported on this new set of regulations and others to come. In general, the article discussed the process by which the ICC modified its rules and some related changes to income statement and balance sheet rules. In an attempt to portray the ICC as an inflexible and bureaucratic organization, the *Gazette* reported that, "An erroneous impression has been created that the [ICC] is disposed to reconsider the propriety of depreciation on equipment accounts.…In working out the details of such an account the commission is willing to consider all practical suggestions and is working with members." The views of Professor Adams were unaltered on this subject.

To combat the new regulations, Frederick Delano, the president of Wabash Railroad, wrote his "Notes on the Application of a Depreciation Charge in Railway Accounting," which was published by the *Gazette* [March 1908, pp. 471-473]. In this article, he criticized the ICC's depreciation rules on rolling stock and then warned that the regulators would soon be issuing new accounting rules regarding fixed structures. Delano wanted to make his opinion clear to the ICC that depreciation does not exist in an economic sense, but is solely related to wear and tear and obsolescence. He wrote: "There is admittedly a depreciation or deterioration…but it is difficult drawing the line between the cost of making good this sort of depreciation and ordinary maintenance." Further to the point, he observed that, "in the case of cars depreciation goes on at a rate of 5 percent or 6 percent per year until the car is 60 per cent depreciated of its original value. Beyond that it is assumed there is no depreciation if maintenance is properly kept up." This type of deterioration was a concept he called "limited depreciation" because the property is eventually replaced through the betterment system at which time the costs would be absorbed into current expenses. He relates these facts to a perceived public controversy regarding the arcane problems of railroad overcapitalization. Essentially, in a long diatribe, Delano felt that the capitalization of American railroads was solid, and used this fact as evidence of the efficacy of betterment charges. Delano also felt that the current system was more flexible than the new depreciation system, allowing better decision making by the board of directors regarding the integrity of the property. This can only mean that railroad management wanted to retain the right to decide when and if betterments and replacement occurred.

Delano then criticized the ICC requirements for depreciation as fictitious by explaining: "To put expenditures into operating accounts that have not been actually made has been regarded as 'padding' accounts. To make a charge of depreciation every month on a purely arbitrary basis, when the money which is charged is not actually spent in replacement is obviously charging against operating expenses something for which no expenditures has been made."[10]

It is clear from Delano's objections that the railroad industry was resisting any rapid change in its accounting methods from largely cash basis to one that necessitates extensive accruals for matching current expenses with income. In addition, it is also clear from Delano's comments that industry suspected the ICC's new rules did have an ulterior safety motive after he pointed out that the public and stockholders had the right to know the condition of a railroad's property. Delano ended his article by concurring with "A Defective Accounting System" that the change in accounting would be unevenly applied and mature railroads like Delano's Wabash would suffer the most. To counteract the problem, Delano felt that any depreciation charge must be offset by a corresponding adjustment in the appreciating value of the property. This would have been even more onerous to the industry because the ICC rate setters would have probably recognized such appreciation as income and lowered tariffs correspondingly.

Railway Age [May 1, 1908, p. 623] synthesized the arguments of both Mahl and Delano and indicated that the ICC's intentions for the new accounting rules were two-fold. The first was to charge depreciation over and above current repairs to operating expenses monthly (economic depreciation). Second, the ICC's purpose was to charge this "average life of property" to the profit or loss or surplus account, essentially the modern matching principle. The article felt that these were neutral issues when taken separately, but that the industry objected to them taken in operating expense money that was not spent. A monthly charge for accruals would, in the industry's opinion, make the system too rigid and inflexible and deprive the railroad of the ability to judge when expenditures should be made. The argument from the editorial was simple, "since the charge for depreciation is not met with payment of money, it is not an expense, and since depreciation continues…even though operations cease, it certainly is not an operating expense." The concepts of modern accruals and matching had not yet taken hold in the railroad industry. Since it appeared that the ICC was not going to relent, the article finally suggested a compromise

[10]Delano's arguments may have come from a 30-year-old court case, *United States vs. Kansas Pacific Railway Company* [99 U.S. 455]. In this case, the court disallowed the railroad from using depreciation to determine the amount of net earnings available to pay back certain government sponsored bonds.

where there would be a presentation of two forms of operating accounts, "operating expenses other than depreciation" and "depreciation."

H.A. Dunn, a partner at Haskins and Sells, made a similar argument in a letter to *Railway Age* [May 29, 1908, p. 726], but he wanted to name the account "expired outlay on productive plant" (the basic definition of economic depreciation). According to Previts and Merino [1998, p. 219], the founder of Dunn's firm, Elijah Watts Sells, was critical of the ICC's new accounting rules. He essentially believed that, "depreciation charges should be sufficient to ensure asset replacements." Previts and Merino then explained that Sells and Price Waterhouse partner Arthur Loews Dickinson argued this based on the assumption that depreciation recognition was the only way that one could prevent the erosion of capital, an argument closely allied with railroad executives.

In an April 20, 1908 letter to Adams, Dickinson [1980, pp. 13-14] wrote: "The object of a depreciation is, we take it, to make a provision for the decreases in value from year to year by reason of wear and tear, etc., as it accrues instead of as it is made good." Dickinson continued by saying that, "It seems to us that to such a proposition there is an obvious corollary that renewal expenditures made to arrest Depreciation should be charged against a Fund created in the years depreciation accrues, and not against the operating expenses of the year in which the expenditures are made." It is clear that Dickinson had not moved to the concept of economic depreciation, favoring the 30-year-old accounting methodology articulated by Albert Fink.

The opinions of Sells and Dickinson would soon run contrary to that of the accounting profession in general. For example, Arthur Teele [1908, pp. 89-91], an early supporter of the ICC's new depreciation rules, indicated, "that I do not think it is necessary for me to present arguments…as to the necessity of promptly taking depreciation of capital…for I believe anyone who gives careful thought will agree to the principle of providing for the loss out of revenues earned in the period the loss is occurring." Teele was on the side of matching and economic depreciation. The next year, William Lybrand [1909, pp. 224-227] took much the same view of the need for depreciation except he stressed the balance sheet rather than the income statement because he felt betterment accounting would result in the assets appearing at cost regardless of deteriorated value, wear and tear, or replacement.

Later in that year, Adams used the same themes as Teele and Lybrand in a speech to the annual meeting of the American Association of Public Accountants on October 23, 1908. Adams [1908, p. 381] explained to the audience, "When carried to its final analysis, the question of formal depreciation charges to operating expenses is simply a question of what constitutes cost of operation and the time when such cost shall be acknowledged." He further told the gathering that the new system assumed "the depletion through the use of that asset in operations creates an item of cost of operation that should be reflected in the accounts when the fact of this depletion takes place." He further pointed out that, "a statement of net revenue made without including this element of cost in operating expenses, is an erroneous statement." Adams finished this section of the speech by saying, "an expense arising through the consumption of property employed in operations ought to be acknowledged on the accounts with the same scrupulous fidelity as an expense caused by the consumption of labor or material."

Adams had obviously solidified his conclusions related to the matching principle and the conservative timing on the recognition of costs. He summed up his feelings on the subject: "[It is my] proposition, however, that depreciation is a proper charge to operating expenses [and] is one which is regarded as an established principle in the science of accounts." Because railroad accountants had helped the ICC create these accounts, it appears that he meant these comments for the consumption of his opponents, the railroad executives and some of their public auditors.

An Internal Industry Debate: In a front-page article, the *Journal* [May 2, 1908, p. 1] weighed into the depreciation argument, more or less on the side of the railroads. The article detailed the "modifications" that railroad officials wanted the ICC to make to the new accounting rules. Many of these changes dealt with a reduction in the total number of accounts required by the ICC. Most of these accounts dealt with equipment reporting detail and the corresponding depreciation for each. The argument was that 90% of all operating costs were contained in these accounts.

The report further explained that railroad officials had criticized and chastised the railroad accountants (the AARAO committee) for insufficiently studying the effect that depreciation would have on the bottom line. The railroad officers also complained that net operating revenues were down due to the new rules, although they omitted to explain that there was a general economic downturn of the American economy at this time. In the end, the rail executives seemed to want the accountants to help them in two contradictory ways. First, the accountants were to report high net income for stock market purposes, while at the same time reporting low net income for rate-setting purposes, an error already pointed out by Adams in his valuation example. Even after a year, the railroad officials were still having problems with ICC definitions of what economic depreciation actually represented, the matching of cost to revenues. It became clear that debate over depreciation had moved from an industry/ICC conflict to an internal rail industry debate.

The controller of the Erie Railroad, M.P. Blauvelt, was one of those executives who criticized the AARAO in an April 29, 1908 speech. Blauvelt said that the AARAO's Committee of Twenty-Five "caved in" and "materially altered" its position on many aspects of the new accounting system to meet Adams' demands. The speaker then echoed the rail industry's party line regarding the new accounting rules by stating that, "to depreciate is to lessen the value" of the equipment [*Railway Age,* May 15, 1908, p. 81]. C.F. Calvert [1908, p. 230] disputed Blauvelt's accusations by explaining that the "loss in value feared" by the railroad executive should actually be viewed in much the same way the ICC saw it, as a part of the cost of production.

After chastising the AARAO, Blauvelt then brought a new dimension to the anti-depreciation argument when he suggested that the ICC might not have the authority to compel railroads to show properly maintained equipment in a state of depreciation. This was an early indication that if rhetoric and public opinion would not change the mind of Professor Adams, then maybe the courts could. The Commission probably foresaw these future arguments from Blauvelt when it wrote in its 1907 annual report [ICC, 1907b, p. 141] that it interpreted the Act, "as imposing upon it the duty of protecting the integrity of the net revenue statements published by carriers, and it believes that formal depreciation charges, conservatively administered, are essential for attainment of this end."

The *Gazette* [October, 1908, p. 1,050] presented another compromise by urging the ICC to drop depreciation accounting and require current replacement cost accounting, which it felt would be an improvement over betterment accounting. The article focused on the fact that no two railroads were alike, and that any standardized depreciation rates and accounts were not feasible. The article went on to address ten more problems with the new system. Most of these dealt with procedures and theoretical questions like obsolescence and reserve accounts. However, the most prominent was the ICC's assumption that depreciation charges would better protect the stockholder by making the charges more standardized and understandable.

Nearly 15 months before, the *Times* [August 12, 1907, p. 10] had supported this position when it focused on the impact the new accounting changes had on the stockholder and the market. The article went on to say, "the new system would enable both the bondholders, and stockholders of the railroad to better understand the nature and amount of the company's income." By contrast, the issue was raised that the new ICC rules favored railroad accountants and not line operations people. The argument behind this complaint was unclear, but seemed to center on the supposed rigidity of the new rules. As noted previously in the June *Gazette* article, the railroads were worried that the new rules would preclude the gathering of additional and specific "non-financial operating data" used for efficient rail operations. This type of managerial accounting data may have included studies of wear and tear on locomotives, not the corresponding economic depreciation as intended by the ICC.

Problems with the Application of the New Rules: As the reporting period for June 30, 1908 came and went, it was clear that the railroads were "suffering" under the new rules. The *Journal* [October 13, 1908, p. 1] reported that annual reports of the railroads for the first fiscal year since the adoption of new depreciation rules "… may not fully justify the present form of such rules, but they go towards affirming the necessity for some more uniform and systematic principles for the treatment of equipment maintenance." The article went on to point out that the results of the new accounting rules for fiscal 1908 were marked by an "enormous divergence as between one road and another." The *Journal* felt that these problems revealed "to what extent each has in the past been a law unto itself not merely as to meeting the individual idiosyncrasies of its own service, but also to the ideas concerning the maintenance of the integrity of capital investment." These comments seem to correspond with the ICC's hidden maintenance agenda that would force the roads to upgrade equipment. In fact, the *Journal* articles stressed this point when it opined that the "popular idea of the new rules has been that they required all roads to increase their maintenance charges to cover a more or less imaginary or at best theoretical depreciation not previously provided for."

Though its editorial policy had been decidedly against the new rules, the *Journal* did say it was surprised to find that some railroads' costs actually decreased with the new system as Delano and others had predicted. The real reason for the great diversity of operating results was the fact that each railroad had a free hand in setting its depreciation rates. The *Journal* awaited future developments: "It remains to be seen whether the commission will continue to leave the percentage of depreciation to the individual determination of the carriers, or attempt to fix the percentages for them." Yet, the *Journal*'s assessment was not totally pessimistic: "Thus far this plan seems to work well and pretty directly toward the ends the commission set out to accomplish."

Were the new rules a failure? From the railroad industry's perspective, the answer was an unequivocal yes! The tone of the *Journal* seemed oddly contradictory when it implied that that the ICC's new rules were failing due to the railroad industry's intransigence and not because of the concept of depreciation itself. Regardless of the reasons, it was clear that the ICC had a problem on its hands.

A full year before the *Journal's* editorial, a *Times* article [October 3, 1907. p. 13] reported these potential problems this way: "As matters stand, each road has been left to decide for itself what percentage it will charge off for depreciation, but all are obliged to charge off some percentage. There is no uniformity in making these charges for depreciation." This article pointed out that the Rock Island Lines would use a 4% rate for locomotives while the Gould Lines were more conservative with a corresponding 2% rate. The only guidance on the subject that came from the ICC was as an introductory letter from Professor Adams in the 1907 *The Classification of Operating Expenses*. In the section entitled "Consideration of Depreciation," Adams had indicated that the depreciation charges should be based on the value of the equipment with a percentage applied to the original cost. Adams went on to say, "the percentage rate required for depreciation of equipment should be limited to the rate required to replace the price paid" [ICC, 1907a, pp.10-12]. In the 1908 update [ICC, 1908, p. 22] of the rules, Adams expanded and modified his comments to include a depreciation calculation net of scrap value, and declared that there should be no depreciation recognized past the equipment's estimated useful life. Again, the ICC failed to give guidance on useful lives and rates. Adams, in the report, only indicated that the monthly charge for depreciation should be computed "using a percentage of original or purchase price."

Inevitably, the decision that allowed rail companies to select individual depreciation methods rather than mandating a common methodology created a loophole for operating expenses reporting. The *Times* [October 3, 1907, p. 13] noted that the larger rail systems were seeing a decrease in earnings because of the new depreciation rules. The article then indicated that the railroad community "in principle approved of the requirements of the commission…but in their practical application, many have found flaws." Surprisingly, this article also mentioned that some U.S. railroads were already depreciating equipment on the books, but this was far from a uniform practice. The article then closed with a prophecy: "One thing the Interstate Commerce Commission will be asked to do is to reduce these charges to some uniform basis. Meanwhile some of the roads, which have adopted a percentage of depreciation, find their net earnings are reduced at a rate, which is very discomforting to the men in charge of finance." Although this high rate of depreciation may have resulted in reduced profits in the short run, its probable long-term result may be to increase tariff rates by showing the ICC that return on investment was not reasonable since current income is compared to assets whose values were reduced by depreciation reserves. The only way to stabilize this trend for the railroad was, of course, the continued replacement of equipment.

In a companion article, the *Times* [October 15, 1907, p. 10] reported that some roads were concerned that the new depreciation rules might result in a double counting of expenses because, according to the article, "the commission ruled that in addition to the charges for depreciation all charges for renewals must be included in operating expenses." Again, the railroads misunderstood that a charge for depreciation reduced book value as the expense was recognized. The article concluded by forecasting that, "unless the commission does change, some railroads will resort to a reduction in the percentages of depreciation which they have been charging." The *Times* [December 30, 1907, p. 10] noted that, "It is doubted…whether the Commission will be able to decide on any uniform percentage of depreciation." In essence, the railroads were required to choose rates that fit their situations, and the Commission had put off the temptation of standardizing depreciation rates across the board. The article finishing by saying, "it is admitted on all sides that very great care will have to be exercised on the commission in fixing any precise percentage for depreciation charges in order to avoid establishing a standard which would meet the case of some roads, but either exceed or fall short of the requirements."

Revised Reporting Rules: The ICC fought back in January 1908 with the publication of new reporting rules for depreciation, which included the aforementioned six-month ICC reporting requirements and a new balance sheet classification showing equipment at original cost less accumulated depreciation. The *Journal* [February 27, 1908, p. 8] reported on this development indicating that the ICC and Henry Adams had "undertaken an exhaustive review of the treatment of depreciation charges by interstate carriers during the six months ending December 31, 1907." The new reporting rules were, in and of themselves, exhaustive and included "blanks" for listing all equipment and providing separate valuations and depreciation rates, as well as the impact per month on income and expenses. The *Journal's* article went on to observe that this was a technical issue, and it took familiarity with the railroad accounting to "appreciate fully the labor involved in answering such a series of questions." These new rules were not merely clerical in nature because they also included onerous regulations that required the chief railroad accounting officer to certify the accounting and depreciation results.[11] Finally, the article went on to relate that a great many railroad companies had determined their depreciation charges, "making an intelligent guess at the average life of locomotives…charging them accordingly." The writer added sympathetically: "It will be no small undertaking to apportion these charges as minutely as the Commission's desires."

The problems over depreciation rates would continue for many years as indicated in the ICC's 1913 annual report where it was noted [p. 39] that depreciation rates for similar equipment varied from 7% per year to zero. The report said that the rates were due to differences in "policy" and were unrelated to "physical depreciation." Although the ICC report provided no standard for depreciation rates, it did give an example that indicated a 1% charge rate would be unacceptably low as assets

[11]In a similar fashion to the Hepburn Amendment, the Sarbanes-Oxley Act of 2002, Section 302, *Corporate Responsibility for Financial Reports,* required that executives of all publicly held corporations had to sign an affidavit regarding the accounting procedures used in the financial statements.

would be overstated and a fictitious surplus created. The example then indicated that a 7% rate was probably too high, leading to an understatement of income and the creation of "secret reserves." The "manipulation" of depreciation rates was of concern to the ICC; it planned to rein in these problem reporters. The Commission made it clear to its readers that it had the power to do so under law, but the tactics of the railroads themselves were about to change. Since rhetoric and protest had failed to dislodge the new accounting rules, it was evident that the tide of power had turned against these once politically powerful railway concerns. They were left with only one recourse – challenge the new accounting rules directly, first through civil disobedience and then, if necessary, the courts.

LEGAL CHALLENGES TO THE DEPRECIATION RULES

The rail industry, in a brief but combative article in the *Times* [March 2, 1908, p. 10], continued to protest the high cost of the application of the new depreciation rules. The article noted that there had been plenty of grumbling from railroad officers because the ICC had compelled them to include monthly depreciation charges in operating expenses. It was reported that the politically powerful Pennsylvania Railroad had gone so far as to refuse to comply with the order. Naturally, the ICC wished to fortify its position with complete knowledge of past and present accounting practices.

The *Gazette* [January 31, 1908, p. 681] confirmed the Pennsy's stance on this issue and that of the New York Central as well. The publication indicated that the railroads, in making monthly earnings reports to the ICC, declined to sign an ICC affidavit to that effect. In response, the government proceeded against these roads for non-compliance by sending a ten-day notice compelling the roads to sign the affidavit. Earlier in the debate, the *Journal* [October 5, 1907, p. 8] had reported that there was no uniformity among railroads in their planned actions against the new accounting rules. At this point, it was reported that companies like the Pennsylvania Railroad had not yet made final decisions to defy the accounting and reporting orders permanently. The railroads' indecision over litigation may have had as much to do with the unknown future effect that depreciation would have in the future financial outcomes of the companies as to the authority of the orders themselves because some roads were actually benefiting from the change.

Regardless of the vacillating opinions of the industry, at this late date, any legal recourse appeared limited due to a Supreme Court ruling in January 1909 that supported depreciation charges for determining rates in the public utility industry.[12] In *City of Knoxville vs. Knoxville Water Company* [212 U.S. 1], the Court ruled that "a deduction for depreciation from age and use must be made from the estimated cost of reproducing a waterworks plant when determining the present value of the tangible property for the purpose of testing the reasonableness of the rates fixed by a municipal ordinance." This ruling indicated that depreciation was a "determinant of, not an allocation of net income," rendering invalid the utility's argument that depreciation was confiscatory in nature.

The possibilities for legal action began to improve when the Lehigh Valley Railroad announced in the *Times* [October 18, 1909, p. 13] that it was refusing to recognize the authority of the Commission. In short, their argument was that the ICC had the authority to promulgate accounting requirements, but not to force them on the roads. This protest was directed against the ICC's final installment of the uniform accounting regulations in August 1909. These regulations, according to the report, "restrict(s) the discretion of the directors in the matter of charges for depreciation of equipment."[13]

These issues reported by the *Times* may have been only "shadow problems," while the real issue centered on the new form of a balance sheet formulated by the ICC that showed more detail about capital and asset accounts. The formal protest to the ICC from the Lehigh Railroad indicated that the company believed that the accounting orders "assumed an authority which was not intended to be granted to the commission by Section 20 for the act…and further believes the adoption of said orders will not before the best interests of the railroad." Essentially the railroad felt that the accounting rules were an unwarranted appropriation of the company's surplus.

The railroad also contended that those depreciation charges applied to the cost of betterments (repairs) and not the purchase of additional or replacement equipment. It argued that, "it is not the desire of the [railroad] to enter at this time into

[12]Public utilities included water, gas, and power companies which did not come under the jurisdiction of the ICC.

[13]As a side note, the new rules actually gave the railroads more flexibility in determining what amounts should be capitalized by allowing labor to be expensed under certain conditions. In addition, the ICC relented and combined the accounting for betterments and additions. This had the effect of streamlining the number of accounts required.

any argument with the commission regarding the merit or lack of merit of the systems of accounting prescribed in the orders mentioned above, as the statistician of the commission, we understand has been favored in conference with the views of our representative." The ICC had apparently listened to the Lehigh's complaints but had either dismissed or ignored them. The article went on to comment that while there were no current plans for litigation, the railroad was thinking "about testing the validity of the orders in law or equity." It should be noted here that the railroad, in its discussion, moved from mentioning Adams' name to the more pejorative "statistician of the commission." The debate was turning personal.

To add another wrinkle to the rail industry's anti-depreciation stance, the article mentioned, "the system promulgated by the commission partakes in many respects the practice followed by the British railroads, the financial condition of which, and their cost of performing service, not withstanding lower wage rates paid in that country, being too well known to elaborate explanation." Delano also complained about this perceived British bias and the apparent inefficiencies in its transportation system. The "anti-British" focus may have started when Adams, in a letter to the railroads in 1908, quoted a British accountant as having said: "No profit can exist until the expired outlay of productive plant has been provided out of gross revenue" [Chapman, 1908, p. 623].

A similar article in the *Journal* [October 18, 1909, p. 6] a week later framed much the same argument by claiming that capitalizing betterments (repairs in the eyes of the railroads) is an appropriation of income and an increase in asset value on the balance sheet that the stockholders would improperly perceive as source of new capital rather than a charge to profit and loss. The 1909 rules apparently changed the focus of the roads because they were now worried about a public perception of too little expense rather than the 1907 problem of too many new charges.

The *Journal* also thought that it would be unwise for American railroads to adopt excessive capitalization that had worked "so disastrously" for English railroads. W.G. Taylor defined the term "overcapitalization" as "capitalization (stocks and bonds) merely in excess of the cost of production or reproduction of the plant" [Johnson, 1908, p. 325].[14] It was thought that in the

[14] The British also felt that the Americans were moving to their system. A sarcastic article regarding the situation was published in the British account-

absence of a dollar for dollar match in long-term bonds and fixed assets, it would be assumed that the railroads were gouging the public because of the higher rates needed to cover any "excess borrowing." Overcapitalization went against the public good. The more colloquial term for this methodology was "stock watering," which had given the railroads a bad reputation in the past. This issue would continue contentious for the next 20 years and would be the crux of future rate arguments. It constituted the central reason why the ICC was going to attempt systematically to standardize the "value" of all railroads in the U.S.

Before any of the railroads could file against the ICC, a parallel set of lawsuits began working their way through the courts. The Goodrich Transportation Company and the White Star Lines attempted to have the 1910 issuance of Special Report Circular 10, which required them to report certain accounting data to the ICC, overturned in court. In *ICC vs. Goodrich Transportation Lines and White Star Line* [224 U.S. 194], the two companies argued that they did not come under ICC jurisdiction because the law creating the ICC implied that only shipping lines affiliated with railroads could be regulated. As independent Great Lakes steamship lines, they were therefore exempt. The *Times* [April 2, 1912, p. 15] reported that that the court disagreed and indicated that they were required to follow ICC regulations because they were a business in the pursuit of interstate commerce by definition of the law.

Because the courts allowed the ICC to require formal reporting by the water-borne carriers, the railroads' protests over accounting and reporting issues appeared to be dead, except for one challenge from the Kansas City Southern Railroad filed in November 1911. The *Journal* [November 17, 1911, p. 1] reported that the railroad sued in Commerce Court over the refusal of the Commission to allow the capitalization of certain outlays. The argument was narrow and dealt with a $10 million charge that the ICC wanted taken into income because the railroad did not "charge against earnings the estimated replacement value of six parcels of abandoned roads incident to grade reduction." Simply put, it had not offset the cost of new railroad grades

---

ing journal *Accountant* on July 20, 1907. It noted: "The 'reform' is curiously interesting inasmuch as it affords a rather pathetic spectacle of the United States striving to get back to the low level of British railroad statistics and Great Britain struggling to attain the fullness of perfection exhibited by the now discarded American method" [*Journal of Accountancy*, 1907, p. 318].

they had completed with the value of the abandoned right-of-ways for depreciation purposes. The railroad felt that this process not only hurt income but also impaired the market value of bonds issued to pay for the betterments. There appeared to be a contradiction in the ICC regulations because it allowed capitalization on the grade changes to the existing right-of-way but not for the change in location of the same rail system that would have substantially reduced operating costs.

The Supreme Court issued its ruling in *Kansas City Southern vs. U.S.* [231 U.S. 423], upholding the ICC's rules [the *Journal*, December 6, 1913, p. 1]: "The Supreme Court sustained a ruling of the ICC, and established absolute authority of that body to decide questions of accounting practice." Adams, however, could not savor this 1913 victory as he had retired two years earlier from the ICC after nearly 25 years of service. Although the seven-year debate over accounting policy had started out cordially enough, by the time of his retirement it was beginning to get ugly with civil disobedience, litigation, and recriminations. A *Times* editorial [September 24, 1910] eyed the suspicious nature of the ICC as it pertained to the dual issues of accounting treatments and railroad valuation. The article took the stance that no two railroads could ever be valued the same, "Yet, it is the [holy] grail of the Interstate Commerce Commission."

The critical tone of the editorial seemed to point to the ill-advised concept that all railroads were equal and that such regulations would harm the industry. Adams was portrayed sarcastically: "In obedience to the theories of Prof. Adams [the ICC] has adopted a system of accounting designed to impede the methods of betterments from earnings which has made the capitalization of American railroads a world's marvel." This was probably another veiled reference to the opinion that English roads were overcapitalized. Whether the ICC indeed viewed the English system of accounting to be superior is not known, but it probably saw most other industries embracing economic depreciation and became unrelenting on the issue, wavering little from its basic theory. Such regulations, as the railroads and the press felt, penalized the efficient and well-run railroad.

AFTERMATH AND CONCLUSIONS

By the end of 1913, the ICC had essentially won on the issues of uniform accounting measures and its authority to impose reporting requirements on the railroads. The ICC's annual report [1913, p. 39] noted: "The Commission continues to receive…the cooperation and assistance of different classes of carriers in formulating accounting systems which will furnish the Commission with the largest possible measure or information while recognizing the practical limitations." Within the next year, the ICC would issue a wide range of accounting regulations for all the constituent industries and companies under its jurisdiction. Round one of the great American depreciation debate was over.

The ICC and the related concepts of "economic depreciation" and "cost matching" were clear winners, but the necessity of maintaining efficient rail operations in a large, prosperous, and growing country would take precedence over theory for the near future. In an apparent vindication and a mild rebuke to the theories of Henry C. Adams, the ICC granted the railroads a five percent rate increase on December 18, 1914. Although reported as a victory for the railroads, it was indicated in the *Times* [December 19, 1914, p. 1] that gross revenues compared to expenses had dropped drastically since 1910 due to the "inelastic nature of many expenses." According to the Commission, the "recent increased provisions for depreciation…that may militate against a fair comparison of…comparable statistical items…we cannot say this on the record that such charges as the present returned by the carriers are excessive, viewed with from the standpoint of proper accounting."

The ICC commissioners, even with the accounting data before them, could not decide upon the reasonableness of rates of return as envisioned by Adams, but neither did they scrap the new system in favor of the old pre-1907 betterment accounting rules. In this case, it appeared that regardless of what the rates of return were telling the ICC about them, the railroads were not generating enough income and corresponding cash flow to cover operations and complete the necessary asset replacements mandated by the ICC. In fact, the ICC realized that the roads were in a dire situation because they would be unable to float bonds in Europe to finance replacements due to the war that had erupted in August 1914. In the end, even with Professor Adams' rate theories and uniform accounting data, the decision had come down to one of expediency and necessity to maintain the integrity of the American rail system for the traveling and shipping public. In the meantime, the accounting policy of the railroads would remain at odds with those of American industry in general for some time to come.

The depreciation debate was again renewed in 1923 when the ICC ordered the depreciation of track right-of-way and way structures. This order set off another ten years of protests and litigation that would culminate in the ICC's canceling the orders in 1933 due to the economic depression. The final phase of the debate over betterment accounting would recommence in the mid-1950s with an attempt by Arthur Andersen to reinvigorate an economically moribund rail system through the convergence of railroad accounting practices with industry GAAP. This time Arthur Andersen challenged the theoretical underpinnings of railroad accounting rules in light of depreciation standards issued by the Committee on Accounting Procedures during World War II. The debate created a strange coalition as Arthur Andersen stood against the American Institute of Certified Public Accountants which sided with the railroads and the ICC. The final demise of betterment accounting for rail structures would occur in February 1983 when the ICC, bowing to pressure from the Internal Revenue Service and the Securities and Exchange Commission, abolished its usage. Congress abolished the ICC itself in December 1995.

REFERENCES

Articles, Books, and Documents:

Act to Regulate Interstate Commerce, February 4, 1887, amended June 29, 1906, 34 Stat. 584.

Adams, H.C. (1908), "Railway Accounting in Its Relation to the Twentieth Section of the Act to Regulate Commerce," *Journal of Accountancy,* Vol. 6, No. 6: 381-393.

"American Railroad Accounting Methods," (1907), *Journal of Accountancy,* Vol. 4, No. 4: 318.

Barret, G.E. (1907), "Depreciation in Railroad Accounting," *Journal of Accountancy,* Vol. 3, No. 3: 486.

Calvert, C.F. (1908), "Depreciation in Railroad Accounting," *Journal of Accountancy,* Vol. 6, No. 4: 229.

Chapman, S. (1908), "American Methods of Railway Accounting," *Journal of the Royal Statistical Society,* Vol. 71, No. 4: 619-648.

Dickinson, A.L. (1978), "Depreciation and Renewals of Equipment, A Communication to Professor H.C. Adams, April 30, 1908," in Previts, G.J. (ed.), *Early 20th Century Development in Accounting Thought, A Pre-classical School* (New York: Arno Press): 13-27.

Financial Accounting Standards Board (1983), *Statement of Financial Accounting Standards No. 73, Reporting a Change in Accounting for Railroad Track Structures* (Stamford, CT: Financial Accounting Standards Board).

Fink, A. (1875), *Cost of Railroad Transportation, Railroad Accounts and Governmental Regulation of Railroad Tariffs,* an extract from the 1875 annual report of the Louisville and Nashville Railroad Company (Louisville, KY: John P. Morton and Company).

Heier, J.R. (1994), "The Development of Railroad Regulatory Accounting at the Interstate Commerce Commission in the Later Part of the Nineteenth Century," in Brown, B. (ed.), *Collected Papers and Abstracts, Southeast American Accounting Association Meetings,* (Louisville, KY): 101-110.

ICC vs. Goodrich Transportation Lines and White Star Line, 224 U.S. 194 (1912).

Interstate Commerce Commission (1905), *Nineteenth Annual Report of the Interstate Commerce Commission – 1905* (Washington, DC: Government Printing Office).

Interstate Commerce Commission (1907a), *Classification of Operating Expenses for Steam Roads* (Washington, DC: Government Printing Office).

Interstate Commerce Commission (1907b), *Twenty-First Annual Report of the Interstate Commerce Commission – 1907* (Washington, DC: Government Printing Office).

Interstate Commerce Commission (1908), *Classification of Operating Expenses for Steam Roads* (Washington, DC: Government Printing Office).

Interstate Commerce Commission (1913), *Twenty-Seventh Annual Report of the Interstate Commerce Commission – 1913* (Washington, DC: Government Printing Office).

Johnson, J.F. (1907), "Railroad Over-Capitalization – A Symposium," *Journal of Accountancy,* Vol. 4, No. 5: 37-349.

Kansas City Southern vs. United States, 231 U.S. 423 (1913).

Knoxville Water Company vs. United States, 212 U.S. 1 (1909).

Louisville and Nashville Railroad (1908), *57th Annual Report for the Louisville and Nashville Railroad – Fiscal Year June 30, 1908* (Louisville: John P. Morton and Company).

Lybrand, W.M. (1909), "Accounting of Industrial Enterprises – Depreciation," *Journal of Accountancy,* Vol. 7, No. 3: 224-236.

May, G.O. (1962), *Memoirs and Accounting Thought of George O. May* (New York: Ronald Press and Company).

Miranti, P.J. (1989), "The Mind's Eye of Reform: The ICC's Bureau of Statistics and Accounts and a Vision of Regulation, 1887-1940," *Business History Review,* Vol. 63, No. 3: 469- 510.

National Association of Railway Commissioners (1905), *Proceedings of the Seventeenth Annual Convention, 1905* (Washington, DC: Government Printing Office).

Previts, G.J. and Merino, B.D. (1998), *A History of Accounting in America,* 2nd edition (Columbus, OH, Ohio State University Press).

Sivakumar, K.N. and Waymire, G.B. (2003), "Enforceable Accounting Rules and Income Measurement by Early 20th Century Railroads," *Journal of Accounting Research,* Vol. 41, No. 2: 397-433.

Smyth vs. Ames, 169 U. S. 466 (1898).

Teele, A.W. (1908), "Railroad Accounting in Relation to the 20th Section of the Act to Regulate Commerce," *Journal of Accountancy,* Vol. 7, No. 2: 89-95.

United States Steel (1904), *Third Annual Report to the Stock Holders of United States Steel* (Hoboken, NJ: United States Steel Corporation).

United States vs. Kansas Pacific Railway Company, 99 U.S. 455 (1878).

Younkins, E., Flesher, D., and Flesher, T, (1984), "Working Paper No. 58 – Financial Statements of U.S. Steel, 1902-1951: A Half Century of Leadership in Reporting," in Bishop, A. and Richards, D, (eds.), *The Academy of Accounting Historians Working Paper Series,* Vol. 3, (James Madison University: Academy of Accounting Historians): 246-259.

Newspaper Articles (listed in chronological order):

New York Times

"Roads to Fight Bookkeeping Plan" (1907, June 15), *New York Times:* 12.
"Some Phases of New Accounting – Stockholders Think their Interests are Better Safeguarded than under Old System"(1907, August 12), *New York Times:* 10.
"Federal Accounting Cuts Net Earnings – Large Systems to Protest Against Depreciation Charges Ruling"(1907, October 3) *New York Times:* 13
"Roads Expect New Ruling – ICC Depreciation Charges May be Revised" (1907, October 15) *New York Times:* 10.
"Some Roads Neglect Depreciation Fund Question ICC's Right to Order Creation of Such a Fund" (1907, December 30), *New York Times:* 10.
"Cost of Reports, Railroads Call Commission's Requirements Burdensome" (1908, March 2), *New York Times:* 10.
"Railway Protests to Commission" (1909, October 11), *New York Times:* 13.
"Regulating Earnings" (1910, September 24), *New York Times:* 10
"Commerce Court Reversed – Interstate Board Upheld in Regard to Reports" (1912, April 12), *New York Times:* 15.
"Railroads Win Rate Increase" (1914, December 19), *New York Times:* 1.

Railroad Gazette, Railway Age, and *Railway Age Gazette*

"Editorial" (1907, January 11), *Railway Gazette* XLII, Vol. 2: 32.
"General News Section" (1907, April 19), *Railway Gazette,* Vol. XLII, No. 12: 507.
"General News Section" (1907, June 14), *Railway Gazette,* Vol. XLII No. 25: 869
"A Defective Accounting System" (1907, June 21), *Railway Gazette,* Vol. XLII, No. 25: 883- 884.
"The New Expense Accounts" (1907, September 27), *Railway Gazette,* Vol. XLIII, No. 4: 86.
Mahl, W. (1907, October 11), "Equipment Depreciation and Renewal," *Railway Gazette,* XLIII, No. 15: 90.
Traffic Affairs" (1908, January 16), *Railway Age,* Vol. XLV, No. 2: 54.
"General News" (1908, January 31), *Railway Age,* Vol. XLV, No. 4: 681.
Delano, F. (1908, March 27), "Notes on the Application of a Depreciation Charge in Railway Accounting," *Railway Age,* XLV, No. 12: 471-473.
"Depreciation in Railway Accounting" (1908, May 1), *Railway Age,* Vol. XLV, No. 14: 623.
Blauvelt M.P. (1908, May 15), "Railroad Accounting under Government Supervision," *Railway Age,* Vol. XLV, No. 24: 707.
Dunn, H.A. (1908, May 29), "Depreciation in Railway Accounting," *Railway Age,* Vol. XLV, No. 22: 726.
"Objections to Depreciation Change" (1908, October 3), *Railway Age Gazette,* Vol. XLV, No. 28: 1050.

Wall Street Journal

"Uniform Railroad Accounts" (1907, May 21), *Wall Street Journal:* 3.
"Railroad Valuation" (1907, May 22), *Wall Street Journal:* 5.
"Create Railroad Department Says Commissioner Pouty," (1907, May 23), *Wall Street Journal:* 1.
"Standard Railroad Accounts, Prescribed Form Issued by ICC" (1907, May 29), *Wall Street Journal:* 6.
"Interstate Commerce Commission – Ruling on Railroads" (1907, June 7), *Wall*

Street Journal: 6.
"No Uniformity of Plans for Action Against New Rule" (1907, October 5), *Wall Street Journal:* 8.
"Commission Begins Inquiry into Depreciation Charges" (1908, February 27), *Wall Street Journal:* 8.
"R.R. Officials to Recommend Modifications in Accounting" (1908, May 2), *Wall Street Journal:* 1.
"Railroad Reports under New System will be Misleading" (1908, August 20), *Wall Street Journal:* 5.
"Equipment Depreciation Plays many Roles in Recent Reports" (1908, October 13), *Wall Street Journal:* 1.
"Railroads not yet United against New Accounting Rules" (1909, October 18), *Wall Street Journal:* 6.
"Kansas City Southern vs. the Commerce Commission" (1911, November 17), *Wall Street Journal:* 1.
"Kansas City Southern to Appeal Guardian Trust Case" (1913, December 6), *Wall Street Journal:* 1

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 125-143

Robert W. Russ
NORTHERN KENTUCKY UNIVERSITY
Gary J. Previts
CASE WESTERN RESERVE UNIVERSITY
and
Edward N. Coffman
VIRGINIA COMMONWEALTH UNIVERSITY

THE STOCKHOLDER REVIEW COMMITTEE OF THE CHESAPEAKE AND OHIO CANAL COMPANY, 1828-1857: EVIDENCE OF CHANGES IN FINANCIAL REPORTING AND CORPORATE GOVERNANCE

Abstract: Canal companies were among the first enterprises to be organized in the corporate form and to require large amounts of capital. This paper examines the stockholder review committee of a 19th century corporation, the Chesapeake and Ohio Canal Company (C&O), and discusses how the C&O used this corporate governance structure to monitor and improve financial management and operations. A major strength was the concern and dedication of the stockholders to the company, while a major weakness was the political control exerted by the State of Maryland. The paper provides an historical perspective on corporate governance in the 19th century. This research contributes to the literature by providing detailed workings and practices of a stockholder review committee. The paper documents corporate governance efforts in archival sources that provide an early example of accountability required in a corporate charter and the manner in which the stockholders carried out this responsibility.

INTRODUCTION

Canal companies were among the earliest enterprises to be organized in a corporation form, and they were also among the first to require large amounts of capital. Raising the needed capital resulted in absentee owners who required financial infor-

Acknowledgments: We express our appreciation to the anonymous reviewers and the editor emeritus, Steve Walker, for their comments and suggestions which improved the paper significantly.

mation. The purpose of this paper is to contribute to a better understanding of the origins of corporate governance and financial management in the U.S. by examining activities of a 19th century canal corporation's stockholder review committee, specifically that of the Chesapeake and Ohio Canal Company (C&O). While other studies have discussed accounting practices and procedures of companies in different industries during this time [Kistler, 1980; McKinstry, 1996; Michael, 1996; Previts and Samson, 2000], there is limited discussion in the literature of corporate governance during the canal era. The C&O broke ground in 1828, and construction was completed to Cumberland, Maryland in 1850.[1] The company continued operations until 1889.

A review of the accounting literature reveals that little has been written about the corporate governance and financial management practices of canals. Kistler [1980] presented an analysis of the accounting practices and management of the Middlesex Canal, which was built from 1793 to 1804 and operated until 1850. As part of its corporate governance, the Middlesex Canal Company used a stockholder review committee to audit the company financial records. Stockholder review committees have also been found in early railroad companies (e.g., the Baltimore & Ohio Railroad [Previts and Samson, 2000]). While these studies present evidence of the existence of stockholder review committees, they do not provide details of their workings or findings although some limited evidence of the operations of a review committee is presented by McKee [1979]. Our study of the stockholder review committee of the C&O contributes to the literature by providing evidence of the workings and practices of a canal company that operated independently between 1828 and 1889. It identifies an early example of accountability required by a corporate charter.

At the time of the C&O's founding in 1828, there were very few corporations. There were no known established corporate governance or financial reporting practices in the U.S. In his discussion of the Forth and Clyde Navigation Company of Scotland, Forrester [1978] noted many innovative business practices. Boockholdt [1983], in describing early railroad accounting, observed that prior to these early corporations, there were no precedents for disclosure or accounting methods to be used. Previts and Samson [2000], in their study of the Baltimore &

[1]For comparison, the Erie Canal was 363 miles and built in eight years (1817-1825). The C&O was 186 miles and took 22 years to construct.

Ohio Railroad (B&O), provided evidence that the financial reporting of early corporations evolved over time. They observed that the B&O served as a school for railroad companies by providing an example of company management that other companies could emulate. Claire [1945] provided further evidence by describing the evolution of financial reporting at U.S. Steel around the turn of the century and noting that a measure of reporting progress was to chart the changes in the annual reporting style of a single company.

The research of the current study takes the evolution in financial reporting a step further by examining the catalyst for evolutionary change. It is hypothesized in this paper that one catalyst for change resulted from the accountability demands of stockholders. In the case of the C&O, the stockholders used the stockholder review committee to effect this evolutionary change not only in financial reporting but also corporate governance.

The following section provides a brief discussion of the canal era in the U.S. Information regarding the origins of corporate governance at the C&O is then presented, followed by a discussion of the stockholder review committee and the financial management of the company. The final section provides some concluding comments.

THE CANAL ERA IN THE U.S.

As a young man, George Washington had surveyed land and rivers throughout Virginia into the Ohio Valley. In 1772, Washington proposed the establishment of a company to make improvements on the Potomac River. In that year, Washington obtained a charter from the House of Burgesses in Williamsburg, Virginia; however, the charter was not ratified by the Maryland legislature.[2] The start of the Revolutionary War ended all consideration of the project.

In the fall of 1783, General George Washington resigned his commission as commander-in-chief of the revolutionary army. On September 2, 1784, Washington started a tour of the western territories to examine his land holdings and to determine the feasibility of waterway improvements between the coastal region of the country and the Ohio Valley. In a letter to Virginia governor Benjamin Harrison on October 10, 1784, Washington

[2]Thomas Johnson presented the charter proposal to the Maryland legislature. Joint approval of the charter was necessary because the state boundary was set on the Virginia shore.

bespoke the need for improved communication and transportation with the western territories. The letter reflected Washington's fears that without communication and trade, the western territories would become Spanish by virtue of trading with then Spanish New Orleans. From this letter was born the canal movement in the U.S.[3] Survey notes of George Washington, included in the letter to Governor Harrison, indicated that the Potomac River route was the shortest distance between Pittsburgh (on the Ohio River) and Tidewater (an Atlantic seaport). Over the next three months, Washington would travel between Mount Vernon, Annapolis, and Richmond to obtain, in 1784, the corporate charter of the Potomac Company.

The Potomac Company made various improvements in the navigation of the Potomac River. Obstructions were cleared and canals built around major obstructions, such as the great falls several miles upriver from Georgetown, Maryland (now in the District of Columbia).

However, by the early 1820s, the Potomac Company had exhausted its funds, and the navigational improvements carried out by the company were proving inadequate for the needs of the region and country. In 1823, a new group of individuals obtained a charter from Virginia, Maryland, Pennsylvania, and the federal government to form a new company. The new company, the Chesapeake and Ohio Canal Company, would absorb the assets, liabilities, and stockholders of the Potomac Company. The goal of this new enterprise was to build an artificial river (canal) from tidewater Potomac to the Ohio River at Pittsburgh [Sanderlin, 1946].

The C&O was never profitable enough to pay off the corporate debt borrowed for construction and repairs. However, the company was able to survive for over 100 years (including the predecessor Potomac Company). The canal was financially successful during the 1870s to the 1880s, but this success was neither sufficient to pay off the corporate debt nor to provide a return to the stockholders. During this time, the company's administrators were successful in waging a political war with the B&O [Dilts, 1993]. Severe flooding in 1877 and 1889 caused major damage to the canal works. After the 1889 flood, fund-

[3]Persons promoting the C&O Canal and the Erie Canal [Shaw, 1966], as well as other canal promoters, quote the letter from Washington to Governor Harrison. During the canal era in the U.S., hundreds of miles of canals were constructed to provide transport and communications between cities and states [Appendix 1].

ing was not available to make repairs, and the C&O was forced into receivership.

Following receivership, the B&O Railroad emerged as the majority owner of the repair bonds holding the mortgage on the canal and assumed control of the C&O. Funding provided by the B&O allowed the canal to be repaired and returned to service in 1892; however, another flood in 1924 resulted in the canal being closed permanently. In 1938, the federal government purchased the canal assets from the B&O for $2 million [Sanderlin, 1946], and in 1971, the canal was designated a national park.

With the impacts of nature and technology, the C&O succumbed to its archrival, the B&O. The B&O competed on three fronts – goods to transport, construction routes, and construction funding. The railroad was also a technological rival. Over the life of the C&O, railroad technology improved and lowered the cost of rail transport. Canal technology was at its peak and was unable to make additional efficiency improvements to compete with the railroad. The C&O stockholders, including states, towns, and the federal government which had contributed the millions of dollars needed for construction, never received a return on their investment.

The C&O, while never profitable for the individual investors, was beneficial for the region it served. Ransom [1964] stated that economic historians have focused on the railroad as the most important factor in U.S. economic growth. He argued that this is misguided, that canal construction in the U.S. predated the railroads, and that the canals should be re-evaluated to reflect their contribution to U.S. economic growth. Ransom further urged that since canals were not a system, they should be evaluated individually for their economic contributions.

At the time the federal government purchased the C&O canal assets (1938), the available corporate records were also transferred to the government and now reside at the National Archives in College Park, Maryland. Included in the records are the board of directors' minute books and *The Minutes of the Proceedings of the Subscribers of the Chesapeake and Ohio Canal Company* (referred to in this paper as the stockholder minute books) which are the primary sources for this paper. As separate documents, annual reports were presented to stockholders of the C&O; however, the annual reports for only select years reside in the National Archives. The list and location of the annual reports for the years covered in this study are presented in Appendix 2.

THE ORIGINS OF CORPORATE GOVERNANCE AT THE C&O

The accounting records left by the C&O present evidence of the corporate governance and financial management of a 19th century corporation. The 1784 charter of the Potomac Company, after which the C&O's charter was modeled, required an annual meeting of the stockholders. Thus, the Potomac Company charter stated that at the annual meeting the "president and directors shall make report, and render distinct and just accounts of all their proceedings, and on finding them fairly and justly stated, the proprietors then present, or a majority of them, shall give a certificate thereof" [1784 Virginia Act, p. 515]. This charge to the corporate officers represents a significant event in the history of U.S. corporate governance and financial management for it provides a very early example of corporate accountability required by charter. To accomplish this requirement, the stockholders at each annual meeting of the Potomac Company selected a committee to review the annual report of the company. The first stockholder meeting was held May 17, 1785. At the next meeting, held August 7, 1786, a committee of stockholders was selected to examine the records of the treasurer. The committee reported back to the stockholders the following day that the accounts were "fairly and justly stated" [Potomac Company, 1785-1796]. This process was repeated annually.

The 1823 charter of the C&O was almost identical to that of the Potomac Company and included the phrase above referenced. The charter also stated that the C&O would absorb the assets, liabilities, and stockholders of the Potomac Company. In so doing it also adopted some of the practices of the Potomac Company, including its corporate governance structure. The C&O hired a full-time president and a part-time board of directors.

The C&O continued the practice, started by the Potomac Company, of having a stockholder committee appointed at the annual meeting review the current year's annual report (presented by the company president and the directors) and report their findings back to the stockholders. A subcommittee would be selected within the review committee to scrutinize the financial records of the company. This procedure continued until the June 1831 stockholders meeting at which time this practice was modified. The stockholders then passed a resolution stating that a committee should be appointed each year to review the annual report of the *next* year. The resolution directed that the president and directors should have the report ready two weeks before the scheduled annual meeting to allow the review committee time to examine the report and prepare its evaluation. The reports prepared by these annual review committees are presented in the stockholder minute books and assist us in understanding the functioning of the company's corporate governance structure.

After completing the canal to Cumberland, Maryland in 1850, the practice of having a committee review the annual report was again modified. As mentioned, the original practice was for the committee to review the practices and decisions of the president and directors with a subcommittee reviewing the company's financial records. With the completion of the canal to Cumberland, it seemed there was less need for the stockholder committee to review the decisions of the president and directors. Therefore, under the new arrangement, three or four stockholders present at the current stockholder meeting were selected to review the next year's annual report, mainly focusing on an examination of the financial records of the company. Additionally, other committees would be established as the stockholders felt necessary to examine particular issues of interest to them. For instance, a committee in 1855 was appointed to review a proposal for leasing waterpower to the Alexandria Canal Company, and again in 1869, a committee was selected to investigate a proposal to abandon the C&O and turn its assets and operations over to the corporate bondholders.

The company charter provided for a weighting process of stock voting rights to favor the small, individual investor. The charter stated that "each member shall be allowed one vote for every share, as far as ten shares, and one vote for every five shares above ten" [1784 Virginia Act, p. 513]. The original stock subscriptions gave the U.S. federal government 40 percent of the voting rights at stockholder meetings. By 1836, the State of Maryland had taken control by means of continued subscriptions to stock in the company [Sanderlin, 1946].

Exhibit 1 demonstrates that the State of Maryland investment was five times larger that any other governmental investor. With the additional subscription of stock in 1836, the State of Maryland controlled more than 50 percent of the voting stock rights of the company. Individual investors were noted in a subscriber's log maintained by the company.

The charter for the C&O was obtained in 1823; however, the first annual meeting was not held until 1828. These years were spent obtaining stock subscriptions from the States of Mary-

EXHIBIT 1

Stock Subscriptions to the Chesapeake and Ohio Canal Company, 1828-1836

Subscriber	1828	1836
Federal Government	$1,000,000	$1,000,000
City of Washington	1,000,000	1,000,000
City of Georgetown	250,000	250,000
City of Alexandria	250,000	250,000
State of Virginia	250,000	250,000
State of Maryland	500,000	5,000,000
Individuals	468,889	468,889

land and Virginia, as well as stock subscriptions from the U.S. government.

Political Environment of the C&O: Any study of the C&O Canal Company must consider the economic development and political role of the company. The first president[4] of the C&O was Charles Fenton Mercer who served from 1828 to 1833. Mercer was then chairman of the U.S. House Committee on Roads and Canals. It was Mercer who had introduced the legislation for the C&O charter and for the U.S. government's subscription to stock in the company. By 1833, when John Eaton replaced Mercer as company president, Andrew Jackson had been elected president of the United States. Jackson's predecessor, John Quincy Adams, was a member of a different political party, and the stockholders of the C&O, in an attempt to enlist further support of the federal government, supported a change in the company's presidency to Eaton, who was a member of Jackson's political party [Garraty and Carnes, 1999].

The officers of the C&O changed to reflect the political party in power in the Maryland statehouse. Maryland had by far the largest financial interest in the C&O. Such was the power of Maryland over the company that the state's selection of nominees for the president and the directors of the company was tantamount to their election. At the April 1841 stockholder meeting, the committee reviewing the annual report made the following statement [*Minutes of the Proceedings of the Subscribers ...*, Vol. B (1836-1841, pp. 417-418]:

[4]The company president was elected annually to serve a one-year term.

> The committee, from evidence given them, are satisfied that very valuable and faithful officers have been removed from the service of the company, and, in some cases, men not competent to perform the duties required have been appointed in their places, to the serious injury of the best interest of the company.
>
> Some of these removals have been as admitted by the president's report to the governor of Maryland, for political opinion's sake which, as your committee conceive, no direct interest of the company either required or demanded.
>
> In addition to these views already presented, there are other matters which might be adverted to if the time allowed for this report would permit, which go strongly to induce this committee to believe that the affairs of the canal company have been most unfortunately managed.

At this same 1841 meeting, the stockholders, recognizing the costs of continuous changes in company management, passed a resolution stating that the C&O is a work of national importance and should not become a political engine and fluctuate with the tide of the party in power [*Minutes of the Proceedings of the Subscribers …*, Vol. B (1836-1841), p. 414].

Sanderlin [1947] further illustrated the political nature of the company in his article on Arthur Gorman and the C&O Canal Company. Sanderlin described Gorman's rise to power in Maryland politics through his position as the president of the C&O Canal Company. In 1872, Gorman was "elected" to the presidency of the canal company in the same year that Gorman's benefactor William Whyte was elected governor of Maryland. Sanderlin [1947, p. 324] called this "an appointment to the presidency … as a reward for his services in behalf of his party."

In 1881, the bondholders also complained about political appointments in company management. They presented a petition at the annual stockholder meeting containing the following statement [*Minutes of the Proceedings of the Subscribers …*, Vol. E (1856-1889, pp. 336-337]:

> That they [the bondholders] have received no payments on account thereof since December 1876. That they believe if the canal is managed on business principles, free from political influences, it can and will pay the debts due to them.
>
> That they believe it is now and has been for years too much controlled and managed as a political ma-

> chine for the purposes of promoting the interest of party without proper regard to those of the State of Maryland, who is the largest creditor or of the bondholders.

The minority stockholders made attempts to gain more influence within the company. At the June 1879 annual meeting, the individual representing the stock held by the U.S. government presented a motion to change the method of election of the board of directors. The motion was that the board of directors should consist of three members elected by the State of Maryland and two members elected by the minority stockholders. This motion failed with the State of Maryland voting against the motion and all other stockholders voting in favor.

By 1836, the State of Maryland had purchased more than 50% of the voting stock of the C&O through additional stock subscriptions. To oversee the state's interest in the various companies in which the state had invested, a Board of Public Works was created in 1825. The original purpose of the board was to oversee state investments in corporations and to locate additional investment opportunities. The goal of the state was to provide income for the operation of the state government without direct taxation [Wilner, 1984].

The state did not exercise direct managerial control over the various state investments. In 1850, the State of Maryland held a constitutional convention and the oversight of the various state corporate investments was an area of significant debate. Mr. Thomas, the representative from Frederick County, stated that there was a difference between Maryland and other states with canal investments. The difference was that the internal improvements companies in other states were owned, built, and operated by the states as state non-profit entities. Mr. Smith of Alleghany County said that the state had no duty but to attend the annual meeting and cast the state's vote. He further said that the state can have no supervision over the works; the charter gives entire control to the president and directors of the company [Wilner, 1984].

THE STOCKHOLDER REVIEW COMMITTEE AND FINANCIAL MANAGEMENT

As stated previously, the C&O annually created a committee of stockholders to review the annual report of the president and directors. McKee [1979] discussed the use of a stockholder review committee to perform the audit function at the East Tennessee and Western North Carolina Railroad Company

(ET&WN), a company organized in 1866. His paper presented evidence of the stockholder review committee's querying certain payments in the ET&WN company records.

In her paper on the Middlesex Canal, Kistler [1980] stated that the stockholders of that company relied upon a committee of their number to perform the audit function each year. She further stated that the committee does not appear to have reviewed all transactions, noting that the review performed in 1830 was completed in one week, too short a period to complete an audit of all transactions However, she noted that the degree of audit thoroughness could not be determined.

The C&O review committee recognized similar limitations in their auditing. In 1838, the review committee made the following statement [*Minutes of the Proceedings of the Subscribers…* , Vol. B (1836-1841), pp. 176-177]:

> The committee have [sic] not, of course, been able to examine the vouchers of all whom money has been paid during the year, because such an investigation would require much more time than was allowed them to devote to it; nor did it seem necessary, inasmuch as the requisitions had received the approbation and were authorized by the board of directors. They could do nothing more than look over the requisitions, or warrants, issued for disbursement, examine the books of the treasurer and clerk, and vouchers for the expenditure of the contingent fund, etc. and these they have found to be correct and satisfactory.

In 1839, the C&O review committee, commenting on estimated figures on the financial statements, made this further observation [*Minutes of the Proceedings of the Subscribers…,* Vol. B (1836-1841), p. 291]:

> From these causes the statements may be found to require some variation but although not exact, the subcommittee are [sic] induced to believe, that they are at least proximately correct in the available basis that they exhibit for the demands of the current year.

Such "limitations" did not keep the review committee from admonishing the company officers when irregularities were encountered.

Early corporations were founded without any pre-existing corporate governance methods to follow. The C&O was one of the first U.S. corporations and, thus, had no other companies to emulate with respect to its financial reporting or corporate governance systems. One outcome of this was a trial and error approach to corporate governance and financial reporting.

Over the life of the C&O, the stockholders reviewing the company finances made numerous observations and recommendations. The first recommendation for change came in 1834, when the review committee directed that [*Minutes of the Proceedings of the Subscribers…,* Vol. A (1828-1835), pp. 361-362]:

> 1) Requisitions for salaries and services state the time period the person was being paid for and the capacity in which the person had served the company.
> 2) Changes be made regarding presentation of the financial statements. For instance, previously the treasurer's report consisted of one statement showing total receipts and expenditures for the company to-date. The recommendation of the review committee was to present a column for the current year information and a separate column for the company to-date information.
> 3) Expenses for repairs be accounted for and reported separately from expenses for construction of the canal.
> 4) A statement showing the amount of goods being transported on the canal be presented.

In 1839, the review committee made the following observation [*Minutes of the Proceedings of the Subscribers…,* Vol. B (1836-1841), p. 289]:

> The clerk's statement however shows other receipts to the amount of $11,175.58 arising from tolls, rents, etc. gathered by the several superintendents, which have been used and accounted for by them in disbursements in the service of the company; consequently these receipts have not passed through the books of the treasurer.

Stating that the "practice seems irregular and inconvenient," the review committee directed that this process be terminated and that all receipts and expenditures be "passed through," or recorded, in the treasurer's books.

Two stockholder meetings were held in 1841. At the April meeting, the review committee admonished the company with the following statement [*Minutes of the Proceedings of the Subscribers…,* Vol. B (1836-1841), pp. 415-416]:

> In one of the documents referred to by the president and directors, in their report of this day, there is a

> statement purporting to be a 'statement of the debts & credits of the Chesapeake and Ohio Canal Company on the first of January 1841,' but this is admitted to be incorrect. It is therefore not to be relied upon.
>
> The committee are [sic] therefore unable to present any satisfactory view on this point but will briefly state that as well as they can ascertain, in the absence of official statements …

The review committee further stipulated that the company bylaws required that the treasurer present a financial report at each monthly board meeting, which had not been done since the current treasurer had been in office.[5] The review committee made further statements regarding individual transactions relating to the sale of bonds issued by the State of Maryland for stock subscriptions. It also observed that the manner in which the bond sales were handled had cost the company a substantial amount of money. As a result, the stockholders removed the company president, the treasurer, and the directors from office.

At the August 1841 stockholders meeting, the review committee, having examined the company records further, identified additional problems. The review committee noted that several irregularities in vouchers were traced to a disregard of company policy by the former company president. The review committee also divulged that during the five months leading up to the change in officers, no accounting entries were made in the company books.

In 1845, the review committee made the following observation about the company's method of bookkeeping and asked that it be changed [*Minutes of the Proceedings of the Subscribers…,* Vol. C (1842-1846), pp. 488-489]:

> They find that under the directions given to the treasurer, and in accordance with the custom, which has heretofore prevailed in the company, payments have been made for more than one purpose on the same warrant and the whole payment charged under the head of the principal item for which the warrant was drawn.
>
> In consequence of this circumstance the abstract of receipts into and payments from the treasury instead of

[5]The treasurer referred to had been elected at the last annual meeting for the first time and had not served a full year. The board of directors met monthly. The company treasurer was supposed to present a financial report to the board at each of these monthly meetings.

> exhibiting the actual condition of the affairs of the company in its items as well as in its final balances, only show the amount charged in the treasurers books under each head in the abstract instead of the whole amount of expenses properly chargeable under that head. Thus under the head of pay of lockkeepers, it appears by abstract that the amount paid in 1845 was $627, whereas by reference to the accounts of the company it is found that the whole amount properly chargeable under this head is $7,801,00.

The final review committee admonishment contained in the stockholder minute book came in 1857 and related to the organizational structure. At the 1855 annual meeting, a new slate of company officers had been elected. These officers had made changes to the company organization (such as combining the offices of treasurer and clerk). As a result of these unpopular changes in company organization, a new slate of officers was elected at the 1856 annual meeting, and the former company organization was restored. The 1857 review committee opined that they were grateful to see the former organization restored.

Once the canal was completed to Cumberland in 1850 [Appendix 1], the activity level of the review committee tapered off with respect to officers and directors, but admonitions with regard to company finance increased. After 1857, the review committee ceased providing commentary. No specific evidence in the records at our disposal seems to explain this phenomenon, but some observations seem plausible. After the two decades that constituted the development stage of the canal, the review committee may have outlived its role as the protector of the stockholders' interests.

By l850, the prospects for the canal's completion to Pittsburgh were greatly diminished. The exploitation of recently discovered coalfields, proximate to Cumberland, made a ready market for canal transport. With the changing leadership and political climate in Maryland, this revised market role wherein rail transport was in ascendancy decreased the incentives for additional effort to perfect canal transport. In short, the canal era was reaching an end. A new generation of shareholders with different, and perhaps less ambitious, expectations may have become resigned to the declining viability of this form of transportation. Evidence of this change in interest is found in the significantly diminished levels of attendance and participation at stockholder meetings. Given the prominent past profile of state ownership representatives, it is apparent that the political interest in, and support for, the canal as the "best bet" in transportation had waned. By the l870s, an entirely different generation of shareholder representatives were likely involved, those content to accept the diminished prospects of the canal despite a brief interlude of profitability.

CONCLUDING COMMENTS

The surviving records of the C&O Canal Company provide opportunities for improved understanding of the processes of corporate governance and relatedly the financial management and reporting techniques employed by officials of an early American corporate enterprise. In addition, the materials provide an early example of accountability required in a corporate charter. In the discharge of this accountability requirement, the company adopted a stockholder review committee to oversee the annual reporting of the company to the stockholders. The process and findings of the review committee provide an example of the innovative processes by which the stockholders amended the corporate governance and financial reporting practices of the company.

The details of the activities of the shareholder review committee discovered in the C&O records reveal a pronounced level of involvement in the oversight of financial activities. This paper contributes to the literature of accounting history identified in previous research by McKee [1979], Kistler [1980], and Boockholdt [1983] which has been used to orient our findings with reference to stockholder committees and canal accounting and operations in other U.S. settings.

The activities of the C&O stockholder review committee discovered in our research support and inform our understanding of early control and reporting practices in U.S. corporations during the canal era. This evidence has shown that in the case of the C&O, the evolutionary process of financial reporting and corporate governance was greatly affected by the stockholder review committee. This group requested and effected changes in financial reporting and corporate governance. Previts and Samson [2000] described the evolution of financial reporting found in the annual reports of the B&O. This paper provides evidence that in the C&O, the catalyst for this type of evolutionary change was the stockholder review committee.

Future research into the financing, operations, and governance of U.S. canals is called for in order to identify the practices of other canal companies. Such knowledge may assist both in identifying what constituted commonplace practice and the further tracing back of the origins of such practices.

We encourage scholars to continue to investigate canal companies and the canal era not only for the sake of improving our understanding of the origins of corporate governance and financial management, but also to provide a clearer conclusion as to a particular episode, the dissolution of the C&O.

REFERENCES

1784 Virginia Act, "An Act for Opening and Extending the Navigation of Potowmack River," in Hening, W.W. (1823), *The Statutes at Large Being a Collection of all the Laws of Virginia from the First Session in the Year 1619* (Richmond, VA: Hening), Vol. XI: 510-525.

Boockholdt, J.L. (1983), "A Historical Perspective on the Auditor's Role: The Early Experience of the American Railroads," *Accounting Historians Journal,* Vol. 10, No. 1: 69-86.

Chesapeake and Ohio Canal Company (1828-1835), *The Minutes of the Proceedings of the Subscribers of the Chesapeake and Ohio Canal Company,* Vol. A.

Chesapeake and Ohio Canal Company (1836-1841), *The Minutes of the Proceedings of the Subscribers of the Chesapeake and Ohio Canal Company,* Vol. B.

Chesapeake and Ohio Canal Company (1842-1846), *The Minutes of the Proceedings of the Subscribers of the Chesapeake and Ohio Canal Company,* Vol. C.

Chesapeake and Ohio Canal Company (1856-1889), *The Minutes of the Proceedings of the Subscribers of the Chesapeake and Ohio Canal Company,* Vol. E.

Claire, R.S. (1945), "Evolution of Corporate Reports," *Journal of Accountancy,* Vol. 79, No. 1: 39-51.

Dilts, J.D. (1993), *The Great Road* (Stanford, CA: Stanford University Press)

Forrester, D. (1978), "The Great Canal that Linked Edinburgh, Glasgow & London," *Issues in Accountability,* Vol. 3: 1-31.

Garraty, J.A. and Carnes, M.C. (1999), *American National Biography* (New York: Oxford University Press): 320-322.

Kistler, L.H. (1980), "The Middlesex Canal – An Analysis of its Accounting and Management," *Accounting Historians Journal,* Vol. 7, No. 1: 43-57.

McKee, T.E. (1979), "An 1870 Corporate Audit Committee," *Accounting Historians Journal,* Vol. 6, No. 2: 61-68.

McKinstry, S. (1996), "Designing the Annual Reports of Burton PLC from 1930 to 1994," *Accounting, Organizations and Society,* Vol. 21, No. 1: 89-111.

Michael, R.R. (1996), "Voluntary Disclosure in a Nineteenth Century American Corporation: The Demise of Managerial Information as a Significant Element of Financial Reporting," *Accounting Historians Journal,* Vol. 25, No. 2: 1-33.

Potomac Company (1785-1796), *The Minutes of the Proceedings of the Subscribers of the Potomac Company.*

Previts, G.J. and Samson, W.D. (2000), "Exploring the Contents of the Baltimore and Ohio Railroad Annual Reports: 1827-1856," *Accounting Historians Journal,* Vol. 27, No. 1: 1-42.

Ransom, R.L. (1964), "Canals and Development: A Discussion of the Issues," *The American Economic Review,* Vol. 54, No. 3: 365-376.

Sanderlin, W.S. (1946), *The Great National Project* (Baltimore: Johns Hopkins Publishing).

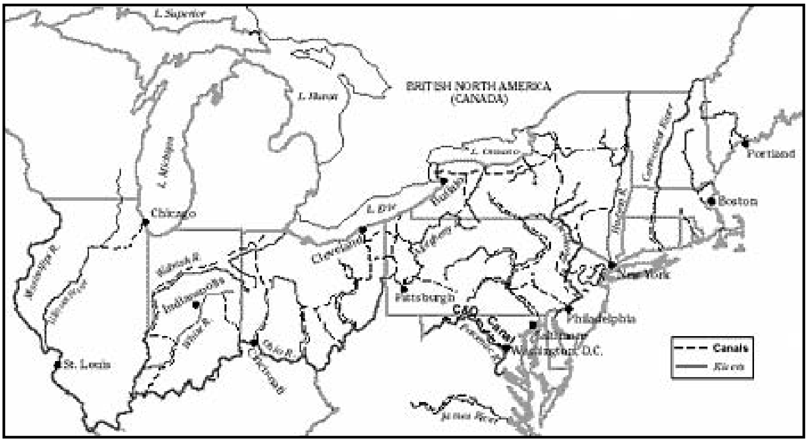
Sanderlin, W.S. (1947), "Arthur P. Gorman and the Chesapeake and Ohio Canal: An Episode in the Rise of a Political Boss," *The Journal of Southern History,* Vol. 13, No. 3: 323-337.

Shaw, R.E. (1966), *Erie Water West* (Lexington: University of Kentucky Press).

Wilner, A.M. (1984), *The Maryland Board of Public Works* (Annapolis, MD: Hall of Records Commission, Department of General Services).

APPENDIX 1

Canal and River Transportation in the 1850s



Source: http://www.nps.gov/carto/index.htm

APPENDIX 2

List and Location of Annual Reports for the Chesapeake and Ohio Canal Company for the Period of this Study: 1829-1857.

Number	Year	Location copied from
1	1829*	Library of VA
2	1830	Library of VA
3	1831	Library of VA
4	1832	Library of VA
5	1833	Library of VA
6	1834	Library of VA
7	1835	Library of VA
8	1836	Library of VA
9	1837	Library of VA
10	1838	Library of VA
11	1839	Library of VA
12	1840	MD Law Library
13	1841	MD Law Library
14	1842	MD Law Library
15	1843	Library of VA
16	1844	MD Law Library
17	1845	MD Law Library
18	1846	MD Law Library
19	1847	MD Law Library
20	1848	MD Law Library
21	1849	MD Law Library
22	1850	MD Law Library
23	1851	MD Law Library
24	1852	MD Law Library
25	1853	NARA
26	1854	UVA
27	1855	MD Law Library
28	1856	UVA
29	1857	Report not located

NARA: National Archives and Records Administration, College Park, Maryland
MD Law Library: Maryland State Law Library, Annapolis, Maryland
Library of VA: The Library of Virginia, Richmond, Virginia
UVA: The University of Virginia Library
* The C&O broke ground in 1828, and the first annual report was presented at the end of the first year of operations in 1829.

Accounting History

Call for Papers

The fifth *Accounting History* International Conference

"Accounting in other places, Accounting by other peoples"

The Banff Centre, Banff, Alberta, Canada
9-11 August 2007

Sponsored by: College of Commerce at the University of Saskatchewan
and
Accounting History Special Interest Group of the
Accounting and Finance Association of Australia and New Zealand

Conference papers will be accepted across a wide range of accounting history topics, including those on the above theme, and a variety of methodological and theoretical perspectives. However, in signifying a conference theme, authors are encouraged to think about non-traditional topic areas and explore other places and other peoples.

"Accounting in other places, Accounting by other peoples" would include such topics as:

- The professionalisation of accounting in the developing world;
- The role of imperialism in spreading accounting practice;
- Accounting history issues that interface with race, gender or culture; and
- The role of accounting and accountants in non-business settings such as art and music.

Submission and Review of Papers: Papers written in the English language should be submitted electronically no later than 26 March 2007 to 5AHIC@mu-private.edu.au. All papers will be subject to a double-blind refereeing process and will be published on the conference web site, as refereed conference proceedings unless otherwise advised.

Notification of Acceptance: Notification of papers accepted for inclusion in the conference program will be made by **15 May 2007**.

Conference information is available at the Conference website:
http://www.commerce.usask.ca/5AHIC

Information about The Banff Centre is available at:
http://www.banffcentre.ca

Inquires may be directed to the Conference Convenor,
Nola Buhr of the University of Saskatchewan, at the following e-mail address:
nola.buhr@usask.ca.

Accounting Historians Journal
Vol. 33. No. 2
June 2006
pp. 145-166

Graeme W. Dean
THE UNIVERSITY OF SYDNEY
Peter W. Wolnizer
THE UNIVERSITY OF SYDNEY
and
Frank L. Clarke
UNIVERSITIES OF SYDNEY AND NEWCASTLE

THE R.J. CHAMBERS COLLECTION: AN "ARCHIVIST'S" REVELATIONS OF 20th CENTURY ACCOUNTING THOUGHT AND PRACTICE

Abstract: A major, unique accounting archival source, the R.J. Chambers Collection comprises both hard copy and, utilizing cutting-edge search technology, internet accessible materials. From his academic beginnings, Chambers was an orderly person, an archivist of the extensive and varied evidence that underpinned his proposals for accounting reform.

Opening research areas for accounting biography, the development of accounting thought, the history of accounting institutions, prosopography, public sector accounting history, and comparative international accounting history are foremost amongst the myriad justifications for seeking to unravel the accounting history "lodes" in archives such as the Goldberg, Chambers, and Briloff Collections [Potter, 2003]. The archiving of the meticulously kept Chambers papers from 1947-1999 provides an opportunity for unfolding the background to events previously withheld from accounting history scholars. Professional episodes in relation to inflation accounting, standard setting, proposals to reform accounting education, and the like that appeared *prima facie* to be worth investigating are now open to scrutiny from a different angle, with a different type of evidence available in this Collection. This Collection provides a high degree of archival provenance. In particular, it represents an orderly retention of past documentation of what Chambers wrote, and perhaps uniquely for accounting historians, received; thus, providing an extensive window from which to examine the disorderly present environment of acounting.

Acknowledgments: The R.J. Chambers Collection and this work was financed and assisted by The University of Sydney Accounting Foundation, the Archives Unit, the Faculty of Economics and Business of The University of Sydney, and one of Australia's major professional accounting bodies, CPA Australia. The assistance of Cameron Esslemont and Angelika Dean is also greatly appreciated, as are the comments from two anonymous referees.

BACKGROUND

Raymond John Chambers (1917-1999) has been described by his 20th century peers as an "accounting pioneer" [Moonitz, 1982], an "intellectual giant of 20th century accounting thought" [Barton, 1982; Mathews, 1982; Staubus, 2003], truly a "Renaissance man."[1] He was selected by Edwards [1994] as one of the "twentieth century accounting thinkers;" by Colasse [2005] as one of "*les grands auteurs en comptabilité*; and, at the time of his admission, he was the only non-North American to be inducted into the Accounting Hall of Fame of Ohio State University. He achieved many other awards and recognitions as listed in Chambers' *Aide Memoire*, which appeared in Vol. 6 of his collected works, reproduced in Chambers and Dean [2000a]. As Foundation Professor of Accounting (1960-1982) at The University of Sydney, Chambers founded and built what was to be known internationally as the Sydney school of accounting thought [Wells, 1976; AAA, 1977]. Together with Professor Louis Goldberg (University of Melbourne), Professor Russell Mathews (Australian National University), and other contemporaries, such as Professor Reg Gynther (University of Queensland) and Professor Ken Wright (University of Adelaide), Chambers pioneered scholarship in the teaching, learning, and research of accounting in Australian universities [Barton, 1982].

Chambers is probably best known for his proposed system of accounting, <u>Co</u>ntinuously <u>Co</u>ntemporary <u>A</u>ccounting (CoCoA), a summary of which is provided by Clarke and Dean [1996; Chatfield and Vangermeersch, 1996, pp. 109-111]. The belief in his system and academic tolerance may be gleaned from this quote from a previously unreported correspondence: "CoCoA [like airplanes, etc] will rest on its functional superiority; if not today, then tomorrow, for all change takes time to be assimilated" [R.J. Chambers Collection, SUA P202, Item # 6258, June, 19, 1981].

To put some balance into this background, Chambers was certainly not without his critics. He had many debates in the literature with contemporaries such as Moonitz [1982], Ijiri [1967, 1982], Littleton [1953], Mattessich [1964, 1995, 2005], Staubus [1961], and Edwards and Bell [1961]. They gave "as good as they received" from him. A recent issue of *Accounting*

[1]Giuseppe Galassi [1999], private correspondence with one of the authors

Education contained a forum on Chambers' ideas on education where again critics and supporters discussed those ideas.[2]

This work will demonstrate another previously unknown characteristic of Chambers. He was an archivist, and seemingly so from the beginning of his academic career. On November 15, 2004, the R.J. Chambers Collection (the Collection hereafter), Chambers' collected papers and related materials, was launched by the vice chancellor and principal of The University of Sydney, Professor Gavin Brown. The Collection is both in hard copy, stored in the Archives Unit of The University, and is internet accessible at [http://chambers.econ.usyd.edu.au]. Brown observed that Chambers not only wrote a substantial set of materials but he carefully ordered them, together with correspondences with other academics and interested parties, so that he and others would be able to access them easily.

The Collection's development and its features described below give insight into how this archive will provide an important missing link in what is known publicly regarding Chambers' contribution to the accounting literature and to the professional practicing community. There are expected to be several articles and monographs produced (see possible projects noted below in the conclusion).

In the current unsettled environment of accounting, evidenced, for example, by the disputes regarding principles v. rules-based standards, the canons of accounting measurement, and the function of fair values in the new regime of International Financial Reporting Standards, the Collection is a unique historical source. For, unlike many historical enquiries in accounting in which hazy sources are accessed to explain a relatively unequivocal present state of affairs, the Collection, by virtue of its completeness, order, and comprehensiveness, provides a relatively unequivocal record of the state of past affairs with which to point to what is reasonably described as the hazy state of contemporary accounting thought and practice.

CHAMBERS: AN INSIDER OR FRINGE DWELLER?

There are many sources detailing various aspects of Chambers' life, including two *festschrift* issues of *Abacus* (December 1982 and October 2000). Chambers provided useful summaries in "An Accounting Apprenticeship" [1991] and in the introduc-

[2]The current authors [Clarke et al., 2005] contributed to that forum, as did Tinker [2005], Amernic, [2005], Mattessich [2005], and Lee [2005].

tory preface to the 1974 reprinting of *Accounting, Evaluation and Economic Behavior*. Those aspects have been augmented by the cataloguing of Chambers' full correspondence files (1947-1999) stored in the Collection.

What is unlikely to be well known, especially by younger accounting academics, is Chambers' role in lifting the status of accounting to that of an equal discipline in the learned halls of The University [Barton, 1982; Wolnizer and Dean, 2000; Clarke et al., 2005]. He fought for this recognition for half a century. Chambers [2000b] described his struggle on this and other fronts as being a "life on the fringe." His posthumously published "Early Beginnings: Introduction to Wisdom of Accounting" [2000c] recounts his early struggles in gaining an economics degree and an understanding of business, finance, and accounting. Accepting Chambers' view that he worked "on the fringe" may appear, *prima facie*, at odds with our belief that this Collection provides unique insights by an "inside observer" of many of the major events affecting accounting thought and practice in the 20th century. The following shows that there is scope for both to be correct.

Chambers [2000b] aptly captures his professional and practical experiences in respect of what he perceived to be the outcomes of those experiences. A perusal of many of the materials in the Collection shows clearly that Chambers observed first-hand the "inner workings" of the early professional attempts (1950s and 1960s) to have accounting accepted as a truly professional activity; he was also at the forefront of efforts by the Australian professional accountancy bodies to have graduate entry into the profession. He was a major proponent of the introduction of a "professional orientation" for new entrants to the profession's ranks. He fought unsuccessfully for the merger of Australia's two major professional bodies in the 1970s. He worked on many professional committees for over fifty years, particularly those dealing with education and the introduction of a more serviceable system of financial reporting to incorporate the effects of changes in prices and price levels. In this sense, Chambers was an "insider." The Collection reveals that, as an insider, his counsel was sought by Australian universities on all the early accounting professorial appointments in the 1960s and 1970s. His advice was also solicited for many overseas professorial appointments as well during that same period.[3]

[3]The first accounting professorial appointments occurred in the early to mid-1950s. These were followed by several more in the 1960s [see Mathews, 1982; Carnegie and Williams, 2001].

On the regulatory side, Chambers' voluminous critical works led to his appointment as chairman of the 1978 NSW Parliamentary Committee of Inquiry, "Company Accounting Standards." The Collection contains all of the expert evidence reports prepared by Chambers throughout the 1960s and 1970s, highlighting his close connection to business matters, leading business personalities, and members of the profession.

Significantly, the Collection also contains details of his overseas travels in the late 1950s through to the early 1990s, featuring his association with the international academy. At the Collection launch, Professor Gary Previts spoke and referred to Chambers as perhaps the world's first "geoaccountant." On those travels, he pursued his desire to have accounting thought and practice viewed as research and principles driven, rather than merely the product of rote learning and dogma.

Recent interest in Chambers' ideas is evident in the abovementioned March 2005 issue of *Accounting Education*, including a forum on Chambers' [1999] provocative work, "The Poverty of Accounting Discourse." The forum confirms that his ideas continue to be considered and debated. In a similar way, the Collection seeks to ensure that academics in future decades will be able to access and debate his work, using evidentiary source material.

HISTORY AND NATURE OF THE COLLECTION

To create the second of The University of Sydney's Foundation Professors' series,[4] the Archives Unit, the Accounting Foundation, the Faculty of Economics and Business within The University of Sydney, and CPA Australia combined to provide initial funding and other support to archive in the Collection all of Chambers' collected papers, with particular attention being given initially to his private correspondence.

Fittingly, the Collection was launched in the Great Hall of The University of Sydney, a venue of some of Chambers' finest speeches. Chambers described the period to which the Collection relates as "perhaps the most eventful period in the history of accounting up to the terminal date [1985]. It was a period of substantial growth, of conglomeration on a large scale by

[4]Chambers was appointed in 1960 as the Foundation Professor of Accounting at The University of Sydney. The first in the Foundation Professors' archive series was the Philosophy Department's John Anderson Collection. Both collections are located within the Archives Unit on the fifth floor of Fisher Library.

mergers and takeovers, of intense multinational corporate development, of increasing use of modes of organization and methods of financing that were novel at the beginning of the interval [1946]" [Chambers and Dean, 1986, general preface].

The Collection had a lucky escape from destruction following several moves after Chambers officially retired in 1982. Physical moves continued in 1999 after Chambers' death. Many of the papers were boxed again and placed in rather insecure storage in a University-owned building that was scheduled to be demolished. The return to The University of Sydney of Peter Wolnizer as dean of the Faculty of Economics saw urgent manoeuvres to ensure the Collection was recovered from its several locations and recompiled in a similar form (layout of room, etc.) to when Chambers was researching. The Collection was saved from imminent destruction, which would have been a tragic loss not only for accounting historians, but also for the history of accounting. With the Collection thus saved, Graeme Dean assumed principal responsibility for managing the archiving and digitizing processes that have yielded the international accounting treasure that is the R.J. Chambers Collection. The entire project has been a collaboration by those who had worked closely with Chambers over an extended period of time.

The Collection comprises hard-copy files and approximately 20,000 catalogued summary items accessible within a full-text, searchable electronic repository (see below for details). The complete electronic archive is expected to be accessible to scholars and postgraduate students worldwide by the middle of 2006.

The Collection augments a recently launched archive of another Australian academic accounting pioneer, Louis Goldberg, so ably described in Potter's [2003] "The Louis Goldberg Collection at Deakin University: Exploring a Rich Foundation for Historical Research." Potter provides a useful framework to examine both the Chambers and Goldberg Archives, outlining several historiographic approaches [e.g., the "source-oriented" and "problem-oriented" approaches]. A smaller collection of papers of Russell Mathews also exists. Further, the collected papers of a contemporary U.S. iconoclast, Abe Briloff, are being made available at City University of New York. These, and hopefully more collections, will form an invaluable database for accounting historians to explore how accounting ideas underpinning current practice have been forged. Increasingly, that is becoming a pertinent issue as, arguably, practice effectively has changed little since the 1930s. Yet, the incidence of criticisms of those practices recur, decade after decade, following, *inter alia*, the large unexpected crashes of the genre of Maxwell Communications, Enron, WorldCom, Vivendi, Parmalat, and HIH [Clarke et al., 2003].[5] This is notwithstanding that practice is now governed by a plethora of accounting standards.

The Collection augments the different types of material contained in the Goldberg Collection. Whilst the latter is richer in "old manuscripts," the Chambers Collection has a more extensive contemporary book collection, especially in areas such as education generally and management education specifically, philosophy of science, accounting and financial management, auditing, financial statement analysis, and professional committee papers. It also has more extensive web-accessible material. Whilst both collections contain substantial correspondence items, the Chambers Collection has approximately three to four times the number. It includes letters not only sent by Chambers but also, it would appear, nearly all of the academic correspondence he received from contemporaries during 1947-1999.

The collections of Goldberg and some other contemporaries provide useful benchmarks for analyzing the "utility" of the R.J. Chambers Collection. There will be opportunities for researchers to cross check their sources, thereby reducing possible Collection bias, one of the main criticisms of research done on such biographical collections [Potter, 2003].

In contrast to many archives, a feature of the Collection is its provenance,[6] the exceptionally good order that the material was in when Chambers died. He kept the items in chronological order and sometimes by topic or corresponding person. The Collection contains several photographs of the library *in situ*. This high degree of provenance makes the Collection unique as an accounting history source.

The physical dimensions of the Collection show the difficulties in maintaining his records. Chambers' library contained over 2,500 books, hard copies of over 2,500 articles, newspaper cuttings, etc. in his numerous filing cabinets. The correspondence files amounted to approximately 15,000 individual items or letters that Chambers wrote and received from 1947-1999,

[5]Other catalysts for criticisms include: asset stripping following takeovers in boom periods, as well as undervaluations and undercharges due to price and price level changes.

[6]"Provenance" is an archivist term that refers to the extent to which the environment from which an archive is created has been retained.

which, with grouping, has been reduced to around 12,500 entries in the electronic archive. Cabinets of myriad index cards contained the references that ultimately became the corpus of his *An Accounting Thesaurus: Five Hundred Years of Accounting* [Chambers, 1995].

There were several stages in the archiving process. All entailed classification, metadata creation, and cataloguing of the material:

- The initial phase (2000-2002) focused on the cataloguing, boxing, and storing in acid-free archival boxes of the approximately 15,000 items that constituted more than fifty years of personal correspondence. The Archives Unit within The University of Sydney provided an archivist to undertake this task.
- Then followed (2002-2003) a more extensive recording of the residual of Chambers' resource materials – the 2,500 books in his personal library; the 2,500 journal articles, newspaper cuttings, and miscellany stored then in numerous filing cabinets; and his 20,000-odd card entries.
- During 2003-2004, another research assistant added metadata to Chambers' personal papers, providing indexing according to his *Chambers on Accounting* series and *Aide Memoire* classificatory schema. The various schemata are all described on the Collection website.
- Finally (March 2005-present), a consultant integrated all of the records into an electronic archive which offers full-text search, supports innovative search and extraction strategies, and is integrated to a publishing system (to be completed in a second stage) to create a "dynamic archive," allowing researchers to submit their research into the archive, whilst ensuring that we preserve provenance of the initial material. At this point the value of research undertaken will be dynamically linked with the original material to the benefit of those who follow. Also, the data were double-checked by a research assistant.

Below we provide a more detailed description of the various characteristics, some of which are briefly noted above.

CHAMBERS' PUBLISHED WORKS – COLLECTION INSIGHTS

Chambers' teaching and writing characteristically used analogies, drawn from economics, decision sciences, law, sociology, philosophy, psychology, art, the physical sciences, and literature, to illustrate the essence of the infelicities of which he complained in contemporary accounting, to explain the principles underpinning his preferred solutions and to elaborate the reasoning driving his analyses of contrary suggestions. Those illustrations were at his elbow. He perceived linkages between them and the legitimate methods and focuses of accounting, for they related to other critical elements influencing human endeavor, of which accounting too is part. In many ways, it is less remote a part than many of those for other disciplines since the focuses of accounting (decision making, economic activity, economic evaluation, monetary calculation, evaluation and assessment) are everyday events to a greater or lesser extent for virtually all.

A unique feature of the Collection is the lack of distinction it makes between those matters that elsewhere would normally be so classified to indicate their special relation to teaching or to research, or to the frequently drawn distinction between accounting theory and practice. In retrospect, it seems unlikely that he contemplated any real distinction between teaching and research, or between what constituted good theory and good practice.

His teaching was always peppered with examples and analogies drawn from his treasury, his analyses of them, his reasoning, and the supporting evidence. His written contributions, the output from his research, were the end product of an extensive learning process. Part of that process entailed "exposing" his ideas in discussion with his colleagues, his contemporaries, friend and foe alike, and his students. The other part was his penchant for sending copies of drafts of the proposed piece to scholars around the world for comment. Many of the resulting debates through correspondence between Chambers and accounting scholars; e.g., Barton, Baxter, Briloff, Galassi, Goldberg, Hansen, Ijiri, Littleton, Mathews, Mattessich, Moonitz, Onida, Paton, Shiobara, Someya, Spacek, Stamp, Staubus, Sterling, Sweeney, and many other European scholars, are preserved in the Collection. These provide not only insights into how Chambers' ideas were hewn and honed, but also insights into the development and firming up of the ideas of many correspondents, both those who held similar ideas and those who held to the contrary. By the time Chambers was in print, his thoughts had been well exposed, refined, tested, and rehearsed. His archive was not a mere museum of which he was the curator; it was his tool kit to which he was forever adding and from which he was forever learning.

As such, the Collection provides hitherto unpublished insights into some of the influences that shaped the refinement of those ideas, the support he received from colleagues, and the frustrations endured over an academic "odyssey" of more than fifty years. It augments the six volumes of *Chambers on Accounting* [1986, 2000a] which contain the distillation of Chambers' published scholarship, other than that published in books, over a fifty year period.

Many of those published works addressed the pressing professional matters of his time. Almost without exception he corresponded with academic colleagues from many cognate disciplines, including law, economics, decision sciences, psychology, sociology, etc., with academics who shared and opposed his ideas and with the profession's policy makers and policy followers. His published papers provide only limited insight to those ideas and their formulation. Meticulously kept papers from 1947-1999 provide a unique window into the background to so much of his work previously withheld from accounting scholars and practitioners. It is already apparent that the Collection is going to be the object of immediate inquiry by senior scholars, nationally and internationally, especially, it seems, those from the U.S. and the U.K. As Potter [2003] notes, such unpublished material provides insights of a hitherto unknown research lode. The types of positive research he suggested in respect to the Goldberg archive aptly apply to the Chambers Collection: "…biography, institutional history, prosopography, public sector accounting history, as well as comparative international accounting history."

The December 1982 and the October 2000 issues of *Abacus* were devoted to reflections of contemporaries on Chambers' contribution to accounting thought and practice.[7] Arguably, his influence has not been fully appreciated by modern-day accountants, by neither those in practice nor those in academe. A recent autobiographical article by one of Chambers' contemporaries and at-times critic, George Staubus [2003, p. 179], goes some way to redressing the balance. He includes the observation in the subsection, "My Greatest Intellectual Debts," that "Chambers [had] the 'greatest' intellectual effect on him." As noted in

[7]As well as the October 2000 *Abacus festschrift*, there is the *Abacus* 1982 "Special Issue" celebrating Chambers' "official" retirement from The University of Sydney. A special forum in the March 2005 issue of *Accounting Education* paid tribute to Chambers' contribution to accounting education.

the Background, there are many others who have sung Chambers' praises and many who have critiqued his ideas.

But, it may have surprised some that Chambers' contributions were made against enormous resistance, both academically and professionally. His posthumously published 1992 contribution "Life on the Fringe – An Accounting Odyssey" [2000b] explains an in-depth involvement in the teaching of accounting, his research into accounting, the confronting head-on of the problems that beset conventional accounting, and his participation in the management of the profession. Consider also the following observations made in a whimsical-cum-serious speech delivered upon his appointment as a senior lecturer in accounting in 1953 (Chambers Collection, SUA P202, Item #10770):

> Outside these walls certainly, and inside them perhaps, the accountant is a curious figure. Technical people find him hard to endure; he is rather too thrifty in business matters to be hail fellow well met. In fact they say it runs in his veins: some their hearts don't beat, they click like cash registers: and I have heard of one business executive who in high disdain observed Accountants – they walk just like men. Now there may be something pathological about accountants that the school of medicine might be interested in. The accountants also have their rituals, doctrines and dogmas which is something they have in common with the churchmen; they have their mumbo jumbo, their abracadabra and their folk lore which may interest the anthropologist. And what they do with money symbols I'm sure would intrigue the mathematician.

Those observations would seem to sit equally well in the post-Enron era with the current ongoing debates about accounting measurement, fair value, and standards, whether they should be principles or rules-based.

From day one of his academic career, Chambers [Chambers Collection, SUA P202, Item #141, 1955 correspondence] was keen to rid accounting thought and practice of its myriad dogma, to replace them "with a sound theoretical, may I say academic foundation to the subject." Notwithstanding, he was always kept at arms length by those he sought most to inform, those more concerned about protecting their reputations, elevating the importance of their product, and enhancing their social status. As he put it, he was "on the fringe." His documented experiences provide insights into how ideas do, or do not, get on to the regulatory agendas.

DETAILED CHARACTERISTICS OF THE COLLECTION

This section provides an overview of (1) how the Collection is arranged, the schemata used, (2) how it can be accessed, and (3) the prospect for a "dynamic archive." These characteristics provide a window into the environment in which Chambers plied his trade, allowing researchers to immerse themselves in his various time-dependent "knowledge spheres."

Schemata: Retaining its provenance, the Collection's physical items are ultimately catalogued for electronic search purposes primarily. It uses an extended Dublin Core metadata set, allowing for easy extraction of search strategies based on different contexts. The Collection comprises four main areas:

I. Published Works: About 300 records of his published works are classified using his autobiographical system. In the early 1970s, Chambers began collecting and summarizing all his published works, the forerunner of his *Autobibliography* [1976] monograph, published by the International Centre for Research in Accounting. It contained paragraph-level summaries of his published works in chronological order. All articles are catalogued to Dublin Core with abstracts and, where possible, articles are included either in full or as an integrated, searchable, full-text index as determined by copyright constraints.

II. Unpublished Works: Over 12,000 records, mainly correspondence, are classified using Chamber's schemata of "On Accounting," "*Aide Memoire*," and "Series," developed by the Sydney University archivist in line with Chambers' files. This material has been further indexed using extended Dublin Core to cater for recipient (the receiver of the correspondence), organization (the organization of the recipient or writer), and theme (an overarching classification based on major thematic concepts). Finally, as the material is currently in physical format primarily, the metadata has been extended to cater for the eventual ongoing digitization of material based on a researcher's use and requirement, offering details of original status, pagination (size and number), cost of digitization, and copyright management.

Within the Unpublished Works, there are further schemata supporting extended metadata elements of:

III. Series: A classification prepared by a professional archivist who, upon examining his personal correspondence and related materials, identified a 66 item schema that Chambers had explicitly or implicitly used to store the materials on shelves in his work office. The schema reflects faithfully how Chambers had catalogued those materials.

IIIa. On Accounting: In their general preface [Vol. 1, *Management and Finance*, 1985] to the six-volume set, *Chambers on Accounting*, editors Chambers and Dean observed:

> The selection includes direct contributions to professional and academic periodicals, the prepared scripts of a number of conference papers and other addresses published in professional and academic journals, conference proceedings or otherwise, a number of published pieces, and a selection of texts of addresses and submissions to inquiries not otherwise published. Within this selection there are a series of papers on observed accounting practices, on the generation and content of recommendations and standards devised or endorsed by professional and other organizations. There are series on information generation, measurement, communication, and choice. There are series on basic ideas, theories, and theory construction and on research in accounting education. But the individual pieces in any of these series may appear at widely separated dates; some pieces could quite properly fall into any one of several of the above groups; and ideas first treated in one setting have been used or developed in other settings. The division of the materials of selection was intended to minimize mere repetition, but that intention was moderated where it seemed desirable to indicate the origin or development of some specific theme. The volume titles are indicative of the general themes of each, but within each the arrangement is chronological.

IIIb. *Aide Memoire*: This classification is based on what was designed by Chambers following his official retirement in 1982. As noted in the preface of Vol. 6 of Chambers and Dean [2000], Chambers' *Aide Memoire* gives in chronological order the places and circumstances which gave rise to the contents of Vols. 1-VI of *Chambers on Accounting* and to other publications and unpublished material over some 60 of the most turbulent years in the history of accounting. The contents of Vols. I-V were grouped by material content. The references in the *Aide Memoire* ease access to any item reproduced in Vols. I-VI.

IIIc. Recipient/Writer: the recipients of letters written by Chambers and the writers of material to Chambers

IIId. Organization: the organization of individuals to whom Chambers wrote and from whom he received material

IVa. Personal Library Book Listings: About 2,500 records of material from his personal library have been classified according to the Chambers library system. Chambers maintained an extensive collection of books over his academic and professional life. Correspondence in the late 1940s and early 1950s in the Chambers Collection reveal that he was arguably one of the first Australian accounting academics to seek overseas books on accounting and cognate discipline matters to inform his theoretical ideas about a "better system of accounting." Those books were also classified on his office shelves using an abridged Dewey classificatory schema, retained in this Collection. His 2,500 book collection entails great breadth, covering education, decision making generally, communication, economics, accounting, law, ethics, business biography, psychology, metrology, philosophy, and scientific methods.

IVb. Personal Reading Material: Thousands of records of material from his filing cabinets are referenced using an abridged Dewey-type classificatory system developed by Chambers. This part of the Collection is testimony to Chambers' obsession with order. Having maintained an extensive set of professional and academic material for many years, the system he developed was to be the antecedent of what appeared as the schema for arranging nearly 6,000 (of approximately 20,000 available) items in his magnum opus, *An Accounting Thesaurus: Five Hundred Years of Accounting* [1995]. This aspect is described in detail in Clarke [1996].

Access: The archive website serves as a reflection on Chambers as an individual, educator, mentor, and researcher. It provides details about his seminal work on a comprehensive theoretical foundation for a style of accounting, CoCoA. Once the archive is accessed, the user is presented with the ability to review with ease the records based on the major metadata elements (e.g., title, creator, date, publication) over the major groupings – Published Material, Unpublished Material, Personal Library Book Listings, and Personal Reading Material. Further, the archive supports two main search strategies: (1) standard searching with keywords or advanced Boolean searching using different metadata elements; and (2) phrase (context) searching wherein the user is presented with a comprehensive list of phrases within the material (including metadata) based on the input of a single keyword. The researcher can thus understand the context in which words are used. Finally, there is the ability to search by date, allowing a chronological view of what was happening in different periods.

The archive will also eventually support an innovative extraction tool which will allow researchers to extract the results of their work as in overview, summary, and page format as an e-book that can be downloaded and used off-line as a basis for their research. The archive is developed using a mixture of open source and managed source products. It uses Unicode and supports numerous data types, including audio and video.

A Future Dynamic Archive: Classifying the archive "dynamic" is perhaps a somewhat curious, and certainly novel, notion for an archive. But the archive has been developed so as to be integrated in the future with a publishing system that will allow researchers to integrate the information extracted from the archive with their research and then to resubmit that work back as an e-book to a parallel archive for inclusion in an overall repository.

These archival characteristics, especially the classifications, provide insights into Chambers' ordered nature and the breadth of his scholarship. Clearly, he was a voracious, insatiable reader on myriad aspects of human endeavor, always looking for different angles from which to address what he saw as the fundamental issues in commerce in general and in accounting thought and practice in particular.

CHAMBERS – ARCHIVIST *PAR EXCELLENCE*

The scale and systematic nature of this Collection reveals Chambers to be an accomplished archivist. Perhaps following the approach of the late 16th/early 17th century British empiricist, Sir Francis Bacon, Chambers arguably saw value in storing his voluminous collection of materials on accounting and cognate disciplines in "a goodly huge cabinet." A commentator on an earlier draft of this piece noted that the early amassing and ordering of items begs the question of why this was undertaken from the beginning of Chambers' academic career. Was it ego driven? Who knows? Possibly it is indicative of his commitment to lifelong learning. It is clear from the correspondence he had with others that, although confident of his own reasoning, he was always sufficiently humble intellectually to stand corrected if presented by a more formidable array of evidence than his own or with superior argument.

But, there are some plausible explanations in the Collection itself for its detailed classificatory order. Several correspondence items reveal that Chambers was directly involved in the formation of the NSW Division of the Business Archives Council of Australia in the early 1950s. Indeed, Chambers was its first treasurer, a position he held from many years. Later he would become the national body's secretary. As likely as not, his exposure to and interest in those business archives was a natural by-product of this venture. Perhaps a contiguous explanation for his early desire to have order is Chambers' lifelong interest in mathematics, exemplified by his fascination with Euclidian geometry. Chambers sought to bring order, by "shuffling things" systematically, and through that archiving process, he sought a better understanding of the relationship between accounting and its context. Perhaps, equally likely, it was driven by his passion for accounting and a desire to rid it of its infelicities. His early interest in seeking order contrasted with what he saw as a chaotic accounting world of accounting thought and practice. Hence, likely as not, imposing order to his ever burgeoning tool kit was crucial were he to achieve a better understanding of the "nature of things," including especially the function of accounting.

Whatever his motivations, Chambers was extremely ordered in keeping a hard-copy record of the development of his initial ideas on the issues he addressed over the following 50 years, and the basis upon which they became modified or further entrenched and honed to emerge in the literature. So, what eventually appeared in print, in a congress plenary, or in a mere talk to a professional body, Rotary Club, or student orientation function, invariably was not "first thoughts," but his current state of thinking, shaped by the extensive exposure of his ideas in a wide variety of settings.

Those who were colleagues of Chambers within his Department of Accounting will attest that it was always difficult to argue with him and emerge with other than a feeling of having learned something new. Frequently this meant exposure to an angle that had not been in your mind previously or an historical insight into the issue of which you had not been aware. The many who engaged him in debate in the staff common room in the Merewether Building, the heartland of The University of Sydney's Faculty of Economics at that time, the accountants, economists, political scientists, economic historians, and the statisticians were visibly struck by the extent of his knowledge of their discipline, its core theorems, current practices, contemporary dilemmas, disputes, arguments, and counter-arguments.

Those who were his colleagues were aware that his extensive library included books and journals relating to each of those disciplines. They also were aware of the large card system he maintained to house his references, quotes, and the like for invariably he could quickly direct us "go and read this" or confront us with a "you haven't dealt with…" as he rattled off a list of relevant literature much of which we were unaware. It was also common knowledge amongst his colleagues that he scoured the financial pages of newspapers and financial bulletins every day and marked up items to be processed by his research assistant to be included in an extensive, classified cuttings file that was kept in blue folders or in his extensive filing cabinets, all of which have been retained but for those blue folders. This helps to explain how seemingly within a few moments he could come up with numerous examples of the matters in issue. Whereas in debate his opponents could produce one or two examples, almost invariably Chambers could produce a more substantial array, frequently both contemporary and historical. It is a reasonable suspicion that few colleagues were aware of the enormity, extent, or the order of the sources he archived, and why he was always, almost instantaneously, so "well informed."

Kohn [1989][8] has made the point that the chance of scientific discovery is increased by the extent to which a researcher's mind is "honed" to the making of connections between matters not otherwise perceived to be related. This is possibly what Rozak [1986][9] had in mind with his notion of master ideas. Chambers indeed dealt with master ideas [1955, 1962, 1966], the absence of which Hirsch [1987][10] complained in his explanation of cultural illiteracy. Chambers' *Accounting Thesaurus* [1995] not only illustrates that he pursued his scholarship in a manner consistent with the ideas of Kohn, Rozak, and Hirsh, but beyond

[8]Kohn explains how hitherto unmade connections were forged only with a mind prepared through exposure to a wide variety of knowledge.

[9]To Rozak, master ideas underpinned lesser manifestations in workable, day-to-day practices.

[10]Hirsch's complaint was that a chronic unawareness of everyday events, facts, and general information constrained one's capacity to think.

that, Chambers provides insight into what underpins the accumulation of argument and counter-argument, confirming and refuting examples, as well as the understanding of the origins, history, and development of the ideas and practices of accounting and cognate disciplines. Comprising only approximately a 25% selection of the contents of his card index, the *Thesaurus* displays the breadth and depth of the knowledge upon which he drew to make these connections that formed the basis for his adjudication on the ideas and practices of accounting.

CONCLUSIONS

The Collection contains both the background to the distillation of Chambers' ideas and hitherto unpublished insights into some of the influences that shaped the refinement of those ideas, the support received from his colleagues, and the frustrations endured over his academic odyssey. Many of Chambers' published works addressed the pressing professional matters of his time. An extensive correspondence with academic colleagues from disciplines including law, economics, psychology, and sociology, many of who shared and many who opposed his ideas, as well as the profession's policy makers and policy followers, is the backdrop to Chambers' published works. His writings provide only limited insight to those ideas and their formulation.

The physical and electronic archiving of meticulously kept papers provides a unique opportunity for unfolding the background to so much previously withheld from accounting scholars and practitioners. Various professional episodes in relation to inflation accounting, standard setting, accounting education reform proposals, and the like that appeared *prima facie* to be worth investigating now become feasible with evidence available in this database. That accounting historians are now able to explore via the internet issues that have underpinned many of the developments in accounting thought and practice in the later half of the 20th century is a fitting legacy from Chambers, archivist *par excellence*.

This article seeks to bring to the attention of scholars worldwide this immense, newly created historical database. As noted, Potter's [2003] overview of the Goldberg Collection reveals several possible research avenues that such a biographical collection provides. Some possibilities from the Chambers Collection are illustrated through the following *bon môts*:

• Numerous unpublished formal submissions made by Chambers to many organizations, professional and legislative, over many decades appear in the Collection.

• Multiple items reveal Chambers' leading role in ensuring that accounting was accepted as a legitimate university discipline. They provide insights into Chambers published works [1987, 1999] and those of his reviewers [Amernic, 2005; Lee, 2005; Mattessich, 2005; Tinker, 2005]. In particular, many show his drive for accounting is not to be perceived as simply an invariant code of accepted practices or a process of learning by rote that is passed on uncritically to ensuing decades of students and practitioners.

• Augmenting the point above, influences in the area of curriculum development, inquiry, and critical thinking are shown in the Collection to have been worldwide.

• Further to that point, over 25 years of correspondence reveal the impact on Chambers of a relatively unknown U.S. accounting academic, Ernest Weinwurm. Particularly revealing is Weinwurm's correspondence with Chambers generally, but specifically, their deliberations on theory and measurement. Weinwurm apparently opened doors for Chambers into the U.S. decision sciences literature in the 1960s and an appointment to the Executive Committee of TIMS, the leading U.S. management science body.

• A fruitful episode in Chambers' professional career is the virtually complete set of correspondence on the formation, professional crisis, and alleged "conspiracy of silence" associated with the 1978 NSW government-appointed Accounting Standards Review Committee and its report, *Company Accounting Standards*.

• There are several larger correspondence files with some of Chambers' contemporaries, each worthy of a separate study, for the windows they open to the development of accounting thought.

• Chambers' role in the attempts of Australia's emerging professional bodies to gain university recognition is evident from the myriad correspondence between Chambers and professional representatives over the period of the Collection.

• Chambers' frustrations in founding *Abacus* are well documented and were the source of Wells' [2000] account.

• Chambers' [2000b] perceptions of a "life on the fringe" are evident everywhere in the Collection, as is the support from one of his fellow market price advocates, Sterling [1970].

• Unusual engagements, such as the observation of a leading U.K. economist, G.L.S. Shackle, who lamented that he had completed a major economics treatise before he had had an opportunity to read Chambers' magnum opus, *Accounting,* *Evaluation and Economic Behavior* [1966], and the dialogue between a Melbourne mathematician examining the logic of Chambers' system, contain a rich vein of interdisciplinary enquiry.

But there are many more possibilities. Potter [2003] notes that there has been a dearth of studies of intellectual accounting pioneers. The Chambers, Goldberg, and other contemporaries' collections certainly ensure that there should be much work to add to that hitherto untapped research area. Clearly, Potter's review and our brief summary above suggest that there will be many other projects awaiting researchers' interest and perspicacity in unravelling the lode to be mined in the R.J. Chambers Collection.

REFERENCES

AAA (1977), *Statement of Accounting Theory and Theory Acceptance* (Sarasota, FL: AAA).

Accounting Standards Review Committee (1978), *Company Accounting Standards*, (Sydney: NSW Government Printer).

Amernic, J.H. (2005), "A Legacy for Accounting Education," *Accounting Education,* Vol. 14, No. 1: 19-24.

Barton, A. (1982), "Chambers' Contribution to Rigour in Accounting," *Abacus*, Vol. 18 , No. 2: 119-128.

Carnegie, G. and Williams, B. (2001), "The First Professors of Accounting in Australia," *Accounting History*, Vol. 6, No. 1: 103-115.

Chambers, R.J. (1955), "Blueprint for a Theory of Accounting," *Accounting Research***,** Vol. 6: 17-25.

Chambers, R.J. (1962), "Resolution of Some Paradoxes in Accounting," Australian Society of Accountants Research Lecture, University of Tasmania.

Chambers, R.J. (1966), *Accounting, Evaluation and Economic Behavior* (Englewood Cliffs, NJ: Prentice-Hall).

Chambers, R.J. (1974), "The Development of the Theory of Continuously Contemporary Accounting," in Chambers, R.J., *Accounting, Evaluation and Economic Behavior* (Houston, KS: Scholars Book Company): i-xxvii.

Chambers, R.J. (1976), *Autobibliography* (Lancaster: International Centre for Research in Accounting).

Chambers, R.J. (1987), "Accounting Education for the Twenty-First Century," *Abacus*, Vol. 23 No. 2: 18-27:

Chambers, R.J. (1991), "An Accounting Apprenticeship," *Accounting History*, Vol. 3, No.1: 16-24.

Chambers, R.J. (1995), *An Accounting Thesaurus: Five Hundred Years of Accounting* (New York: Garland Publishing, Inc.).

Chambers, R.J. (1999), "The Poverty of Accounting Discourse," *Abacus*, Vol. 35, No. 3: 241-251.

Chambers, R.J. (2000a), *Aide Memoire*, in Chambers, R.J. and Dean, G.W. (eds.), *Chambers on Accounting, Vol. 6, Logic, Law and Ethics* (New York: Garland Publishing, Inc.): 286-345.

Chambers, R.J. (2000b), "Life on the Fringe – An Accounting Odyssey," *Abacus*, Vol. 36, No. 3: 321-326.

Chambers, R.J. (2000c), "Early Beginnings: Introduction to Wisdom of Accounting," *Abacus*, Vol. 36, No. 3: 313-320.

Chambers, R.J. and Dean, G.W. (1986), *Chambers on Accounting, Vol. I: Accounting, Management and Finance* (New York: Garland Publishing, Inc.).

Chambers, R.J. and Dean, G.W. (1986), *Chambers on Accounting*, Vols. I-V (New York: Garland Publishing, Inc.).

Chambers, R.J. and Dean, G.W. (2000a), *Chambers on Accounting: Vol. 6, Logic, Law and Ethics* (New York: Garland Publishing, Inc.).

Chatfield, M. and Vangermeersch, R. (1996), *The History of Accounting: An Encyclopedia* (New York: Garland Publishing, Inc.).

Clarke, F.L. (1996), "A Treasury of Accounting Thought: R.J. Chambers, *An Accounting Thesaurus: 500 Years of Accounting*," *Abacus*, Vol. 32., No. 1: 111-117.

Clarke, F.L. and Dean, G.W. (1996), "Raymond John Chambers," in Chatfield, M. and Vangermeersch, R., *The History of Accounting: An Encyclopedia* (New York: Garland Publishing, Inc.): 109-111.

Clarke, F.L., Dean, G.W., and Oliver, K.G. (2003), *Corporate Collapse: Accounting, Regulatory and Ethical Failure* (Melbourne: Cambridge University Press).

Clarke, F.L., Dean, G.W, and Wolnizer, P.W. (2005), "Rejoinder to Forum on Chambers' 1999 'The Poverty of Accounting Discourse' – More Questions than Answers," *Accounting Education*, Vol. 14, No. 1: 39-51.

Colasse, B. (2005), *Les Grands Auteurs en Comptabilité* (Paris: EMS).

Edwards, J.R. (1994), *Twentieth Century Accounting Thinkers* (New York: Routledge).

Edwards, E.O. and Bell, P. (1961), *The Theory and Measurement of Business Income* (Berkeley: University of California Press).

Gallassi, G. (1999), private e-mail correspondence to Graeme Dean following Chambers' death.

Hirsch, E.D. (1987), *Cultural Literacy* (Melbourne: Schwartz Publishing).

Ijiri, Y. (1967), *The Foundations of Accounting Measurement* (Englewood Cliffs, NJ: Prentice- Hall).

Kohn, A. (1989), *Fortune or Failure: Missed Opportunities and Chance Discoveries* (London: Basil Blackwell).

Lee, T.A. (2005), "Never Mind the Quality, Feel the Width," *Accounting Education*, Vol. 14, No. 1: 25-27.

Littleton, A.C. (1953), *Structure of Accounting Theory*, monograph No. 5 (Urbana, IL: AAA).

Mattessich, R. (1964), *Accounting and Analytical Methods: Measurement and Projection of Income and Wealth in the Micro- and Macro-Economy* (Homewood, IL: Richard Irwin).

Mattessich, R. (1995), *Critique of Accounting: Examination of the Foundations and Normative Structure of an Applied Discipline* (Westport, CT: Quorum).

Mattessich, R. (2005), "On the Poverty and Richness of Accounting – Illusion Versus Reality," *Accounting Education*, Vol. 14, No. 1: 29-34.

Matthews, R. (1982), "Chambers and the Development of Accounting Theory: A Personal Reminiscence," *Abacus*, Vol. 18, No. 2: 175-178.

Moonitz, M. (1982), "Chambers at the American Institute of Certified Public Accountants," *Abacus*, Vol. 18, No. 2: 106-111.

MacNeal, K. (1939), *Truth in Accounting* (Philadelphia: University of Pennsylvania Press).

NSW Parliamentary Committee of Inquiry (1978), *Company Accounting Standards* (NSW: Government Printer).

Potter, B. (2003), "The Louis Goldberg Collection at Deakin University: Exploring a Rich Foundation for Historical Research," *Accounting History*, Vol. 8, No. 2: 9-34.

Rozak, T. (1986), *The Cult of Information: The Folklore of Computers and the True Art of Thinking* (Cambridge: Lutterworth Press).

Staubus, G.J. (1961), *A Theory of Accounting to Investors* (Berkeley: University of California Press).

Staubus, G.J. (2003), "Autobiographical: An Accountant's Education," *Accounting Historians Journal*, Vol. 30, No. 1: 155-196.

Sterling, R.R. (1970), *Theory of the Measurement of Enterprise Income* (Lawrence, KS: University of Kansas Press).

Tinker, T. (2005), "Rosemary's Baby – Neo-Classical Economics as Chambers' Love Child," *Accounting Education*, Vol. 14, No.1: 35-38.

Wells, M.C. (1976), "Revolution in Accounting Thought," *Accounting Review*, Vol. 51, No. 3: 471-482.

Wells, M.C. (2000), "Founding *Abacus* – Frustration to Fulfilment," *Abacus*, Vol. 36, No. 3: 255-266.

Wolnizer, P.W. and Dean, G.W. (2000), "Chambers as Educator and Mentor," *Abacus*, Vol. 36, No. 3: 243-254.

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 167-202

Thomas N. Tyson
ST. JOHN FISHER COLLEGE
and
Richard K. Fleischman
JOHN CARROLL UNIVERSITY

ACCOUNTING FOR INTERNED JAPANESE-AMERICAN CIVILIANS DURING WORLD WAR II: CREATING INCENTIVES AND ESTABLIHING CONTROLS FOR CAPTIVE WORKERS

Abstract: On February 19, 1942, following the attack on Pearl Harbor and the declaration of war against Japan, President Roosevelt issued Executive Order 9066 which empowered the Secretary of War to exclude "any and all persons" from designated areas in the United States. Shortly thereafter, some 120,000 civilians of Japanese descent were prohibited from living, working, or traveling on the West Coast. By October 1942, over 100,000 "evacuees" were relocated and confined to ten remote internment camps for the duration of the war.

The War Relocation Authority (WRA) administered these camps and had the responsibility to feed, house, educate, and provide employment for the evacuees. This article describes the WRA's use of accounting information and situates the role of accounting within a labor-process framework. It initially discusses labor-process theory and provides an overview of the internment episode and cooperative accounting in the U.S. It then focuses on particular accounting policies, procedures, and reports that were used by the WRA to manage enterprises, monitor internment activities, and socialize evacuees with American capitalistic values.

Acknowledgments: The authors are grateful to participants in conferences where earlier drafts of this paper were presented – the Cardiff Business School, the World Congress of Accounting Historians, and the American Accounting Association (Orlando and San Francisco). We are particularly grateful to *AHJ* editor-emeritus, Steve Walker, for overseeing the review process of this article despite his having completed his editorial duties with the last issue. Thanks also to two very conscientious *AHJ* reviewers. Funding support from the Jack Wasmer Fellowship at John Carroll University is also acknowledged.

INTRODUCTION[1]

The December 7, 1941 attack on Pearl Harbor triggered the most racially prejudicial, federal governmental action in modern American history. As a response to the attack, Japanese and Japanese-American civilians were forcibly relocated to internment camps for the duration of the war. The 1940 Census identified 126,947 U.S. residents of Japanese ancestry, 112,353 of whom lived in the Western Defense Command states of Arizona, California, Oregon, and Washington. Approximately two-thirds of these Japanese Americans had been born in the U.S. Eventually 104,000 of them (officially called "evacuees") were forcibly resettled into ten remote relocation centers (RCs), while 8,000 others voluntarily took up residence outside the western states ["Notes on the Japanese in the United States," Entry 16, box 498, folder 79.100 #1]. While the stated rationale for relocation was national security, there was not one documented case of espionage or sabotage by a Japanese American prior to their internment.

From March 1942 until the end of the war, the immensely complex issues associated with the control and administration of the RCs was handled by the War Relocation Authority (WRA), a badly understaffed governmental agency that was created for this purpose. This article will examine the great variety of matters with which the WRA was forced to deal, ranging from the administration of the ten RCs, the creation of business enterprises, and the resettlement of evacuees into employment opportunities further east. In our view, the WRA established *cooperative* business enterprises, as opposed to ones that were WRA or privately owned, in part to monitor, manage, and socialize a captive population (i.e., control the labor process) given the WRA's very limited resources within a wartime economy. In the context of these enterprises, as well as the WRA's ongoing reporting requirements, accounting information played a crucial role in the internment episode.

The article is organized as follows. We initially discuss labor-process theory in terms of exactly what it says about control and the use of accounting information. We next describe the cooperative enterprises that were established at the RCs. We then provide an overview of the internment episode, giving particular emphasis to some of its racial aspects. There follows

---

[1]All primary-source records we examined are located in Record Group 210, Entries 1, 3, 16, 29, and 48 at the National Archives of the United States in Washington, DC.

then a rather lengthy description of the mass of data that the WRA was charged to collect, either by virtue of its own decision or by fiat from higher governmental authorities. A substantial amount of the documentation was prepared by WRA statisticians and accountants and illustrates labor-process theory in action, albeit in the tightly controlled, non-market setting of internment camps. We conclude by describing how this episode and its use of accounting and cost-control procedures support labor-process theory.

LABOR-PROCESS THEORY

According to Friedman [1978], labor process necessarily involves resistance between workers and owner/managers and requires that emergent administrative controls and procedures result from a dynamic process of interaction between these two competing groups. Labor-process theory has been helpful in understanding the interface between workplace dynamics and the use of accounting information. Labor process has also been the subject of a number of noteworthy studies by accounting and labor historians alike, although none of these studies examined cooperative businesses in controlled, non-market settings. For example, Nelson [1975] described the role of contractors as intermediaries in large, 19th century factories. Clawson [1980] and Hopper and Armstrong [1991] described how owner/managers sought to dominate and disempower workers in early and mid-20th century industries. Braverman [1974] applied Marxist theory to explain the inevitable workplace conflict between workers and owner/managers that crosses national boundaries, time periods, and industry settings.

The labor-process literature of the past three decades has furnished considerable insight into traditional labor-management relationships, although interactions between Japanese-American evacuees and governmental administrators can hardly be called "traditional." Braverman's *Labor and Monopoly Capital* [1974] was the catalyst for an outpouring of support, revision, and rebuttal. Braverman's history of U.S. labor control emphasized a series of devices (piece rates, internal contracting, deskilling) deployed by management to exploit a homogeneous work force he perceived, in best Marxist tradition, to be in class conflict with capital. Later theorists have critiqued Braverman on three issues – (1) his failure to take into account worker resistance, (2) his assumption of labor's homogeneity, and (3) his focus on the exploitative aspects of capital (management). Gordon et al. [1982], Thompson [1989], and Greenbaum [1994] all wrote that the heterogeneity of the labor force, reflected in the diversity of its origins and its ethnic antagonisms, among other factors, reduced the resistance of labor towards management and kept the movement divided.

Another compelling argument, and one more germane to the Japanese internment episode, was Burawoy's [1979, 1985] demonstration of the community of interests between labor and management that has led to a consensual voluntarism on the part of workers collectively. Burawoy [1985, p. 28] wrote: "History suggests, however, that the outcome of class struggle mollifies the opposition of interests and frequently coordinates the interests of capital and labor." This diminished antagonism has also been highlighted in the labor-process analyses of Littler and Salaman [1982] and Knights and Willmott [1990]. Certainly, accounting has a role to play in making labor systems work, be they in captive or market-based environments. As Hopper et al. [1986] suggested from a Marxist perspective, the reporting structures of accounting and its modes of calculation provide a technology to harness the compliance of labor. Similarly, from a Foucauldian perspective, the knowledge generated from the accounting system permits the efficient wielding of power by governmental and business administrators.

As we illustrate in later sections of the paper, the relationship between WRA administrators and the thousands of confined evacuee workers and managers *generally* evidenced both cooperation and voluntarism during the three-year internment period.[2] Thus, the next section of the paper offers a new example to support labor-process theory – the cooperative business enterprises that were established at the internment camps. Also included are brief remarks about the history of cooperatives in the U.S.

COOPERATIVE BUSINESS ENTERPRISES

On March 18, 1942, the WRA was established to administer, maintain, and control all aspects of life at the ten permanent RCs, tasks that must have appeared daunting given that the WRA's top officials had no experience with mass relocations of

[2]We would be remiss not to point out two major acts of disobedience that did occur at the RCs in late 1942: the Poston strike and the Manzanar riot. See Okihiro [1973] for details on these particular incidents.

this magnitude.[3] WRA administrators had to act quickly to assemble a staff and create policies for the housing, feeding, educating, and employment of some 100,000 detained individuals of all ages in communities of between 5,000 and 20,000 evacuees that would be maintained temporarily, but indefinitely, until the war ended. The RCs were intended to be as self-sustaining as possible given the constraints of a wartime economy and the existing prejudice against any policy that appeared to favor Japanese evacuees over "native" American citizens. For example, evacuee wage rates were capped at $19 per month so that they fell below the $21 that was initially paid to American military personnel.

The decision to structure the centers' business enterprises as cooperative associations was made in May 1942, soon after the WRA was established. According to Dillon S. Myer [1971, p. 41], director of the WRA from June 1942 until the end of the interment, "…the WRA had hit upon a formula that it hoped would be a stimulant to work performance, would not be costly, and would be acceptable to the public." Cooperative associations were a common form of enterprise and were especially popular in the agricultural regions of California. According to Kerr and Harris [1939], self-help cooperatives were first established in the early 1930s when the federal government provided financial assistance to stimulate capital formation during the economic depression.[4] Barter cooperatives were initially created for services such as barber shops, sewing rooms, and crop distribution. They reached a peak in popularity in 1933 with 176 different groups and over 30,000 members [Kerr and Harris, 1939, p. 4]. The Wagner-Lewis Relief Act of 1933 stimulated the development of production cooperatives principally for baking, canning, gardening, and sewing products. In the late 1930s, the Works Progress Administration (WPA) received government funding to aid cooperatives in conjunction with the 1938 Federal Relief Act. Jones and Schneider [1984, p. 57] noted over 500,000 families and 600 cooperatives had been formed in 37 states between 1931 and 1938, and that self-help produc-

[3]The names and locations of the ten sites were: Central Utah – Topaz UT; Colorado River – Poston AZ; Gila River – Rivers AZ; Heart Mountain – Heart Mountain WY; Jerome – Denson AR; Manzanar – Manzanar CA; Minidoka – Hunt ID; Rohwer – McGhee AR; Tule Lake – Newell CA; Granada – Amache CO.

[4]"A self-help production cooperative may be defined as a democratic association of the unemployed and underemployed who have organized to obtain the necessities of life through their own production of goods" [Kerr and Harris, 1939, p. 1].

tion cooperatives "represent the only major historical attempt by the U.S. legislature to incorporate workers' participation in management into government programs."

By their nature, cooperatives draw on their membership for managers and governance, a structure ideally suited to the RCs because of the WRA's limited resources, the RCs' remote locations, the shortage of professionally trained managers, and the need to start business enterprises quickly to service the thousands of captive persons. Further, the decision to pay most captive workers the same basic wage and to distribute a portion of the surplus to them were common practices among self-help cooperatives. In the case of the RC cooperatives, a portion of any surpluses generated by the enterprises above the direct costs for materials and the cash advanced to evacuees would revert back to the WRA as partial repayment for the fair value of the food, shelter, medical care, and other services provided by the government. The balance of the surplus would be distributed to the evacuees in the form of additional cash advances. According to Myer [1971, p. 41], accounting data played a critical role in determining the surplus:

> The policy further provided that a full accounting would be kept of maintenance costs on the one hand and the income from the sale of products surplus to the center needs on the other, and appraisals would be made of the increases in capital values of land and structures.

As mentioned, the decision to structure the RC businesses as cooperative enterprises was made early by WRA administrators.[5] Cooperatives would utilize evacuee workers and managers to produce clothing goods and provide laundry, dry cleaning, shoe repair, and other needed services. In a May 25, 1942 letter, Harvey M. Coverley, assistant regional director of the WRA, stated that, "a definite decision had been reached to the effect that all consumer services on relocation centers will be managed by cooperative associations." Coverley also outlined the guiding principles for the cooperatives [Entry 16, box 421, folder 69.014]:

1. All cooperatives will be owned by their members.
2. Each member will have only one vote in membership meetings regardless of the number of shares owned.

[5]Myer [1971, p. 46] noted that three different plans were considered: "(1) WRA management of shops and services, (2) granting of concessions to private operators, or (3) management by the residents on a consumer cooperative basis."

3. All goods shall be sold for cash.
4. Lowest prevailing market prices shall be charged.
5. A certain percentage of profits shall be set up in reserves for cooperative education.
6. Any profits distributed to members as dividends shall be in proportion to the total number of shares outstanding and number of shares owned by each member.
7. All labor employed by cooperatives shall be treated fairly.

The WRA's long-term policy for operating the cooperatives emerged from a conference in late August 1942. In addition to specifying the standards of organization, dividend distribution, and merchandise pricing, the WRA also established uniform accounting procedures and a set of accounts that "should be regularly audited" [Myer, 1971, p. 46]. Clearly, these enterprises operated at a far lower total cost than if they had been staffed by non-Japanese-American employees and operated as privately owned canteens. Using evacuee workers also allowed the WRA to reduce out-of-pocket expenditures, while any work done for private industry (i.e., contract labor) would be charged at prevailing prices.

The WRA's fiscal 1943 appropriation request included $4 million for establishing cooperatives, but, according to Myer, this entire expenditure was best viewed as a loan that "will be repaid to the Government in full" [Entry 16, box 37, folder 12.100]. Of course, the evacuees were strongly opposed to repaying the government for these cash advances, arguing that persons who had been relocated against their wills should not be burdened with the cost of basic services.[6]

Each business cooperative (e.g., Community Enterprises, Inc.) was registered in the state in which each RC was located.[7] They were run by Japanese-American managers who were selected by the WRA for their skill and expertise, since a number of evacuees were college educated and many had experience running small businesses prior to the evacuation order.

[6]According to a February 19, 1943 memorandum from Taizo Inazu, president of the Board of Directors of the Manzanar Cooperative Enterprises: "The evacuees have often been reminded that it was the duty and responsibility of the War Relocation Authority to provide evacuees with the three essentials of living: food, clothing and shelter" [Entry 48, box 228, folder 69.030].

[7]As of December 1943, eight of the ten enterprises had been set up as cooperatives; another (Gila River) was in the process of reapplying for state approval; and another (Heart Mountain) continued to operate as a trust [Entry 16, box 216, folder 24.040 #4].

These managers fell under the supervision of one or two WRA staff advisors and were given a monopoly (in exchange for a monthly rental fee) for furnishing the goods and services not supplied by the government. According to a typical letter from the head of the WRA's Community Management Division to a potential supplier, "[the corporations] must follow an accounting system prescribed by [the] Gov; must agree to accumulate adequate reserves before distributing profits; and must agree to using a mark-up system that will permit them to operate on a sound business basis" [Entry 16, box 416, folder 69.010 #1]. According to an August 25, 1942 WRA policy statement, consumer cooperative enterprises were to be given exclusive rights to operate at all ten RCs. The enterprises were expected to follow WRA procedures for pricing, merchandising, and distributing dividends. They were also required to obtain regular audits of their accounts and financial reports [Myer, 1971]. Patrons who purchased additional shares in the cooperatives were entitled to receive a portion of the cooperative's profits as dividends, but only after the monthly cash advances for clothing (between $2.00 and $3.75 per month) had been repaid to the government.

One WRA internal report indicated that as of June 30, 1944, a total of $1,131,740.22 in patronage rebates had been declared and that $580,306.23 had been actually distributed to evacuees.[8] As of December 31, 1944, there were 36,696 members out of an aggregate population of 80,003 that still resided at the RCs. There were a total of 166 shops and services, employing 1,825 evacuees. While the number of employees may seem small, it should be noted that the WRA directly employed evacuees in mess halls, camp maintenance, police, fire, and sanitation departments, and other basic services. For 1943, total enterprises sales were $7.52 million, with net profit of $913,000. Corresponding numbers for 1944 were $7.13 million and $910,000 [Entry 16, box 417, folder 69.010 #4].

Community services such as dry cleaning, beauty shops, barber shops, and shoe repair were among those that were operated as cooperative enterprises. Operating costs included the material cost of purchased goods, staff wages, and facility rental charges of either $.235 cents per square foot per year

[8]There was a significant difference among the various projects as to the percentage of dividends actually paid. Jerome paid all it had declared ($105,036.36), while Poston declared $215,044.81 but paid only $39,558.41[Entry 16, box 417, folder 69.010 #4]. According to Myer [1971, p. 47], a total of $2,298,820 was distributed in patronage dividends out of $21,890,167 in gross revenues.

for unheated or $.28 per square foot for heated facilities [*WRA Administrative Manual*, Entry 29, box 3].[9] According to WRA officials, the payment of rent entitled the cooperatives to operate as monopolies and precluded individual evacuees from charging for services provided to other evacuees [Entry 48, box 230, folder 75.000]. As mentioned, the difference between an enterprise's revenues and operating costs would be distributed to members of the association only after the government's cash advances had been repaid.

In October 1942, the National Society of Co-operative Accountants (NSCA) proposed setting up a uniform accounting system for the War Relocation Co-operative Enterprises for a fee of $15,000 or $1.50-2.00 per hour plus travel and expenses. The proposal was rejected by Otto Rossman of the Community Enterprise Section of the WRA who indicated that the WRA planned to use in-house staff to set up its accounting systems, although Rossman did indicate that the NSCA would be contacted for follow-up audits [Entry 16, box 416, folder 69.010 #1].[10] The decision to use WRA and evacuee staff resulted in a range of accounting practices that lacked uniformity and clearly hindered inter-project comparability. For example, the superintendent of the Community Enterprises Section in Washington indicated by letter to the acting superintendent of the Gila River Project [Entry 16, box 416, folder 69.010 #3]:

> The control and system and auditing [at Gila River] is the best we have seen in cooperatives. If all the enterprises use the same system, we can then send out comparative reports. This is very difficult to do with different types of reports, as you can well imagine.

COOPERATIVE ACCOUNTING ON THE RCS

Evidence reveals that the WRA used comparative financial information to help stimulate cost efficiency and instill a spirit of competitiveness among the RCs despite the lack of accounting uniformity. For example, the WRA prepared semi-annual reports that summarized the financial performance of the

---

[9]Rent rates were revised downward in February 1943 to the above figures in response to complaint letters from evacuees at the Rohwer, Manzanar, and Tule Lake RCs [Entry 16, box 416, folder 69.010 #3].

[10]All RCs except for Granada were audited by the Northwest Cooperative Auditing and Service Association of Walla Walla WA. Granada was audited by the Consumers Cooperative Association of Kansas City [Entry 16, box 417, folder 69.010 #6]. Box 418, folder D contains multiple copies of the accounting system set up by Northwest.

centers' business enterprises and focused on key performance indicators. Meeting key indicators, such as a three-to-one current ratio, also triggered cash rebates to the evacuees and thus served as an inducement to meet the WRA's financial targets. Detailed reports were prepared regularly to assess and compare the performance of each center. The semi-annual report ending December 31, 1943 included a section on business enterprises that contained the current ratios for all ten RCs, ranging from 8.83 at Central Utah to 2.09 at Tule Lake. The report included the following comments about the financial performance of the business enterprises ["Semi-Annual Report, July 1 to December 31, 1943," Entry 3, box 6]:

> During this period an effort was made to reach a ratio of current assets to current liabilities of 3 to 1. By the end of the year most of the Enterprises had hit this ratio and the others were climbing steadily toward it. Several of the Enterprises had established such good cash [positions] that they were able to pay a cash rebate just before the Christmas season. This, of course, is a fine morale builder at this particular time.

Certain evacuee officers and managers of the project cooperatives appeared similarly concerned with meeting financial targets despite not having the opportunity to benefit financially. For example, while noting that the Jerome cooperative was compelled to dissolve despite being rated as the best performer among the ten center co-ops, Katsujiro Iseri, president of the cooperative, discussed the following financial indicators in his year-end summary report ["History of the Jerome Co-Operative Enterprises, Inc.," Entry 16, box 427, folder 69.020][11]:

> According to the report of the WRA Business Enterprises, the ratio of operating expenses to gross sales in the case of Jerome Co-Operative Enterprises, in comparison with the other center co-ops, is the third from the lowest. The ratio of net savings to gross sales is the second highest among center co-ops. The average ratio of assets to liabilities of all center co-ops is 2.95 to 1, but ours is 5.01 to 1, which rates ours at the top.

[11]The archives also include a set of financial reports entitled "Combined Balance Sheet and Operating Statement of Business Enterprises Operating on Relocation Centers." Each of the ten projects is listed on the same page. The following data are included: current ratio, total net savings, average monthly sales per employee, average sales per capita [Entry 16, box 429, folder 69.034].

Once the evacuees had been removed from the West Coast assembly centers (ACs) and relocated to permanent camps, dispersing evacuees to other regions of the country became one of the WRA's policy goals. The archives reveal that certain WRA field officials tried very hard to relocate evacuee accountants who worked on the project cooperatives to other cooperatives further east. An exchange of letters between Don Elberson, chief of Consumer Enterprises at the Tule Lake Project, and Merlin G. Miller, director of the Education Department of the Consumers Cooperative Association in Kansas City, reveals the difficulty in accomplishing this goal given the prejudice against Japanese Americans and the resistance to employ them.[12]

Despite the difficulties mentioned above, and the relatively small number of resettlements, relocations of accounting personnel were sufficient to cause staff shortages to the degree that they impacted the quality of financial reporting. For example, the December 1943 semi-annual report noted that, "there is constant turnover of personnel which is particularly serious in the accounting department where financial reports have to be submitted periodically" ["Semi-Annual Report, July 1 to December 31, 1943," Entry 3, box 6]. Similarly, a December 5, 1944 letter from Charles M. Beltt, business enterprise advisor to the head of the Business Enterprise Section in Washington DC, stated [Entry 16, box 417, folder 69.010 #5]:

> As we all know, there has been a very fast turnover in the personnel of the Business Enterprises and in some instances the cooperatives have lost nearly all of their

[12]On February 10, 1943, Elberson recommended three evacuees for employment. He spoke most highly for Mr. Tanaka, who, although an alien, "is very thoroughly Americanized" and "in terms of knowledge of accounting theory and practice and business organization, he has no peer on this project." Later, in his three-page, typed letter, Elberson discussed the role of cooperatives in overcoming the racial stereotyping that confronted skilled workers like Mr. Tanaka: "It is rather inconceivable to me that the employment of one of these people in an organization the size of C.C.A. could be sufficient to split your organization open on a racial question…It is true that the cooperative movement professes that it puts into practice racial tolerance where other groups merely talk about it. We, who attempt to sell the cooperative movement to the Japanese as an instrument to be used for their general welfare, have much of this point, and I feel that it is quite obvious that the cooperative movement itself has as much to gain from this as the Japanese." Unfortunately, Elberson was not fully persuasive as Miller's February response indicates: "I, myself, am convinced by your argument, but this is not the case for our entire staff, and we do, here, usually work as a unit. Frankly, our situation is complicated by the fact that part of our staff and our employees come from a long mental background of the old slave-holding states psychology of color prejudice" [Entry 48, box 281, folder 516].

accountants and other key employees, and they have been unable to fill these vacancies with qualified people.

Beltt noted that employee turnover caused the financial statements to contain errors and to lack uniformity for comparative purposes. This theme was frequently reinforced in the WRA archive. Emil Sekerak of Topaz wrote to Rossman in 1943, claiming that the lateness of its financial statements and the RC's failure to use the uniform reporting form were occasioned by the recent turnover of chief accountants three times [Entry 16, box 417, folder 69.010 #4].

In 1944, auditing had become so desperate in Community Enterprises that Mr. Provinse, the head of the Division, employed George Mori, an evacuee, to travel from camp to camp doing auditing work. In a July 22, 1944 letter, Provinse said a precedent had been set for such an unusual action by the YMCA and the Red Cross [Entry 16, box 417, folder 69.010 #4].

With typical care and perspicacity, Myer drafted a 15-page guide for the liquidation of the cooperative enterprises as early as January 1945 [Entry 16, box 417, folder 69.010 #6]. The final version was dispatched to the project directors in August. In a September 19 memo, Rossman informed Myer that the accounting side of the liquidation was impossible as the "staff had melted away to almost nothing" [Entry 16, box 417, folder 69.010 #6]. Nevertheless, the WRA utilized its financial reports, flawed as they were, to evaluate and compare the performance of project enterprises.

Accounting information and financial reports also served a variety of managerial purposes at the RCs, including comparative costing.[13] Costs were also monitored to defend against the many critics of WRA policies and activities. For example, each center had to submit its planned menus to Washington for approval "to make sure that the public was adequately informed of WRA feeding policies and procedures" [CWRIC, 1997, p. 163]. A June 14, 1943 letter from J.W. Clear, WRA budget and finance officer, to the project director at the Granada RC clearly illustrates the importance of the *Handbook*, the level of re-

[13]The authors of the *Handbook* described its purposes thusly: "It is intended that the accounting records prescribed in this *Handbook* provide a means of preparing adequate financial operating statements to permit: A substantial basis for budgetary estimates; adequate budgetary control; comparative operating costs as a tool of good management; costs of production to assist in intelligent industrial planning and marketing; an adequate means of accounting for all funds advanced to the War Relocation Authority; a source for supplying information with a) the evacuees, b) other government agencies, c) the public.

porting detail, and the degree of administrative accountability within the WRA [Entry 16, box 494, folder 72.520]:

> There should be no conflict of thought as to the preparation of any monthly reports as the procedures prescribed in the *Finance Manual* will govern all cases. We have, therefore, made the necessary changes in your report as to the Total Number of Meals Served, etc. We are unable to check your figures for the daily average number of persons served for the month or by separate mess halls. Will you please advise how you computed the averages as shown. In the future will you also please support any deductions from the 'Stores to Account For,' which are covered by Survey Reports, by attaching copies of those reports to the Monthly Subsistence Report.

Because evacuee cash advances (i.e., wages) were capped far below comparable civilian wages, there were few economic incentives to induce workers to perform above minimum performance levels.[14] WRA policies initially specified that a job would be provided to every evacuee who was willing and able to work. In addition, evacuees were given food, clothing, housing, education, and medical attention whether they worked or not, although the business enterprises were required to reimburse the government for the allowances given to their employees.[15] This meant that jobs were often overstaffed, and there were few penalties that could be imposed for absenteeism, tardiness, or poor job performance.

In our view, the WRA responded to its charge by combining administrative mechanisms that included traditional, accounting reporting procedures, as specified in the *Handbook*, with a variety of more creative, non-market social factors that included aspects of a less than fully democratic society. In a June 10, 1942 memorandum to Thomas Holland, chief, Employment Division, a senior employment officer described the challenges confronting the WRA [Entry 16, box 492, folder 72.100]:

---

[14]As an example of the wage disparity between Caucasian and evacuee workers, the CWRIC [1997, p. 167] noted that, "a WRA librarian received $167 a month, while her evacuee staff received $16 a month."

[15]According to the U.S. Department of the Interior [1975, p. 81], the decision to provide jobs to everyone who was willing and able to work led to "a number of glaring abuses – a great deal of overstaffing on evacuee jobs at some of the centers, creation of a large number of 'boondoggling' positions, and encouragement of inertia and slack working habits among a large percentage of the evacuee population."

> In the Relocation Centers, at present, the ordinary incentives to work are largely lacking. The wage is small and the worker sees little prospect of being able to improve his future position through present work or sacrifice. The people enjoy security of a kind but without freedom or future…Closely related to the lack of work incentives is the weak position of the Administration as employer. The ordinary employer holds a strong sanction over his employees in that he can terminate the employment and endanger the livelihood of an employee whose performance is not satisfactory to him. Conversely he can offer greater pay as a reward for more or better work. The WRA can do neither. Unless it is prepared to resort to physical duress, the Administration is compelled to treat idlers nearly as well as the workers.

Thus, notwithstanding the frustrations of inducing worker efficiency in the RC environment, the WRA staff collected extensive data on each individual worker's job performance and maintained a personnel file on every evacuee who resided in them. They established cooperative associations as the form of enterprise best able to minimize costs, overcome work resistance, and facilitate skill development that would enable WRA officials to disperse evacuees to other parts of the country. The WRA collected cost data as a way to stimulate efficiency in the absence of normal market mechanisms (layoffs, discharges, plant closings, etc.).

COST ACCOUNTING AND CONTROL PROCEDURES

While many top WRA officials had administrative experience with isolated populations at the Department of Agriculture or the Bureau of Indian Affairs [U.S. Department of the Interior, 1975, p. 83], the mass relocation of over 100,000 civilians to isolated camps must have represented an extraordinary set of challenges. As a first step, the WRA had to prepare budget estimates and develop detailed administrative policies. The largest single item within the WRA's fiscal 1943 budget of $70 million was an expenditure of $20 million for evacuee food costs. Although $.50 per person per day was the daily food allowance initially proposed for the ACs, the *WRA Handbook* [Entry 29, box 1, 20.2.8/9] reduced the allotment to $.45 per person per day, in part because the RCs could provide foodstuffs from their cooperative farms. The overall cost was calculated at $1.20 per day for evacuees except at Tule Lake. Figure 1 illustrates the costing procedures that were proposed by WRA staff to determine per-person food cost at the RCs. Although comparable examples are not reproduced, this same level of accounting detail was proposed for estimating the costs of operating housing and sanitary facilities, laundry facilities, and the hospital/dispensary.

FIGURE 1[16]

Proposed Outline for Food Costs

Explanation of Accounts

10. Provision of food for evacuees other than those in hospital. Includes costs of food and of operation of kitchen, commissary, dining halls, and refrigeration and food storage facilities.

11.0 Direct Costs
- 11.1 Food issued to kitchens, but not including food inventory held in warehouse
- 11.2 Evacuee labor used directly in operating kitchen, commissary, refrigerator plant, etc.… but not including central office force
- 11.3 Caucasian labor employed in this activity
- 11.4 Freight on food issued to kitchen, but not including freight on food inventory
- 11.5 Fuel for cooking and heating buildings and water
- 11.6 Miscellaneous

12.0 Allocated Costs
- 12.1 Water. A charge for water, prorated from the Center water account as nearly as possible on the basis of quantity consumed.
- 12.2 Electricity. A charge for electric power and light, prorated from total electric power cost as nearly as possible according to consumption.
- 12.3 Garbage disposal. Proration as equitably as may be of total cost of garbage disposal for whole project.
- 12.4 Trash disposal.
- 12.5 Cartage. Charges incurred by WRA for cartage of food from railroad station to project, within project, prorated from project total for cartage as nearly as possible according to load.
- 12.6 Office and general supervision. A pro rata charge for general office service not carried as a specific project expense.

13.0 Buildings: Maintenance and Repair. Includes items of a more or less recurrent nature, including labor, material, and supplies, incident to maintaining in operating condition the buildings used for kitchens, dining room, and food storage, refrigeration, and preparation.

14.0 Equipment: Maintenance and Repair. [Same as above]

15.0 Investment Items. These are items of major outlay, usually recurring only infrequently, if at all, the cost of which must be spread over a considerable period rather than charged currently.
- 15.1 Land cost, building construction and replacement of buildings used for… Includes replacement of complete units or substantial parts thereof, as in case of serious damage by fire or wind.
- 15.2 Equipment cost, installation and replacement for…

[16]Letter on August 13, 1942 from Stauber, to Mr. Leland Barrows, executive officer, WRA [Entry 16, box 494, folder 72.520]. Stauber proposed that a summary form, based on these procedures, be prepared monthly with data reduced to a "per evacuee-day" cost basis. Stauber recommended a similar costing approach for housing and sanitary facilities, laundry facilities, and the hospital/dispensary.

The *Finance Handbook* contained WRA Form 202 – Revised which was entitled "Monthly Report of Administrative Mess Operation" [Entry 29, box 5, *Finance Handbook*, 1945, Section EG]. This standard form was prepared at each RC and described how the average cost per meal was to be computed. Another statement entitled "Comparative Mess Hall Food Costs" was to be prepared by each mess hall at a RC and was to supplement the center's monthly report [Entry 29, box 5, *Finance Handbook,* 1943, Sections E-G]. This supplemental report was to include columnar headings for the total number of meals served, the daily average number of rations served, the cost of food consumed, the average food cost per ration, and remarks. Another statement, entitled "Comparative Mess Hall Labor Costs," was to include columnar headings for the daily average number of rations served, the labor costs, the average labor cost per ration per month, and remarks. Clearly, these two statements served managerial purposes of promoting greater cost efficiency for mess hall operations.

In addition to providing essential information for budgeting and cost control, a carefully proscribed, cost accounting methodology enabled WRA officials to respond definitively to inquiries from the media, other federal agencies, government officials, and political critics of WRA policies. For example, data emanating from a comprehensive cost accounting system could explain the following response to an inquiry from Secretary of Labor Frances Perkins [Entry 16, box 494, folder 72.520]:

> The policy of the War Relocation Authority, an agency of the Federal Government, requires payment by evacuees of $4.69 per week to cover cost of food and lodging when such evacuees are engaged in private employment and taking meals and lodging on the project.

Since a number of evacuees were well-educated and many had experience running groceries and other small businesses before their internment, the WRA could employ them in accounting positions at the centers. For example, of the 3,845 people listed as working at the Rohwer Center on May 11, 1943, 26 were described as engaged in accounting activities. The fact that only a $3 monthly wage differential existed between the controller and the lowest level clerk clearly illustrates the challenges the WRA faced in creating economic work incentives. The breakdown of these positions is presented in Figure 2 [Entry 16, box 495, folder 72.510].

FIGURE 2

Occupational Titles in Use at Rohwer Relocation Center

Title	Total	$16	$19	Job Title Description
Accountant, Cost	4	2	2	Prepares financial statement, audits books – Maintenance, Public Works, Agriculture, Trans. & Supply Division.
Controller	1		1	Supervises the financial affairs of Cooperative Enterprise.
Bookkeeper II	1	1		Keeps record of the business transactions – Community Service.
Bookkeeper III	3	3		Keeps record and works on one phase of records Administration Division
Accounting Clerk	5	5		Performs the more routine calculating, typing, and posting necessary in accounting – Administrative, Community Service, Co-op Enterprise.
Audit Clerk	3	3		Checks and verifies the figures, calculations and postings pertaining to various transactions Administrative Division.
Cost Clerk II	9	9		Computes the cost of a working unit – Public Works, Maintenance, Trans. & Supply, Administrative Division.

Cost accounting methods used at the projects were also subject to periodic audit by the WRA's headquarters staff. For example, the project director at Gila River sent a letter to Myer regarding a recent audit [Entry 16, box 37, folder 12.000]. The letter described a number of questions that WRA officials had raised, but that Mr. Dodd, the project director, had channeled to Myer. The first question and Dodd's response, reproduced below, illustrate the comprehensiveness of the cost accounting at the centers:

> 1. How are the farm produce costs arrived at from farm to mess? Our cost system includes the following charges:
>   (1) direct and indirect labor
>   (2) materials, such as seeds, fertilizer, sprays, dust, etc.
>   (3) cost of farm employment expenses and operation
>   (4) transportation to and from the farm, transportation of material, and transportation of produce
>   (5) land and water rentals
>   (6) miscellaneous expenses such as evacuee office wages, office material, etc.
>   (7) salaries of appointed personnel…

In summary, WRA officials recognized the importance of maintaining detailed records that monitored costs in order to justify appropriation requests, promote cost efficiency, and assuage critics who charged that evacuees were given favored treatment over native citizens in regard to wages, provisions, and accommodations during a period of wartime shortages. As mentioned, many career WRA officials had cost accounting experience from prior service at the Bureau of Indian Affairs, and the procedures they initiated at the RCs were fully described in the government's *Finance Handbook*. Instilling a *desire* among captive workers to work in a cost efficient manner was an entirely different matter and one that required a more creative solution.

In summary, and from a theory perspective, the decision to establish cooperatives and their use of accounting and cost controls enabled the WRA to minimize resistance and control the labor process in a non-market setting amidst a captive labor force that the WRA could not physically compel to work. The next two sections of the paper reviews certain key aspects of the interment episode and then highlight how accounting information was used to monitor and socialize the evacuees.

THE INTERNMENT EPISODE: A BRIEF RETROSPECTIVE

While the internment appears unequivocally reprehensible in retrospect, it is noteworthy that the injustice done to citizens of Japanese descent did not go unrecognized by WRA officials. For example, a WRA booklet of May 1943, entitled "The Characteristics of the Project Population, A Handbook of General Statistics," contained the following introductory comments [Entry 16, box 498, folder 79.100 #1]:

> It was about an [sic] year ago that nearly a hundred thousand Japanese were suddenly divorced from the scheme of things in American society and corralled into far-flung desert waste lands while the nation girded itself for the supreme task of winning the war. The war has obliterated every vestige of individual achievement for the whole of the Japanese. Issei and Nisei alike now find themselves in the bottom stratum.[17]

The Commission on Wartime Relocation and Internment of

---

[17]Issei were native-born Japanese who had emigrated to the U.S. after 1907 and could not become U.S. citizens by law. Nisei were American-born, American-educated, U.S. citizens of Japanese descent.

Civilians (CWRIC) was established in the early 1980s to re-examine the internment episode in detail. The CWRIC [1997, p. 12] held 20 days of hearings, received testimonies from 750 witnesses, and described the losses that were not covered by the Japanese-American Evacuation Claims Act of 1948 to include, "…the stigma placed on people who fell under the exclusion and relocation orders; the deprivation of liberty suffered during detention; the psychological impact of exclusion and relocation; the breakdown of family structure; the loss of earnings or profits; physical injury or illness during detention."[18] The CWRIC [1997, p. 18] also concluded that, "the broad historical causes which shaped these decisions were race prejudice, war hysteria and a failure of political leadership." It clearly intimated that racial prejudice was a major driving force, citing General DeWitt's February 1942 recommendation for forcible exclusion [CWRIC, 1997, p. 6]:

> In the war in which we are now engaged racial affinities are not served by migration. The Japanese race is an enemy race and while many second and third generation Japanese born on United States soil, possessed of United States citizenship, have become 'Americanized,' the racial strains are undiluted.[19]

In terms of the actual relocation, the Wartime Civil Control Administration (WCCA) preceded the WRA and was charged with assembling Japanese-American civilians in 64 civil control stations and relocating them to15 regional centers.[20]

Several of these ACs were hastily constructed at nearby racetracks or fairgrounds where living conditions were deplorable. Evacuees were fed and housed there for one to four

---

[18]Russell Robinson, WRA chief of the Evacuee Property Division, estimated that the evacuees left behind $200 million worth of real, personal, and commercial property when forced to leave their homes [U.S. Department of the Interior, 1946e, Entry 1, box 1, p. 108].

[19]Further to this point were comments by General DeWitt that were quoted by the Associated Press on April 13, 1943, during a hearing of the House Naval Affairs Subcommittee [Entry 16, box 417, folder 69.010 #5]: "It makes no difference whether the Japanese is theoretically a citizen. He is still a Japanese. Giving him a scrap of paper won't change him. I don't care what they do with the Japs so long as they don't send them back here. A Jap is a Jap." Weglyn [1996, p. 28] noted that 73% of those interned were American citizens who "were imprisoned for no reason other than their race." Dillon Myer, long-time director of the WRA, noted in a speech to the American Legion that 72% of the evacuees had never seen Japan [Entry 16, box 471].

[20]Voluntary relocation outside the WDC ceased as an option at the end of March 1942.

months until permanent camps could be built. The WCCA's policies did call for a space allowance of 200 square feet per couple, food rations not to exceed $.50 per person per day, and a yearly clothing allowance that ranged from $25 to $42 depending on an evacuee's age and sex. In point of fact, the ACs spent on average only $.39 per person per day [CWRIC, 1997, p. 142]. Drinnon [1987] observed that by the end of March 1942, over 90,000 persons were living at ACs where they stayed an average of 100 days.

During their residence at these centers, evacuees were assigned a family identification number and were required to wear regulatory ID tags to identify each family member, their personal property, and every transaction involving the exchange of goods or services.[21] An evacuee's individuality was routinely compromised by requiring everyone to eat in common mess halls and to use common showers, latrines, and laundry facilities.

The internment camps were intended to be as self-sustaining as possible given the constraints of a wartime economy and the existing prejudice against any policy that appeared to favor Japanese evacuees over "native" American citizens. For example, evacuee wage rates were capped at $19 per month so that they fell below the $21 that was initially paid to American military personnel. Milton Eisenhower noted that, "a storm of protests developed throughout the country about the possibility of the evacuees being paid any amount of money greater than the amount paid to American soldiers, namely, $21 a month" [Entry 16, box 53, file 12.202].

By August, 1942, the WRA's charge also included the dispersal and permanent resettlement of evacuees in non-designated areas of the U.S.[22] As of January 1, 1945, just under 32,000

[21]Icihasi described the use of identification numbers at his AC: "The Camp has a population of 18,400, each of which is numbered for identification; for instance I am No. 5561A, which is required for every transaction in the Camp." Transactions included the purchase of clothing, medical attention, and patronage at camp stores and enterprises [Chang, 1997, p. 110].

[22]In a letter to Eleanor Roosevelt in August 1942, Myer explained the softening of the original policy [Entry 16, box 429, folder 71.100]: "We strongly believe that loyal American citizens among the evacuees should be allowed every opportunity and encouragement to reenter private employment or enterprise…With this in mind I issued about two weeks ago an instruction to our field offices covering procedures through which individual loyal American citizens of Japanese ancestry may be permitted to leave relocation centers to accept private employment in the middle-western States."

evacuees had been settled outside the RCs.[23] Of these, 14,000 had gone to the East North Central region which included Chicago and 8,500 to the Mountain states. Interestingly, nearly 1,500 had been allowed to return to the Western Defense Command, mostly to Oregon and Washington. The resettlements increased significantly during 1945 when it appeared the war was winding down. Only 194 persons had been permitted to go to California precedent to 1945; subsequently, 43,181 returned to the state that had been the center of Japanese ethnic culture before the evacuation outrage [U.S. Department of the Interior, 1946b, Entry 1, box 1, pp. 42-45].

Table VI of the WPA's semi-annual report for July 1-December 31, 1944 [Entry 3, box 4] provided interesting place-of-origin and occupation data for evacuees who had been granted indefinite departure from the RCs. Of 111,170 original evacuees, 29.4% had left the RCs. Of the 38,520 foreign-born detainees, only 14.23% had departed; the corresponding number for the 72,650 native-born was 37.55%. With respect to the mobility of various occupational groups, it seems that those with middling skills were most in demand (e.g., sales/clerical 52.63%, semi-skilled 42.51%, trained but without specific expertise 41.98%). Those with greater expertise followed (e.g., professional and managerial 37.56% and skilled 35.02%), while those without skills lagged behind in terms of their occupational mobility (e.g., unskilled 28.53%, no occupational classification, 22.10%, agriculture and fishing 25.19%).[24]

Although the WRA's staff performed yeoman service in attempting to place evacuees with private industrial and service-sector firms outside the containment area, bureaucratic delays in determining an evacuee's loyalty and a reluctance to hire workers of Japanese ancestry meant that "only a small percentage of the internees were able to leave the camps" and be resettled [Robinson, 2001, p. 5]. Typical was a letter G. Richardson, head of the Community Enterprises Section, wrote to J.W. Hannon on October 15, 1942, in which he characterized these efforts in patriotic terms [Entry 16, box 416, folder 69.010 #1]:

---

[23]The WRA maintained monthly records on the relocation rate for evacuees per 1,000 population. Over the course of 1943, the monthly rates ranged from 3.9 to 23.6%. These rates ranged from 7.4 to 30.4% and 12.7 to 39.1% for 1944 and 1945 respectively [U.S. Department of the Interior, 1975, p. 211].

[24]These percentages are derived by dividing those on indefinite departure on December 31, 1944 by the original job classification identified for each evacuee in 1942.

> It has been determined that this problem shall be handled in a thoroughly democratic, American way. The WRA is cooperating with both military and civilian agencies to enable this mass migration to proceed in a planned, orderly, and decent manner.

WRA officials often described relocation and resettlement efforts similarly; however, their sentiments are belied by a comment Richardson made trying to place Japanese Americans with eastern cooperative groups. He assured Mr. Lincoln, for instance, in a December 10, 1942 letter that "…each candidate would be thoroughly investigated by the FBI" [Entry 16, box 416, folder 69.010 #1]. These "democratic" principles are also contradicted by the fact that evacuees who failed to answer the now infamous Question 28 in the prescribed manner were disqualified from relocation.[25] However, the WRA's community activities advisors may be cast in a more sympathetic light if one considers their efforts to "Americanize" the evacuees for a smoother transition to resettlement. For example they secured movies for educating evacuees about sections of the country to which they might be relocated [Entry 16, box 417, folder 69.010 #4].

The *WRA Handbook* [Entry 29, box 1, 30.5.5, 30.5.9] specified that the prime objective of the WRA's Community Activities Section was to facilitate the relocation process by sponsoring interaction between the evacuees and "groups typically American in concept." RC residents were allowed to participate in "Japanese style games, sports, and cultural activities," but only if they were not specifically nationalistic. Baseball was in; Sumo wrestling was out. Likewise, the Community Analysis Section was charged with the responsibility to engineer sociological investigations and to provide programming that was geared toward the "assimilation of evacuees into American life" [*WRA Handbook*, Entry 29, box 1, 30.8.1B].

Regardless of their personal motives towards evacuees, WRA officials followed the procedures and completed the standard forms that were specified in the WRA's *Finance Handbook*. The purpose of the *Finance Handbook* was "to cover all phases of accounting involved in the activities of the War Relocation Authority" [Entry 29, box 5, p. A-1]. Thus, the accounting and record keeping for both WRA-operated activities (mess halls, hospitals, fire and police departments, and agricultural

[25]Question 28 was an oath of allegiance to the U.S. It will be discussed in detail in the succeeding section.

units, among others) and evacuee-managed cooperative enterprises (general clothing stores, food and drug stores, shoe repair shops, watch and radio repair shops, etc.) were indicated in the *Handbook*.

BIG BROTHER IS WATCHING

Four decades prior to Orwell's dating of his futuristic vision, the U.S. government had collected an astounding amount of data on the evacuees. Even before the WRA's statistical division was established, the WCCA was gathering information related to the AC phase of the relocation operation. A letter from M.M. Tozier to Myer reviewed the categories of information the WCCA was being asked to provide [Entry 16, box 498, file 79.100 #1]. These included documentary materials taken from evacuees at the ACs (e.g., diaries, minutes of evacuee meetings), all AC newspapers, vital statistics of all evacuees, reports on AC operations, daily recapitulation reports on the whereabouts of all detainees, etc. Subsequently, when the WRA assumed responsibility, a letter sent from Myer to John McCloy, the Assistant Secretary of War [December 5, 1942, Entry 16, box 498, file 79.100 #1], requested additional information from either the WCCA or the War Department. The specifics of the WRA's informational needs are summarized in Appendix A.

By the end of 1942, the WRA had ceased to depend upon the WCCA for its statistical data. B. Ralph Stauber served singlehandedly as the relocation planning officer until he was given a small division (Relocation Planning) of his own in 1943, the result of a nine-page, single-spaced memo to Myer on November 7, 1942, in which he proposed a statistical division for the WRA. His grand design for 1943 was a "locator file" in which would appear a Hollerith alphabetic punch card for each evacuee. These cards were to include standard demographic information about age, gender, education, occupation, family size, medical history, criminal record, and RC location. However, additional data categories about links to Japan were also maintained, such as years of residence in Japan and the extent of education received there.

Perhaps the most intrusive statistics were those associated with Japanese Americans identified as "repatriates," either by virtue of an evacuee's application to be sent to Japan and/or by a request emanating from the Japanese government [Entry 16, box 498, folder 79.100 #1]. The punch card project was so extensive and immediate that the WRA subcontracted the function to IBM. A March 24, 1943 memo from Leland Barrow informed Clear and Stauber that 30,000 locator cards had been completed on an initial contract of 40,000 with a final total of 80,000 expected [Entry 16, box 498, folder 79.100 #2]. By April 9, Stauber complained to the WRA director that the file project had been slowed by variations in the data gathering at the RCs [Entry 16, box 498, folder 79.100 #2].

Stauber's 1942 proposal to Myer, envisioning a statistical division of the WRA to gather in-depth information on all RC operations, was approved in early 1943. These data would include the physical facilities of each, with particular attention to the number of available apartments for evacuee living. At the Rohwer Center, for example, the 1,050 single persons all lived in six-person units [Entry 16, box 498, folder 79.100 #1]. Agricultural and industrial statistics were kept on operations and individuals, as were records of those evacuees who worked off the RCs and the payments made to them. The cost of subsistence payments and clothing allowances was maintained, leading to "profit and loss" statements for each project (Entry 16, box 498, folder 79.100 #1).

Additional information on evacuees included lists of visitors to the RCs and those who were visited [Entry 16, box 498, folder 79.100 #1]; data on short and long-term leave hearings for educational, occupational, and relocation purposes [Entry 16, box 498, folder 79.100 #3]; and background details on the characteristics of those evacuees confined to the centers' stockades [Entry 16, box 498, folder 79.100 #4]. "Gallup Poll" inquiries were regularly solicited to gauge evacuee opinion on an assortment of issues [Entry 16, box 498, folder 79.100 #1]. The WRA wanted to differentiate the attitudes of the Kibei, Japanese Americans who had been educated in Japan, from the Nisei and Issei. What were the characteristics of the repatriates, both those who wanted to emigrate to Japan and those whom the Japanese government had specified for return? Did evacuee reactions change as their internment lengthened? Were there attitudinal variations among the occupants of various RCs? How did those who sought employment relocation differ from those who did not [Stauber to Myer, November 7, 1942, Entry 16, box 498, folder 79.100 #1]? Based upon these and other questions, an "Analysis Unit" was formed as a component of the Relocation Planning Division of the WRA. The analytical and estimation activities of this unit are summarized in a letter from its head, Evelyn Rose, to Stauber in October 1943 [Entry 316, box 498, folder 79.100 #3].

On March 7, 1944, a new handbook of statistical procedures was sent by Stauber to all project directors. This resulted in a new reporting system which was operationalized on April 1 [Entry 16, box 498, folder 79.100 #4]. In a letter from Stauber to R.R. Best at the Tule Lake Center on April 23, 1944, the head of the Relocation Planning Division prioritized the information required by the Washington office [Entry 16, box 498, folder 79.100 #4]. It will be seen below that Tule Lake housed those evacuees considered the most dangerous by the government. See Appendix B for details of this prioritization with accompanying references to the new manual.

While much of this wealth of information was amassed to improve the internment process irrespective of its inherent immorality, the outcomes did not always reflect benevolence. Myer wrote to Senator Holman on June 21, 1943, disclosing the number of native-born Japanese Americans 17 years and older who had "declined to subscribe to an oath of allegiance"; namely, "Will you swear unqualified allegiance to the United States of America and foreswear any form of allegiance to the Japanese emperor, or any other foreign government, power or organization?" The WRA had sufficient information to report that 79% had so sworn and 21% had refused [Entry 16, box 498, folder 79.100 #2]. Subsequently, the wording of this infamous "Question 28" was "rephrased to read whether they would abide by the nation's laws and refrain from interfering with the war effort" [Myer speech to the American Legion, November 16, 1943, Entry 16, box 471]. A later statistic, reported by the U.S. Department of the Interior [1946c] after the war, had only 11% of the evacuees declining to swear the oath.[26]

The oath of allegiance, combined with information regarding those Japanese Americans requesting repatriation, formed the basis for a heinous process known as "segregation" that adumbrated the advent of McCarthyism a decade later with an additional leavening of racism and xenophobia. Segregated at the Tule Lake Center were those evacuees, along with one or two immediate family members, who failed to respond affirmatively to Question 28 and/or those viewed as potentially interfering

[26]The *WRA Handbook* [Entry 29, box 1, 60.4.3B] was very specific as to which evacuees would be eligible for permanent relocation out of the camps. First and foremost was the need for an "unqualified affirmative" to Question 28. Additionally, Japanese-American male citizens were eligible only if they had not lived in Japan for ten years of more after age six, had not received all or most of their education in Japan, and had received no formal education in Japan after the age 15.

with the war effort [Myer speech to the American Legion, November 16, 1943, Entry 16, box 471].[27]

The discussion of the WRA's data gathering efforts heretofore has suggested several reasons for this time-consuming and expensive undertaking. In the first instance, the WRA was the servant of government and, as such, was required to provide sufficient data to demonstrate that the captive population was maintained efficiently and cost effectively. In some instances, comparative statistics from the ten RCs were required for gauging the relative competency of their individual managements. As an agent of government also, the WRA had to pay particular attention to those Japanese Americans whom the state perceived to be the most dangerous – the Kibei, the repatriates, those who had declined the oath of allegiance, and those who were segregated.

In other instances, the statistical collection had the potential for improving life on the RCs specifically as attitudinal data were gathered and analyzed. Information about the evacuees was provided to academics, such as Leonard Blum of UCLA and D.S. Thomas of UC Berkeley, for psychological, sociological, and statistical study. The distinguished American author and Japanese-Hawaiian advocate, Edgar Rice Burroughs, requested and received information about evacuee mobility from the RCs to employment opportunities further east [Entry 16, box 498, folder 79.100 #3]. Ultimately, however, it was the economic data the WRA collected on the cooperative enterprises operating on the RCs that benefited the evacuees most directly.

The State Department had a distinct interest in the WRA's statistical operations. In November 1943, the State Department wrote Myer to the effect that it might need detailed information about the costs of Japanese-American detention if post-war negotiations took a particular direction. Stauber informed the WRA leadership that the Relocation Planning Division was already compiling those costs. Myer wrote to Secretary of State Cordell Hull on December 8, 1943: "The system of statistical records and cost accounts provided in the regular operating procedures in the War Relocation Authority appear to be adequate to furnish the information requested…" [Entry 16, box 498, folder 79.100 #3].

A related and interesting observation was made by Myer

[27]Evidence in Entry 16, box 498, folder 79.100 #3 suggests that correlations between Question 28 declinations and repatriation requests were made routinely, even when segregation was not at issue.

in his November 1943 speech to the American Legion when he averred that it was his feeling that the WRA had to do all it could to make life bearable on the RCs lest the Japanese militarists take retaliatory actions against American prisoners of war [Entry 16, box 471].

The archive also reveals an exchange of information between the WRA and several foreign governments. A letter from Stauber to Hector Allard, the secretary of the Canadian legation in Washington, proposed a reciprocal exchange of information and visitation to Canadian operations that paralleled the RCs [October 13, 1942, Entry 16, box 498, folder 79.100 #1]. In particular, Stauber was interested in hearing about conditions the Canadian government imposed upon employers of evacuee labor. Additionally, there is evidence of the Spanish government's interest in the operation of the RCs and the utilization of a captive labor force. The repressive Franco regime is reputed to have employed convict labor in the aftermath of the Spanish Civil War. A letter from Stauber to John Provinse, the chief of the Community Management Division, requested data in preparation for a 1944 visit to the RCs by the Spanish Embassy under the auspices of the State Department [Entry 16, box 417, folder 69.010 #5].

We should also point out that the WRA maintained daily time reports for all evacuee workers, some 2,500 to 3,000 at each center. A post-war conclusion with respect to their efficiency was discouraging. Although the average working day was seven to eight hours of on-the-job presence, the WRA felt it was getting only two to three hours of performance [U.S. Department of the Interior, 1946c, Entry 1, box 1, pp. 32-34]. If this analysis is correct, it could suggest that the cooperatives may have provided sufficient incentives to make them a superior labor control structure than the direct hiring of labor at low wages, which was the only recourse for the WRA. However, it is conceded that no evidence exists in the archives of the work performance of cooperative employees; thus, any comparison to the WRA's direct hires in terms of their relative efficiency must be pure conjecture.

SUMMARY AND CONCLUSIONS

In our view, the need to house, care for, and sustain thousands of captive workers in semi-permanent centers convinced top WRA officials that cooperative enterprises would be the organizational form that would best overcome worker resistance, provide positive incentives, and promote cost efficiency in the non-market environment of RCs. A letter on October 9, 1942 from E.R. Fryer, acting project director (Gila River) to Philip M. Glick, the WRA's solicitor, reveals the thinking behind cooperatives. It is most helpful in illuminating the WRA's underlying rationales implementing this structure [Entry 16, box 495, folder 72.510]:

> We are obligated not only by virtue of our commitments but even more so by our position as guardians to take every possible action to maintain and, in fact, promote economic respectability. Otherwise, not only will we fail in our efforts during war time to preserve human values but in the difficult post-war period we shall have on our hands a great American minority that shall have lost some of its most admirable qualities. On the purely practical side, industrial and agricultural enterprises will fail if we do not by some means make our people a living, vital part of them. Otherwise, each evacuee will generate inevitably into a \$16 or \$19 worker. Here at Gila we are about within two weeks – to launch a net enterprise. We certainly don't want a repetition of Manzanar – strikes, sit-downs, bitterness, charges and counter-charges. It is clearly within our power to dignify the 'net' enterprise. We can easily give it all the vitality needed. We need to make it a Community Enterprise with the proceeds deposited into a community trust fund for the benefit of all members of the work corps shared in proportion to their man-days of work.

It is especially noteworthy to observe that top WRA administrators discussed the use of non-economic (i.e., social) incentives as a way to stimulate evacuee work performance and bring vitality to the cooperative enterprises. On September 1, 1942, Director Myer issued Administrative Instruction No. 27 on the subject of Employment and Compensation [Entry 16, box 495, folder 72.510].[28] This Instruction contained the most detailed policy statement to date and included such items as basic polices, compensation and work rules, employment in consumer enterprises and the private sector, and unemployment compensation. It reaffirmed that all employment would be voluntary, but went on to describe the social inducements that would be

[28]The CWRIC [1997, p. 167] noted: "The new policy adopted in August [1942] remained substantially unchanged throughout the WRA program."

used to promote work effort and desired behaviors. Section II, "The Work Relocation Works Corps and The Order of Merit," and Section III, "Merit Rating Board," are reproduced in Figure 3:

FIGURE 3

Administrative Instruction No. 27

II The War Relocation Works Corps [WRWC] and The Order of Merit

A. The Work Corps was designed to place in the hands of the evacuees an instrument of organization understood by the American people, and an organization which can focus attention on work for the public good and will give recognition to evacuees.

B. Each evacuee, upon first being assigned to a job, shall become thereby enlisted in the WRWC...Upon completion of three months' employment, if his conduct and quality and quantity of his work for that period are certified to the Project Director as outstanding by the Merit Rating Board, an evacuee may be cited by the Project Director for special recognition and be made a member of the Order of Merit which is herby established as a unit within the WRWC. The Merit Rating Board may recommend that such merit recognition shall be withdrawn, for cause, and the Project Director may, upon such recommendation, terminate the membership of an evacuee in the Order of Merit.

C. Preferential consideration shall be given to members of the Order of merit in connection with leaves for private employment, assignment to preferred types of employment within the relocation center, promotion to supervisory positions, and in such other matters as the Project Director may consider appropriate, in recognition of the superior initiative, efficiency, leadership and loyalty of evacuees who achieve in the Order of Merit.

III Merit Rating Board

A. There shall be on each relocation center a Merit Rating Board of seven members, appointed by the Community Council. Members of the Administrative Staff may serve on the Board if requested to do so by the Community Council. This Board may be assigned a full-time evacuee secretary.

B. The Merit Rating Board shall develop and install a simple work report to be made periodically by each supervisor for members of the Work Corps working under his direction. This work report shall cover quality of work, quantity of work, and conduct. (Attitude, punctuality, loyalty to the United States, etc. shall be considered as part of conduct.)

C. The Merit Rating Board shall constantly seek all proper work incentives by planning awards and recognition and may make appropriate recommendations, from time to time, to the Project Director.

The most interesting aspect of Instruction No. 27 is its reliance on non-market factors to spur work effort and recognize achievement. For example, a Merit Rating Board, comprised of evacuees, would evaluate the conduct, quantity, and quality of an evacuee's work. Superior performance would result in membership in a select "Order of Merit," which included benefits such as job promotion and leaves for private employment outside of the center. In essence, therefore, cooperative associations provided a structure for labor control through peer monitoring and evaluation.

Another point of interest in Instruction No. 27 is the call for evacuees to demonstrate loyalty and patriotism to the U.S. In retrospect, the idea that captive workers would be expected to express loyalty to their captors seems almost ludicrous, but Japanese Americans were widely mistrusted in the early 1940s and were subjected to frequent and overt acts of racial prejudice, especially in the months immediately following Pearl Harbor. WRA officials believed that displaying acts of loyalty to the war effort, such as putting forth a full-day's work effort and later volunteering for military service, would help the evacuees obtain employment and join the mainstream of American life.

In essence, evacuees had far fewer options than native workers in utilizing their labor power despite severe wartime labor shortages. Evacuee wages were capped; evacuees were forcibly relocated and detained at remote locations. They were unable to pursue other opportunities to leverage their bargaining position in regard to wages and work conditions. On the other hand, evacuees were not slaves or convicts, and they could not be physically compelled to work, in part because of the government's intent to abide by the terms of the Geneva Convention.[29] Evacuees were provided with basic necessities whether they worked or not, so the economic motives for work effort (e.g., resources necessary for food, clothing, and shelter) were essentially nonexistent.[30] Given these unique circumstances, the

[29]Glick discussed the reasons against work compulsion: "It is probably impossible to compel Japanese to work against their will. While their detention can be shown to relate to the National safety as a war measure, the product of their work would be in no different category from the standpoint of war need than the product of the work of any other American citizen. Furthermore, it would be unwise to attempt to compel them to work in view of present negotiations between the State Department and the Japanese Government, under which the Geneva Convention of 1929 regarding treatment of prisoners of war would be extended to civilian internees and under which the compulsory labor of civilian internees would be prohibited. It is not expected that the lack of authority to compel labor will be a practical obstacle in view of the administrative devices of preferential treatment that can be used" [Entry 16, box 225, folder 31.000].

[30]A February 19, 1943 memorandum from Taizo Inazu, president of the Board of Directors of the Manzanar Cooperative Enterprises, to Dr. William. J. Bruce, superintendent of the Consumer Enterprises Division, listed ten points indicating why the WRA should lessen the financial burden on cooperatives. Point number 6 reveals the incentive problems the WRA constantly faced: "It is felt by the residents that the Cooperative is a division of the WRA set-up to serve the interests of the residents" [Entry 48, box 228, folder 69.030].

WRA felt that cooperatives would be the most effective and cost efficient way to control the labor process. Philip M. Glick, solicitor of the WRA, described why cooperative enterprises were selected [Entry 16, box 225, folder 31.000]:

> The lack of power to compel Japanese to work without their consent may not, however, be a serious obstacle to carrying out the Authority's plans for work programs. Most of them will likely prefer work to idleness, particularly where an increase in income is assured. The Authority can provide other inducements. Cooperation in the work program as a sign of patriotism and loyalty can be stressed. It can be rewarded through various types of awards, insignia, or preferential treatment. Lack of cooperation can be discouraged through various administrative devices, including, if necessary, withdrawal of privileges and denial of more than bare subsistence.

Ultimately, a full understanding of the success of the WRA cooperative associations transcends both labor process and accounting, lying instead with both the culture of the Japanese-American community and the demands of a wartime economy. Rather than sustaining resistance that would have caused any managerial system to fail, Japanese-American evacuees generally portrayed a voluntarism that reflected itself in a commitment to hard work and a patriotism in light of the severest adversity best exemplified by the 442nd, the most decorated battalion of American soldiers in World War II, whose bravery belied the atrocities committed by the American government against civilians who shared their ethnicity.[31]

We are unable to conclude that the WRA's policies, including the decision to establish cooperative enterprises, were inordinately successful. However, the evacuees' spirit of voluntarism and active support of cooperative associations enabled WRA officials to act relatively humanely towards the detained Japanese civilians, although these officials were not immune from obtaining benefits from the wage ceiling which was imposed on evacuees.[32] The few documented cases of civil disobedience

[31]Myer, in his speech to the American Legion, mentioned the exemplary service record of the 442nd [Entry 16, box 471].

[32]For example, a letter on April 13, 1943 from Paul A. Taylor, project director (Jerome), to D.S. Myer (subject: rates for personal services of evacuees working for the appointed personnel) is most revealing [Entry 16, box 495, folder 72.500]: "The appointed personnel at the Jerome Project have expressed a need for the services of a few evacuees to work in their homes as housekeepers, cooks and

and the evacuees' willingness to staff key managerial positions despite receiving wages far below market suggest that cooperative associations enabled the WRA to use non-economic incentives and to avoid physical punishments that typified earlier captive worker environments. That said, it is impossible to parcel out the impact of the cooperative business structure on the response of the Japanese-American evacuee population to their forced confinement.

We can conclude, however, that the accounting information and control procedures played a critical role in the internment episode. The WRA had to justify its policies continually and publicly and to minimize expenditures during a period of severe wartime shortages. The *Finance Handbook* contained the set of templates for recording transactions and creating reports that enabled top officials to compare the centers' performance and monitor their operations. Compiling average daily meal cost figures and creating an elaborate system of repayment for government advances are two examples of the procedures which promoted cost efficiency. Thus, in conjunction with the social mechanisms associated with cooperative business enterprises, accounting played a key role in the management and administration of the RCs.

We would not be relating the full story of the Japanese-American evacuation unless we provide the WRA the opportunity to deliver its final verdict on the relocation program that it directed [U.S. Department of the Interior, 1946d, Entry 1, box 1, p. 99]:

> While some of the evacuees will never recover from the bitter experiences of the evacuation, the Authority is convinced that because of the industry and integrity of the Japanese American, they will quickly build for themselves a better social and economic pattern than they had before the war.

---

nurse maids. I would like authorization for an acceptable full and part-time rate that the appointed personnel should pay for this service. I would suggest that a rate be established on the following basis:

(192 Hour Basis)

Per Hour		Per Month	
$.0833	(A)	16.00 – wage paid to evacuee worker by appointed personnel	
.1510	(B)	19.00 – subsistence	) Paid by
		3.50 – clothing allowance	) appointed
	(B)	6.50 – quarters	) personnel
		——	to WRA
$.2343		$45.00 – Total paid by appointed personnel"	

It is our conviction that with these words the WRA was putting a much too favorable spin upon the whole relocation episode, which remains one of the most shameful events in race relations in the recent history of the United States. The best that can be said for the WRA's participation is that the record seems to indicate that the agency generally did the best it could to make the process as palatable as possible for the oppressed ethnic minority. Yet, it cannot be forgotten that the WRA was an arm of the government and the military establishment that had orchestrated this abomination.

In conclusion, we believe that there are innumerable opportunities to extend this line of research and examine the role of accounting for repressed or captive workers in other non-market settings. One of the most intriguing areas for study is the accounting for convict labor which was common in Australia in the mid-1800s and throughout the U.S. South after the Civil War and well into the early 1900s. Many interesting questions arise regarding leases of human capital. For example, how were these leases structured? What role did accounting play in justifying punishments for failing to meet predetermined task levels? What kinds of accounting information were used by outside contractors who supervised production and marketed convict-made goods? Answering these and related questions will illuminate accounting's role in controlling the labor process of repressed and/or captive workers.

REFERENCES

Braverman, H. (1974), *Labor and Monopoly Capital* (New York: Monthly Review Press).

Burawoy, M. (1979), *Manufacturing Consent* (Chicago IL: University of Chicago Press).

Burawoy, M. (1985), *The Politics of Production* (London: Verso).

Chang, G.H. (ed.) (1997), *Morning Glory, Evening Shadow: Yamato Ichihashi and His Internment Writings, 1942-1945* (Stanford: Stanford University Press).

Clawson, D. (1980), *Bureaucracy and the Labor Process: The Transformation of US Industry, 1860-1920* (New York: Monthly Review Press).

Commission on Wartime Relocation and Internment of Civilians (1997), *Personal Justice Denied* (Washington DC: The Civil Liberties Public Education Fund).

Drinnon, R. (1987), *Keeper of Concentration Camps: Dillon S. Myer and American Racism* (Berkeley CA: University of California Press).

Friedman, A. (1978), *Industry and Labour*: *Class Struggle at Work and Monopoly Capitalism* (London: Macmillan).

Gordon, D.M., Edwards, R., and Reich, M. (1982), *Segmented Work, Divided Workers* (Cambridge: Cambridge University Press).

Greenbaum, J. (1994), "The Forest and the Trees," *Monthly Review*, Vol. 46, No. 6: 60-70.

Hopper, T. and Armstrong, P. (1991), "Cost Accounting, Controlling Labor, and the Rise of Conglomerates," *Accounting, Organizations and Society*, Vol. 16, No. 5/6: 405-438.

Hopper, T.M., Cooper, D., Lowe, T., Capps, T., and Mouritsen, J., (1986), "Management Control and Worker Resistance in the National Coal Board: Financial Controls in the Labour Process," in Knights, D. and Willmott, H. (eds.), *Managing the Labour Process* (Aldershot: Gower Publishing Co.): 109-141.

Jones, D.C. and Schneider, D.J. (1984), "Self-Help Production Cooperatives: Government-Administered Cooperatives during the Depression," in Jackall, R. and Levin, H.M. (eds.), *Worker Cooperatives in America* (Berkeley: University of California Press): 57-84.

Kerr, C. and Harris, A. (1939), *Self-Help Cooperatives in California* (Berkeley: Bureau of Public Administration, University of California).

Knights, D. and Willmott, H. (1990), "Introduction," in Knights, D. and Willmott, H. (eds.), *Labour Process Theory* (London: Macmillan): 1-45.

Littler, C.R. and Salaman, G. (1982), *Class at Work* (London: Batsford Academic).

Myer, D.S. (1971), *Uprooted Americans: The Japanese Americans and the War Relocation Authority during World War II* (Tucson: University of Arizona Press).

Nelson, D. (1975), *Managers and Workers* (Madison: University of Wisconsin Press).

Okihiro, G.Y. (1973), "Resistance in America's Concentration Camps: A Re-Evaluation," *Amerasia Journal*, Vol. 2, No. 3: 20-34.

Robinson, G. (2001), *By Order of the President: FDR and the Internment of Japanese Americans* (Cambridge: Harvard University Press).

Thompson, P. (1989), *The Nature of Work*, 2nd edition (London: Macmillan).

U.S. Department of the Interior (1946a), *Administrative Highlights of the WRA Program* (Washington DC: U.S. Government Printing Office).

U.S. Department of the Interior (1946b), *The Evacuated People: A Quantitative Description* (Washington DC: U.S. Government Printing Office).

U.S. Department of the Interior (1946c), *Impounded People: Japanese Americans in the Relocation Centers* (Washington DC: U.S. Government Printing Office).

U.S. Department of the Interior (1946d), *The Relocation Program* (Washington DC: U.S. Government Printing Office).

U.S. Department of the Interior (1946e), *The Wartime Handling of Evacuee Property* (Washington DC: U.S. Government Printing Office).

U.S. Department of the Interior (1975), *WRA: A Story of Human Conservation* (New York: AMS Press Inc.), reprint of 1946 edition.

Weglyn, M.N. (1996), *Years of Infamy: The Untold Story of America's Concentration Camps* (Seattle: University of Washington Press).

APPENDIX A

Information Requested by D.C. Myer from the War Department (January 1943)

A) Records or Documents Concerning the WCCA Program
   1) AC populations (age, sex, occupation, family size, place of original residence, place of origin, RC to which sent
   2) daily recapitulation reports (nos. 1-12, 44-46, 52-54, 113, 127, 133-34, any issued after 142
   3) addresses of individual evacuees at different stages of the program
   4) property records of the WCCA covering assistance to evacuees in conjunction with property management and disposal in cooperation with the Farm Security Administration and the Federal Reserve Bank of San Francisco
   5) social data registration schedule (WCCA Form S-3)
   6) copies of records, correspondence, applications, or declinations related to repatriation
   7) vital statistics during the assembly center stage
   8) information on sick, insane, deaf, dumb, blind, crippled evacuees
   9) case records of evacuees hospitalized or other medical treatment at the ACs

B) Reports or Information Concerning Individual Evacuees
   1) visitor-visitee file kept by WCCA
   2) individuals sent to RCs from ACs ahead of schedule and reasons
   3) individuals released from ACs and reasons
   4) information about transfers to reunite families
   5) records of those with a "shady past" or those who obstructed administration, or those with "bad performance at ACs
   6) names of students given leave and institutions attending
   7) evacuees from Alaska and reasons for evacuation

C) Reports or Information on Special Situations or Conditions
   1) report on Santa Anita riot – causes, names, actions taken
   2) other specific difficulties in ACs or RCs

D) Information Concerning Physical Facilities and Plant Operation
   1) reports of engineers on facilities at RCs (sewers, electricity, water) – adequacy
   2) information on equipment and supplies
   3) relief grants and clothing allowances pending at time of transfer from AC to RC

E) Observations or Comments on Various General Phases of AC Operations
   1) reports of the WCCA on the entirety of assembly centers operations
   2) evacuee governance at assembly centers – recent shift from self-governance (discontinued) to advisory councils, why the change, conditions that led to the change
   3) most cooperative and uncooperative groups or organizations of evacuees at the ACs
   4) offenses committed and how they were dealt with

Source: letter from Myer to John McCloy, Assistant Secretary of War [January 5, 1943, Entry 16, box 498, folder 79.100 #1]

APPENDIX B

Principal Items or Classes of Information Needed by the Relocation Planning Division

1a. Material called for in the manual regarding the Census of March 31 (manual 50.8.6)
1b. Population distribution by age, sex, citizenship at 3 months intervals back to the beginning of the project
2. Current population reports daily, weekly, and monthly (manual 50.8.2-5)
3. Special information incident to clarifying and correcting records, and clarifying of particular evacuee cases, etc.
3a. Queries from the Central Utah Laboratory to facilitate completion of our Central records
3b. Listing of unauthorized residents of Tule Lake for purpose of clarifying status through interview, hearings, etc.
3c. Cleaning up the residual of incomplete repatriation applications
3d. Supplying corrected lists of seasonal leaves transferred or pending to other projects
4. Completing lists of aliens in residence, particularly those transferred to Tule Lake in the segregation movements.
5. Maintaining a current integrated set of records including a locator file, an evacuee case file, and special records (manual 50.8.1 B(4))
6. Consultative services to Project offices, including review of monthly reports for accuracy, completeness, and comparability of statistical data (manual 50.8.8)
7. Analysis services, analysis and interpretation of statistical data pertaining to evacuees (manual 50.8.7).
7a. Analysis of repatriation applications, giving classification by such factors as age, sex, citizenship, year and method of entry into the U.S., residence and schooling in Japan, etc.
7b. Information concerning stockade residents (many information categories specified)
7c. Kibei: the number of the so-called "1940 Kibei," that is, Kibei who are unmarried, whose families are not in the U.S. since 1935, by age, sex, years in Japan, number requesting repatriation, etc.
7d. Inductees
7e. Project employment – distribution of employment – number of families having one or more wage earners – relation of employment status to welfare load – nature and origin of welfare relief cases (drawn predominately from what groups)
8. Auxiliary reports
8a. Check list of segregee movements to Tule Lake, giving dates of each movement and number transferred, by age (under and over17), sex, citizenship, reason for segregation
8b. Check list of non-segregee movements out of Tule giving date, and number of evacuees, by age (under and over 17), sex, and citizenship
8c. Prompt return of receipted train lists

Highest priority items are identified as 7c, 7b, 7d, and 7a in that order. 7e will take time with immediacy depending upon project considerations. 1a, 1b, 2, 5, 6, and 8c are to be handled routinely. 3 is to be handled as circumstances require. 4 must be kept completely current to meet commitments. 8a and 8b are small jobs. 8c must be dealt with promptly.

Source: Stauber to Best, April 28, 1944 [Entry 16, box 498, folder 79.100 #4]

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 203-210

Garry D. Carnegie
UNIVERSITY OF BALLARAT

"THE ROARING NINETIES": A COMMENT ON THE STATE OF ACCOUNTING HISTORY IN THE UNITED STATES

Abstract: This comment on a recent contribution by Fleischman and Radcliffe [2005], entitled "The Roaring Nineties: Accounting History Comes of Age," specifically deals with their cautionary comments on the general condition of accounting history research in the U.S. around the close of that decade. The author contends that public interest in accounting's past is currently strong, especially following the recent corporate scandals and audit failures in the U.S., and points out that accounting history research projects which are of relevance to policy makers and regulators are likely to be both funded and, accordingly, recognized.

Dick Fleischman and Vaughan Radcliffe have rendered a timely, interesting, and well-written account of an action-packed decade in accounting history research and publication which has been captured by the colorful title "The Roaring Nineties: Accounting History Comes of Age" [Fleischman and Radcliffe, 2005]. Readers of this contribution gain a strong sense that accounting history, as a field of scholarly endeavor, is more popular than ever before. Indeed, the authors stated, "it was only in the last decade of the 20th century that a substantial expansion and maturation of its research agenda occurred" [Fleischman and Radcliffe, 2005, p. 61; see also, Walker, 2005]. The underlying level of enthusiasm in the field, as is manifest within the article itself, is equally evident in recognizing the fact that this contribution appeared in the *Accounting Historians Journal* within five years after the end of "the roaring nineties" (1991 to 2000).

Notwithstanding the generally positive tone described above, the final section of the article, entitled "concluding remarks and a cautionary word," refers to an ominous cloud on the horizon of accounting history research and publication in the U.S. [Fleischman and Radcliffe, 2005, pp. 82-86]. Indeed, the authors argued that "the field's prospects in the U.S. seem to be diverging from the promising conditions seen in much of the rest of the world" [p. 83]. According to Fleischman and Radcliffe [2005, p. 84], "conditions in the U.S. are significant for researchers worldwide, not only because history is threatened in one jurisdiction but because that jurisdiction has proved to be an influential model in both the practice and study of accounting."

Without desiring to re-examine the difficulties being faced in the U.S. by accounting history, as discussed by Fleischman and Radcliffe, it is useful to summarize the recent adverse indications. These include the apparent exclusion of accounting history from major U.S. journals; the failure to renew the professoriate in this field; the disinclination of accounting departments to provide doctoral training in the field; and the declining U.S. membership of the U.S.-based Academy of Accounting Historians.[1] In their final sentence, Fleischman and Radcliffe [2005, p. 86] almost worryingly stated a hope that the roaring nineties "will not also be regarded as ending with the quiet but discernable *death* of accounting history in the U.S." (emphasis added). In sharing this hope and also in supporting the authors' portrayal of accounting history in a broader international context, the following brief comments are made in the interest of furthering discussion and debate on the trends identified.

Is interest in accounting history at or near death in the U.S.? Looking in from the outside, and acknowledging the disadvantages this external insight may provide, the present answer is almost certainly a negative one. Why is this so? It is because never before in the U.S. has there been such a strong public focus on accounting and audit from the early 2000s when "a raft of corporate scandals highlighted how auditors failed to blow the whistle on financial reporting frauds, such as Enron, WorldCom and HealthSouth" [Parker, 2005b, p. 12], and which brought the dramatic demise of Arthur Andersen. Should any readers wish to find out more about such happenings, venture to a cinema complex near you and watch the movie *Enron: The Smartest Guys in the Room* or read one or more of the almost endless array of books on such major corporate collapses and the related accounting and audit debacles. These spectacular happenings and the associated reforms made to the regulation

[1]At the time of writing, the author was a trustee of the Academy of Accounting Historians. All views expressed in this paper are the personal views of the author and may or may not be supported by the Academy.

of accounting and audit in the U.S., along with activities within the accounting profession generally, have stimulated an industry of accounting watchers, commentators, and authors. Many authors of this genre have taken an historical perspective in preparing their works, including those who have focused attention on accounting practices, accounting firms, and, more generally, the accounting profession.

The writer, for instance, has recently reviewed in an accounting journal two books which take an historical perspective in examining the recent U.S. events. The first of these two books is entitled *Unaccountable: How the Accounting Profession Forfeited a Public Trust* by Brewster [2003] [Carnegie, 2005b]; the other is *Inside Arthur Andersen: Shifting Values, Unexpected Consequences* by Squires et al. [2003] [Carnegie, 2005a]. There are many other books of this ilk or similar [see, for example, Jeter, 2003; McLean and Elkind, 2003; Toffler and Reingold, 2003; Wood, 2004; Eichenwald, 2005; Skeel, 2005].

It is true, of course, that such authors are almost always not accounting academics in leading universities with long lists to their names of refereed articles on the historical development of accounting. Yet, authors of this genre are typically experienced writers who seem to rely heavily on the official histories of firms, such as Arthur Andersen, and/or classic accounting history texts, such as *A History of Accountancy in the United States: The Cultural Significance of Accounting* by Previts and Merino [1998] and *The History of Accounting: An International Encyclopaedia*, edited by Chatfield and Vangermeersch [1996], as well as, in a number of cases, oral history interviews and recollections of their experiences by leading accounting professionals. Classic texts on accounting's past at least summarize, in a convenient form, the relevant accounting history research which underpins their preparation.

Books released for the mass market of the kind described by non-accounting historians are typically interesting and easy to read. They would surely not have been published unless there was sufficient commercial interest in their preparation. And so, there presently exists commercial interest in historical perspectives on accounting and audit in the U.S. There is also greater oversight of accounting and audit in the U.S. than ever before as a result of the disasters which have sparked this unprecedented popular interest in accounting's past.

What are the research topics that are occupying the minds of U.S.-based members of the Academy of Accounting Historians? It is very difficult to submit any authoritative response to this question. One way of gleaning some fragmentary evidence, however, is to examine the program of the 2005 Research Conference of the Academy which was held in Columbus, Ohio during October 6-8, 2005.[2] Among the concurrent research papers presented, only one research paper was identified which directly addressed the issues which are effectively selling books, such as those written by Brewster [2003] and Squires et al. [2003]. The single paper is entitled "Neo Liberalism, Deregulation and Financial Reporting Abuses during the Last Two Decades in the United States" by Merino et al. [2005]. At the time of writing, no articles of this genre have appeared in the Academy's journal, the *Accounting Historians Journal*.

It would appear that the calamity which has besieged the accounting profession in the U.S., with implications for the accounting profession worldwide, and which has occupied many non-accounting historian authors has yet to exercise a discernable impact on the research agendas of many, if not most, U.S. accounting historians. And yet, accounting and other policy makers and regulators in the U.S. are likely to be at least interested in being acquainted with rigorous and robust research findings which assist them in their analyses of issues and in formulating policies and/or rules and even in identifying past accounting solutions that may be relevant to current problems. Are prominent and even exciting research opportunities being identified and realized by Academy members in the U.S.? If not, perhaps U.S. accounting academe is failing, at least in part, to fulfill a vital role in the U.S. economy and society and, therefore, to realize its potential for the nation and beyond.

It is to be hoped that research within institutions of higher education, including accounting research, is responsive to what goes on in the world. Many scholars at least hope that their research will assist in shaping public opinion and even lead to changes in behavior in society. The popular commercial interest in the history of accounting will hopefully translate into greater receptivity towards history by the U.S. accounting research community. Fear of failure to sharpen up to society's expectations and needs may even persuade the editors of capital-markets journals and their followers, in particular, to become more interested in, or at least tolerant of, the important insights that can be provided by rigorous historical investigation and analysis in accounting. If not, claims that such research groups live

[2]A copy of the conference program is found at the following site: http://fisher.osu.edu/acctmis/hall/conference/ (site visited on October 18, 2005).

in their own world as self-perpetuating institutions may become increasingly valid in the aftermath of the recent major accounting shocks in the U.S. [see, for example, Lee, 1995, 1997; Williams and Rodgers, 1995].

Of course, it may be argued that any emerging focus by accounting historians in the U.S. on corporate failure is not sustainable as the accounting profession is now beginning to regain public trust in that country [see, for example, Parker, 2005a, b]. However, the outgoing chairman of the Public Company Accounting Oversight Board (PCAOB), William McDonough, is cited as stating that "'investors' faith in the accuracy of audited published statements has not been fully restored" [Parker, 2005b, p. 12]. According to McDonough, the alleged securities fraud at Refco indicates "there is much work still to be done" [Parker, 2005b, p. 12]. Indeed, the work of the PCAOB has shown that there are still, in the reported words of McDonough, "significant difficulties" in the dependability of certain auditing work being undertaken in the U.S. by major international accounting firms [Parker, 2005b, p. 12; see also, Norris, 2006]. Unlike previous rounds of corporate failure in the U.S., where the accounting profession has experienced scrutiny which then subsided, this round of intense scrutiny has never been stronger and will not be completely shaken off if ever, until leading companies are no longer regularly required to restate their accounts through the work of the PCAOB.

Increasingly, research in higher education institutions is being measured in convenient and supposedly reliable ways. One key way of quantifying research productivity is by means of measuring the amounts of direct funding which academics receive, if any, for their proposed research projects from public and other funding bodies [Carnegie and Napier, 2002, p. 711]. Around the globe, accounting historians in at least some countries are becoming increasingly conscious of the need to seek external funding for their research activities, and there is evidence to suggest that certain scholars are becoming well versed at obtaining competitive research funds to assist in financing their accounting history research on a variety of topics, including corporate collapse and audit failure. This should be recognized as a positive trend for accounting history research in an international context rather than a perceived threat to the field.

The growing need to seek and attract such research funds by means of competitive grants, especially in terms of establishing or maintaining the visibility of research groupings or communities, appears to be no less urgent in the field of accounting history than in the U.S at this time. Accordingly, U.S.-based Academy members should aim, where possible, to make their research more visible, and perhaps by necessity of more relevance to economy and society, by seeking available financial support from public and other funding agencies in the country. There is an old adage: "What gets measured gets done." In the modern era of academe, "what gets measured gets recognized." Through increased recognition, the field will prosper internationally.

Presumably, recognition is what accounting history research and publication in the U.S. currently needs most of all. If that recognition comes in line with the current enhanced levels of public interest in the field as outlined above, at least some other problems, as elucidated by Fleischman and Radcliffe [2005, p. 85], will tend to be addressed, if not tempered in due course. The so-called problematic organization of the field in the U.S. may be perceived as less of a concern should accounting history research and publication gain enhanced recognition and even contribute to the shaping of public opinion on a scale not yet experienced. Such things, of course, are much easier said than done! Predicting the future is not the aim of this exercise. Notwithstanding, the perceived threat to accounting history in the U.S. can equally be perceived in more positive terms, if not as an opportunity, in the current climate.

This contribution will hopefully generate further discussion and debate on the subject. If so, such contributions may assist in demonstrating that accounting history research is essential in augmenting our understanding of accounting's past and present both in and beyond the U.S. Irrespective of where historical accounting research is undertaken, "explanations adopting a historical perspective will help us to understand the nature of accounting change and its impacts on organizational and social functioning, as well as enabling us to appreciate better, and thereby effectively critique, the accounting of today" [Napier and Carnegie, 1996, p. 6; see also Carnegie and Napier, 1996; Previts et al., 1990, pp. 3-8].

REFERENCES

Brewster, M. (2003), *Unaccountable: How the Accounting Profession Forfeited a Public Trust* (Hoboken, NJ: John Wiley & Sons).

Carnegie, G.D. and Napier, C.J. (1996), "Critical and Interpretive Histories: Insights into Accounting's Present and Future Through its Past," *Accounting, Auditing & Accountability Journal*, Vol. 9, No. 3: 7-39.

Carnegie, G.D. and Napier, C.J. (2002), "Exploring Comparative International Accounting History," *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 2: 689-718.

Carnegie, G.D. (2005a), book review of Squires et al., *Inside Arthur Andersen: Shifting Values, Unexpected Consequences*, *Accounting History*, Vol. 10, No. 3: 121-123.

Carnegie, G.D. (2005b), book review of Brewster, *Unaccountable: How the Accounting Profession Forfeited a Public Trust*, *Accounting History*, Vol. 10, No. 1: 129-132.

Chatfield, M. and Vangermeersch, R. (1996), *The History of Accounting: An International Encyclopaedia* (New York and London: Garland Publishing, Inc.).

Eichenwald, K. (2005), *Conspiracy of Fools: A True Story* (New York: Broadway Books).

Fleischman, R.K. and Radcliffe, V.S. (2005), "The Roaring Nineties: Accounting History Comes of Age," *Accounting Historians Journal*, Vol. 32, No. 1: 61-109.

Jeter, L.W. (2003), *Disconnected: Deceit and Betrayal at WorldCom* (Hoboken, NJ: John Wiley & Sons).

Lee, T.A. (1995), "Shaping the US Academic Accounting Research Profession: The American Accounting Association and the Social Construction of a Professional Elite," *Critical Perspectives on Accounting*, Vol. 6, No. 3: 241-261.

Lee, T.A. (1997), "The Editorial Gatekeepers of the Accounting Academy," *Accounting, Auditing & Accountability Journal*, Vol. 10, No. 1: 11-30.

McLean, D. and Elkind, P. (2003), *Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron* (New York: Penguin Books).

Merino, B.D., Mayper, A.G., and Tolleson, T.D. (2005), "Neo Liberalism, Deregulation and Financial Reporting Abuses during the Last Two Decades in the United States," conference paper presented at the 2005 Research Conference of the Academy of Accounting Historians.

Napier, C.J. and Carnegie, G.D. (1996), "Editorial," *Accounting, Auditing & Accountability Journal*, Vol. 9, No. 3: 4-6.

Norris, F. (2006), "When Familiarity Fails to Find Fraud," *International Herald Tribune*, February 24: 14.

Parker, A. (2005a), "A Reshaped Role Accounted For," *Financial Times*, September 22: 11.

Parker, A. (2005b), "The Man Who Put Auditing First," *Financial Times*, December 1: 12.

Previts, G.J. and Merino, B.D. (1998), *A History of Accountancy in the United States: The Cultural Significance of Accounting*, 2nd edition (Columbus: Ohio State University Press).

Previts, G.J., Parker, L.D., and Coffman, E.N. (1990), "Accounting History: Definition and Relevance," *Abacus*, Vol. 26, No. 1: 1-16.

Skeel, D. (2005), *Icarus in the Boardroom: The Fundamental Flaws in Corporate America and Where They Came From* (New York: Oxford University Press).

Squires, S.E., Smith, C.J., McDougall, L., and Yeack, W.R. (2003), *Inside Arthur Andersen: Shifting Values, Unexpected Consequences* (Upper Saddle River, NJ: Financial Times Prentice Hall).

Toffler, B.W. and Reingold, J. (2003), *Final Accounting: Ambition, Greed and the Fall of Arthur Andersen* (New York: Broadway Books).

Walker, S.P. (2005), "Accounting in History," in *Proceedings of the International Workshop on Accounting History in Italy* (Rome: Casa Editrice Rirea): 605-630.

Williams, P.F. and Rodgers, J.L. (1995), "*The Accounting Review* and the Production of Accounting Knowledge," *Critical Perspectives on Accounting*, Vol. 6, No. 3: 263-287.

Wood, M.B. (2004), *Business Ethics in Uncertain Times: Case Studies of Enron, WorldCom and Other Shady Accounting Practices* (New York: Prentice Hall).

Accounting Historians Journal
Vol. 33, No. 1
June 2006
pp. 211-214

Vaughan S. Radcliffe
UNIVERSITY OF WESTERN ONTARIO

"IT'S OYSTERS, DEAR!" PROFESSOR CARNEGIE'S PRESCRIPTION AND THE SEEMING FATE OF ACCOUNTING HISTORY IN THE UNITED STATES

It is always a thrill to find someone who is familiar with one's work. I well recall the time that someone first came up to me at a conference and advised that she/he had read my work during Ph.D. studies, had thought it marvelous, and so on. I will not embarrass the colleague in question by naming names; suffice it to say that he/she is now a well-known academic at an institution not far removed from my own. The question, I suppose, is, who should be more embarrassed in reviewing such a navigation of the tropes of conference life, the then student bent on making a good impression or the lonesome academic who so very much wanted to believe what was being said?

It was with a frisson of excitement therefore that I found that our good colleague Garry Carnegie had penned a response to the recent review paper written by Dick Fleischman and myself. I have not had a comment on a paper come quite so soon before, and so there were loud echoes of that first conference encounter and exchange of familiarity in work when I first heard of this note. Unfortunately, the frisson of excitement is gone, and the familiarity with the work in question seems distant. Whether more or less distant than that of my earlier interrogator is for the reader to decide.

Carnegie starts well enough with a strong précis of arguments made in the piece regarding the seeming decline of accounting history in the U.S. He notes a series of factors including the apparent exclusion of accounting history from major U.S. journals, a failure to renew the accounting history professoriate in the U.S., the lack of available doctoral training in the U.S., and the declining U.S. membership of the Academy of Accounting Historians. Carnegie lists these factors without apparent disagreement and then wishes to share in the hope that the authors, Dick and I, came to in wanting not to believe that the nineties might become known as ending with the "quiet but discernable *death* of accounting history in the U.S." Carnegie mentions that he added the emphasis here, but in a way he need not have; the original manuscript used the term "death rattles" but as with any co-authorship, a more measured colleague (in this case Dick) called on a less measured colleague (in this case me, I admit) to cool it. So death rattles might have been too strong, but a sense that the end of the 1990s marked a tipping point in the trajectory of U.S. accounting history seems to hold true.

In a way, I wish I had not cooled it for the sounds of the death rattles are, quite honestly, clearly there in each of the gatherings of friends that constitute the Academy of Accounting Historians' annual research conferences and in the lovely ice cream socials held at the annual meetings of the American Accounting Association.[1] I say this despite the promising inclusion of accounting history in the body of the AAA's annual meeting program even though this comes under the delightful title of "History, Integrative and Other."[2] So next on to Carnegie and to the other.

What is Professor Carnegie's prescription to cure that which ails the accounting history academy in the U.S? It is to write popular works of the type he lauds in his text (e.g., Parker, 2005; Brewster, 2003; or Squires et al., 2003). In other words, a blast of populism should show the public interest benefits of a keen understanding of accounting history and should allow us all to join friend Carnegie in his belief that answer of whether accounting history in the U.S. faces death should be overwhelmingly "negative."

Where to begin? An immediate observation would be that a similar prescription of populist appeal is hardly of attraction or interest to capital market researchers, agency theorists, or others who toil in their allotments within the AAA's intellect-

[1]A disclaimer is due here; I have served as a trustee of the Academy, but do not speak for this fine body in any formal capacity. These views are strictly my own; furthermore, I have good reason to believe that these views are different from those of my co-author on the "Roaring Nineties," Dick Fleischman. As always, Dick's sense of propriety is strong, and so he insisted he not be an author on any reply. This means Dick is never found suspect of self-dealing given his service to the Academy as editor of the *Accounting Historians Journal*. It also means that his younger and more naïve or doleful co-author has free rein to express just why Professor Carnegie's prescription seems so unlikely to cheat fate for the Academy and its friends.

[2]Either the AAA's staff has been reading sophisticated social theory or discussion of the other happened by some curious chance at the keyboard.

ual array. So in that sense, we are different people with a different lot.[3] A further observation, and as a trained field researcher who combined this with historical work that did not quite meet the 30-year rule alluded to by Carnegie (and so had a closer link to practice, or a "history of the present," something Carnegie seems to like) I would simply say, there is *no substitute for lived experience*.

Not even the academic tourism of the conference circuit can fill in for the lived experience of trying to plough one's furrow as an accounting historian in the unforgiving ground of contemporary North American business schools. Remember that North American Ph.D. graduates are now very rare with some 90 per year seeming to be the prevalent count. Precious few of these have the interest or training to engage in accounting history, and, candidly, this observation alone, together with the demographic profile of active Academy members, assures that powerful demographic forces are bearing down to shape the future of academic accounting history in the U.S.

But beyond this, Professor Carnegie's prescription contains a sense of the willed disbelief of that initial encounter and expression of familiarity with work, which now seems so long ago. Surely, we want a field to succeed if we have worked long and hard with its problems. We look for that success or at least continuation with the fervor of a drowning man grasping for aid. And yet wanting this does not mean that it is true. At the simplest level, a renewed public interest in accounting does not necessarily equate to a popular interest in accounting history. As Carnegie notes, this is all easier said than done. Even the most talented accounting historian seems unlikely to crack the best seller lists. Indeed, it is telling that, as Carnegie himself notes, the public works he admires work at a distance, several times removed, from the accounting history he claims are their basic source. Furthermore the authors of such work are "almost always not accounting academics." In this sense, the Carnegie prescription seems to recognize its fallacy even within itself and in its own terms. Wishing for a new and more publicly embraced

[3]Populism is not needed to ensure their continued sense of purpose given that it is adherents of such work that overwhelmingly handle the levers of control within American accounting academe. These colleagues seem unmoved by the shriller aspects of positive accounting theory, and certainly seem not to follow the idea of one really big market for ideas. As historians have noted from a distance, such a view fails to account for the seemingly very large investments made by accountancy's positivists in social networks and social dexterity of a type long exhibited by the more successful characters within AAA central.

form of accounting history is not the same as, indeed is quite distinct from, the scholarship whose demise he claims not to see. In a sense this is reminiscent of *Alice in the Looking Glass* and her conversation with her cat:

> By the way, Kitty, if only you'd been really with me in my dream, there was one thing you would have enjoyed – I had such a quantity of poetry said to me, all about fishes! Tomorrow morning you shall have a real treat. All the time you're eating your breakfast, I'll repeat 'The Walrus and the Carpenter' to you; and then you can make believe it's oysters, dear!

It is with regret that I find that Professor Carnegie's prescription is to the seeming fate of accounting history as Alice's poetry of fishes is to her cat. Belief in the Carnegie prescription is as making believe "it's oysters dear" for you and for me. Just because we wish it were so, does not make it so in practice. We can still make believe, however, if it makes what may lie ahead any easier. I would rather see a call of this nature lead to fervent effort to train a new generation of accounting historians to take the place of those who will retire. Failing that, we might try to make believe its oysters for us all, a willed state that surely beats embrace of the signs of the alternative. Death rattles anyone?

REFERENCES

Brewster, M. (2003), *Unaccountable: How the Accounting Profession Forfeited a Public Trust* (Hoboken, NJ: John Wiley & Sons).

Parker, A. (2005), "The Man Who Put Auditing First," *Financial Times*, December 1: 12.

Squires, S.E., Smith, C.J., McDougall, L., and Yeack, W.R. (2003), *Inside Arthur Andersen: Shifting Values, Unexpected Consequences* (Upper Saddle River, NJ: Financial Times Prentice Hall).

THE ACADEMY OF ACCOUNTING HISTORIANS

APPLICATION FOR 2006 MEMBERSHIP

Individual Membership: $45.00
Student Membership: $10.00

Name: (please print) ____________________________________

Mailing Address: ____________________________________

City: ____________________ State: ____________________

Zip Code: ____________________ Country: ____________________

Accounting History Area of Interest: ____________________

____

Phone: ____________________ Fax: ____________________

E-mail: ____________________________________

Method of Payment: /___/ check enclosed

/___/ Mastercard /___/ VISA

Card Number: ____________________

Expiration Date: ____________________

Signature: ____________________

Mail to: Mrs. Kathy H. Rice
The Academy of Accounting Historians
The University of Alabama
Box 870220
Tuscaloosa, AL 35487
USA