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THE ACCOUNTING HISTORIANS JOURNAL

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AGENT'S REPUTATION, ACCOUNTING AND COSTING IN ORGANISATIONAL CONTROL STRUCTURES

Abstract: This paper examines the roles of accounting and costing in the management of coal mining during the Industrial Revolution in Britain, and considers the impact of the agent's reputation in the development and use of these systems.

INTRODUCTION

This paper deals with the accounting and costing systems employed during the British Industrial Revolution at Tanfield Moor Colliery in North East England. The paper has three objectives: (1), to add to the body of research [Edwards, 1989; Fleischman and Parker, 1991] that questions the view of Pollard [1965, p.248] that “the practice of using accounts as direct aids to management was not one of the achievements of the British Industrial Revolution”; (2), to challenge the expectation of Fleischman and Parker [p.363] that “nascent cost accounting would flourish more notably in a factory environment” than in extractive industries; and (3), to examine the use of accounting and costing information by an absentee owner and his agent, and in doing so, to provide some reflections on principal-agent relationships and organisational control. The paper is organised into three main sections. In the first section, the context is set by means of a review of the relevant literature of the coal industry. In the second section, aspects of agency theory are outlined and a detailed examination is undertaken of the accounting and costing systems employed in the particular context of Tanfield Moor Colliery. Finally, the implications of the current research are considered.

Acknowledgements: I am grateful to the staff of the Northumberland and Durham Record Offices for their help and efficiency. I am also grateful to my colleagues for their comments on drafts of this paper, to the anonymous referee of The Accounting Historians Journal, and, particularly, to Professor R.K. Fleischman.

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THE CONTEXT

The “Bibliography of the British Coal Industry” [Benson, 1981] indicates a vast literature on the British Coal Industry. However, in setting the context for the current paper, the present author has noted the caveat expressed in the definitive series “The History of the British Coal Industry”: coal was a regional industry rather than a national one. Although this caveat was expressed [Hatcher, 1993, p.vi] in relation to the period up to 1700, “intense regional diversity” [Church, 1986, p.2] continued to characterise the industry throughout the eighteenth and nineteenth centuries. Thus the contextual analysis of the current paper is based on North East England in particular, and factors relating to other regional or to national circumstances are drawn into the analysis only if they are directly relevant.

The North East of England is made up of two counties, Northumberland and Durham, and has three major rivers that lead to the sea: the rivers Tyne, Wear and Tees. Access to the sea was crucial to the development of the North East as Britain's premier coal mining region. Coal is an extremely bulky and heavy commodity in relation to its market value, making its overland transport difficult and costly. Water transport was the only cost-effective means of transporting coal over long distances: in 1675 Sir Robert Southwell considered that transporting coal from Newcastle Upon Tyne to London by an overland route was sixty times more expensive than by the sea route [Hatcher, 1993, p.13]. The North East was unique in having ample coal deposits, access to the sea and being within striking distance of the key market of London. Thus the North East was well placed to respond when the demand for coal grew in the London market under the pressures of rising population, increasing industrialisation and the depletion of timber-fuel reserves. Although precise output figures are a matter of great debate there is a consensus [e.g. Blake, 1967; Hatcher, 1993; Nef, 1932], that the late sixteenth century marked the first great expansion of the region’s coal industry. Output rose from 90,000 tons in 1560, c. 40 per cent of national output, to 1,250,000 tons in 1700, c.47 per cent of national output [Hatcher, 1993, p.68], to about 3 million tons in 1775, c.34 per cent of national output, and to about 7 million tons in 1830, c.23 per cent of national output. This reduction in national dominance took place as industrial demand for coal grew

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throughout the country and facilitated supply by other coal fields.

Between 1805-1830, the North-East coal trade was dominated by the Joint Durham and Northumberland Coal Owners Association [Flinn, 1984, p.256]. The major function of the joint association was to enhance colliery profits by restricting output and eliminating price competition. The total “vend” or sale of coal was fixed by a central committee that allocated quotas to collieries on a fortnightly or monthly basis, levying heavy fines for excess output. At times, as in periods during 1818-19, 1820, 1822, 1826 and 1829, failure to agree the sub-division of the vend between collieries led to open trade [ibid., p.263]. The regulation of sales referred only to “sea-sale” coal, that is to coal transported by sea rather than by land. However the North-East’s principal markets were “sea-sale” being mainly along the east coast and in London. In supplying these markets the North-East coal field produced about 3 million tons of coal in 1775, c.34 per cent of national output, and about 7 million tons of coal in 1830, c. 23 per cent of national output. However in 1830 the North-East “was still the acknowledged leader in technology, in the skill of its miners, and in the expertise of its managers” [ibid., p.28]. Members of the senior managerial class were known as “viewers”, a term derived from the verb “to view”, that is to survey, a colliery. In the North-East the term viewer was applied to colliery managers, in the paid employment of the owners, and also to independent professional experts who provided their services on a freelance basis. Essentially, the task of an employed manager was to run the day-to-day operations of the colliery, whilst the independent professional “advised and directed larger issues of colliery design, construction and development” [ibid., p.58]. Professional viewers “were a mixture of manager, engineer, surveyor, accountant and agent” [ibid., p.59] and attracted their own “schools” of assistants and apprentices. There were three great schools in the North-East at the beginning of the nineteenth century: those of Buddie, Barnes and Johnson. Buddie was “the doyen” [Burgess, 1986, p.15], being viewer, agent, consultant and part-owner in many of the region’s leading collieries. Furthermore, from 1806-1831 Buddie was secretary to the Tyne Committee of the Joint Association and at times represented very powerful interests on the Wear Committee. Although the constitution of the Joint Association
allowed for democratic management, the extent to which it could be dominated by one man should not be underestimated. (Given) his immense reputation... (it) must have (been) very difficult to offer serious opposition to Buddie on either committee [Flinn, 1984, pp.261-2]

It is clear that Buddie was the dominant coal-mining professional of his era, and, in the midst of heavy, wide-ranging professional responsibilities, he chose to act as viewer and manager at only two collieries: at the mighty Wallsend Colliery and at the relatively minor Tanfield Moor Colliery [ibid., p.59]. Whereas Wallsend Colliery was owned by residents of the North-East who at times inter-linked ownership of Wallsend with partnerships in other collieries, Tanfield Moor was owned throughout Buddie's management by a single individual, William Morton Pitt, who lived far away in the South-West of England. Thus, the archives relating to Tanfield Moor Colliery, housed at the Northumberland Record Office (NRO) and the Durham Record Office (DRO), provide a unique opportunity to analyse the roles of accounting and costing in the context of Buddie's management and in the context of the principal-agent relationship of Pitt, the absentee owner, and Buddie, the on-site manager.

ACCOUNTING AND COSTING AT TANFIELD MOOR COLLIER Y

Introduction

Based on a detailed study of the coal-mining industry of the British Industrial Revolution, Fleischman and Parker [forthcoming] are set to overturn their previous expectation [1991, p.363] that "nascent cost accounting would flourish more notably in factory environment" than in extractive industries. Following particular searches in the archives of the North-East England coal industry, their forthcoming study will help to bring to a wider audience the wealth of this specific element of Britain's cost accounting heritage. Until now, this heritage has not been subject to great scrutiny by accounting historians but has long been used as a basis for studies by economic historians [e.g. Ashton and Sykes, 1964]. Recently Hatcher [1993] has noted that accounting and costing have long been of great importance in the British coal industry in general and that of the North-East in particular. Having examined the archive evidence
Hatcher stated [p.305] that, prior to 1700, colliery accounts, whatever their deficiencies, were “among the most advanced of all forms of contemporary business accounts” and conclude [p.306] that

few colliery accounts did not permit output, sales, costs and revenues to be calculated and mapped...... (and) information extracted from accounts could provide a serviceable basis for weighing the prospects of future ventures. Of the higher order data, cash flow was also normally discernible, and so too was the balance between output and sales, the average cost of producing each unit of coal, and the average profit from its sale. Bookkeeping as practised by very many collieries, in all its eccentricity and lush profusion of styles, was a serviceable tool of management.......  

The Hatcher study is a work of a economic and social history that provides valuable early surveys of accounting and costing that indicate that these disciplines were well established in the British coal-mining industry prior to the Industrial Revolution. Thus the current work on accounting and costing in Tanfield Moor Colliery during the Industrial Revolution is set in the context of a developed and widely employed knowledge base. However by focusing on one specific colliery the current work can provide a wealth of a detailed evidence to add to the rather more generalised picture built up by the extant economic histories.

**Tanfield Moor Colliery**

The Pitt family, who lived in the South-West of England, claimed to have purchased Tanfield Moor Colliery in 1690 [NRO Bud/22, p.150]. The Pitts were absentee owners, who relied upon others to manage the colliery for them. It is probable that in the late 1700s the colliery was managed on behalf of the Pitts by a family of local viewers, the Browns, who had conducted a “view” of Tanfield Moor in 1764 [NRO, WAT 2/5, p.32]. In the Browns’ “View Book” [NRO, WAT 2/5] there is a run of fortnightly reports for Tanfield Moor, dating from December 1776 - July 1778. Essentially these reports consisted of a listing of payments and a physical reconciliation of stocks, production and sales, and were prepared for “the use of John Pitt Esq.”, the absentee owner of the colliery. The reports enable current researchers to gain some indication of the opera-
tion of the colliery. The reports indicate that while the colliery was owned by Pitt and its viewers were the Browns, the mining of coal was undertaken by two contractors, James and William King, this form of mining organisation being widespread in the North-East between 1780 and 1815 [Taylor, 1960]. The colliery was the overall unit of organisation, and contained two different pits, "the Willey pitt" and "the Brook pitt". As was common practice, over time individual pits were worked out and new pits opened within the continuing operations of the colliery. From the pit, the coal was transported to the staithes, or loading points, on the River Tyne whence it was shipped down river on keel boats and transferred at sea to colliers which sailed down the East coast to sell the coal mainly at the London markets. In a draft pro-forma report of the 1790s [NRO Bud/22, pp.44-45], the system for reporting physical flows of coal was reformulated and a model "general" account developed to record transactions with the "fitter" (sales agent) and for cash. However, there is no evidence of either of these systems being used in practice. Nevertheless, the model general account does contain information on cash balances, receipts, payments and remittances to the owner that would probably have been of great value to an absentee owner.

As an absentee owner, Pitt was particularly reliant upon his on-site managers. Much of Pitt's period of ownership was dominated by two on-site managers, Nathaniel Clayton, Agent from 1800-1822 and John Buddle, who was Pitt's Agent from 1822-1836. Since the relationship between Pitt, on the one hand, and Clayton and Buddle, on the other, are clearly relationships between a principal and his agents, relevant elements of the agency literature are now reviewed in order to provide additional context prior to the detailed examination of Tanfield Moor's accounting and costing archive. Jensen and Meckling [1976, p.308] define an agency relationship as a contract under which the principal engages the agent to undertake work on his behalf whilst delegating some authority for decision making to the agent. They note that, at times, the agent may act to further his own interest rather than that of the principal, and that the principal can act to limit such tendencies by offering appropriate incentives to the agent and by using monitoring systems designed to limit deviant activities by the agent. The agent may incur bonding costs to guarantee that he will not undertake certain actions which would harm the principal or to ensure that the principal would be compensated for any such actions.
However despite incentives, monitoring and bonding, the principal may suffer “residual loss” because of divergence between the agent’s decisions and the decisions that would maximise the welfare of the principal.

Principal-agent relationships were at the core of the “Memorandum of Agreement” [NRO Bud/22, pp.37-40] made in 1800 when William Morton Pitt appointed Nathaniel Clayton of Newcastle as “his agent for the Management of his Colliery called Tanfield Moor...and his....Agent for selling the Coals thereof.” Under the terms of the agreement, Clayton was to:

- execute a bond of £5,000 to Pitt as a safeguard for his fulfilling the terms of the agreement;
- keep “truly and faithfully” accounts of all his receipts and payments and render such accounts to Pitt or his representatives whenever required;
- remit to Pitt or his representative any surplus cash not required to cover current expenditures, together with the relevant cash account;
- present fortnightly reports of expenditures and physical flows of coal; and
- present yearly cash accounts, within one month of the year-end, and pay any surplus cash balance to Pitt.

In return, as his part of the agreement, Pitt was to:

- pay Clayton £562 per annum to cover selling expenses;
- cover all colliery expenses, except those connected with selling; and
  - pay Clayton for his services by means of a fixed sum of £400 per annum plus a further £12 “for every One Hundred Pounds remitted...as profits....over and above the Clear Annual Sum of Three Thousand Three Hundred and Thirty Three Pounds, Six Shillings and Eight Pence.

Under the agreement, Clayton was to have control over all personnel, but the books of account were deemed to be Pitt’s property to be passed to him or his representatives on demand, although Clayton was free to make copies. Thus the Memorandum of Agreement was a clear contract between principal and agent and it indicated that the accounting system was the key to the way in which Pitt, as principal, sought to protect his interests. The Memorandum indicates Pitt’s intention to use the accounting system as a means of obtaining information on the colliery and its cash flows, and as a means of providing appropriate incentives to his agent. Unfortunately gaps in the archive prevent an analysis of how this principal-agent relationship ac-
tually worked in practice. However, this arrangement continued until 1822 when concerns over the financial performance of the colliery and Clayton's effectiveness as Agent prompted Pitt to engage the services of John Buddie.

**John Buddie**

It is apparent that Buddie was aware of the moral hazards involved in principal-agent relationships and that he had clear views on setting incentives for agents. In 1813 he reported [NRO Bud/6, pp.61-2] to the owners of Water-house Colliery in Lancashire on profits that had failed to meet expectations:

> My surprise (at the low profits) subsided in a great measure, on being informed that the managers of some of the principal Collieries were allowed a premium on the number of Tons sold Yearly - not on the Profits....I don't wonder that the Price of Coals has been reduced from time to time, nor that it should still continue to be reduced, until such an absurd practice is abolished. Under this System, the interest of the Colliery proprietors and that of his Agent are completely at variance, and it is too much to expect of human nature that the Agent is to sacrifice his own interest to that of the employer. If an Agent is to be allowed any extra remuneration, at all, over and above his Yearly Salary, it ought surely to be on the Profits made not the quantity sold.

The Tanfield Moor archive does not reveal any arranged or actual incentive payments to Buddie, and, apart from a "simple Money Bond" [NRO Bud/22, p.91] of £4,000 made by Buddie on taking up his post, does not contain any formal agreement made between Pitt and Buddie for the regulation of their relationship. Whether or not such an agreement ever existed, Pitt probably counted himself fortunate that Buddie agreed to accept this commission, given Buddie's pre-eminence in the coal industry. In Buddie, Pitt had obtained an agent of the very highest reputation. The impact of reputation in principal-agent relationships has not yet been subject to a great deal of scrutiny, but does have "potential implications for managerial accounting research" [Baiman, 1990, p.357]. Baiman argues that relationships between "reputable" individuals have distinct benefits over those between individuals without such reputations, including the reduction of the costs of drawing up contracts and collecting information, as well as by "increasing the set of
supportable actions." In a "reputable" relationship, the agent will be careful to maintain his reputation, since, *inter alia*, it affects his future earning power in other relationships, and the principal will act fairly as this helps him to secure the services of an agent with a reputation for profitable management and integrity. The acquisition of an agent of Buddie's reputation must be seen in the context of an industry where fraud and corruption were rampant. Reviewing the period up to 1700, Hatcher [1993, p.304] noted that major determinants of colliery profits were not only the owner's ability to track output and cash and to impose efficiency, but also his ability to limit fraud: the "control of fraud undoubtedly absorbed a disproportionate amount of .....energy and ingenuity." This concern continued to be a major pre-occupation in the coal industry throughout the period of the current study, and, in a letter to Buddie in 1824, Pitt [DRO NCB 1/JB/1090] referred to two recently published treatises on the "abuses", "impositions and frauds" practised in the coal trade, and commented that "both (authors) assert, that more deception and cheating is practised on Tanfield Moor Coal in London than on any other." However, it is apparent that Buddie's reputation caused Pitt to place a great deal of faith and trust in him, and to delegate wide decision-making powers to him. In the matter of negotiations with Clayton over "fitting" fees, Pitt [ibid/10880] wrote to Buddie in February 1824, "I hope you will gain your end in the negotiations with Mr.Clayton, pray let there be no reference to me, - you have carte blanche." Although, in May 1824, Pitt [ibid/1089] did suggest that Buddie should reach a compromise with Clayton, this was one of the very few occasions when he made a direct contribution to the management of Tanfield Moor affairs. Virtually the whole of Pitt's correspondence to Buddie [DRO/NCB/JB/1088-1133] consists of requests for the remittance of funds and with Pitt's own personal financial situation. Pitt showed almost no interest in the operation of Tanfield Moor as a colliery or as a business venture; essentially he was interested only in the cash flow he could generate from Tanfield Moor. In practice, Pitt delegated full decision-making authority to Buddie; as he wrote [ibid, p.1127] in 1830 in response to a minor management recommendation made to him by Buddie, "Any recommendation of yours has a claim to adoption on our part."

Just as Pitt was prepared to delegate to Buddie, so Buddie was prepared to take the initiative in his dealings with Pitt. Whereas Pitt had imposed reporting and financial arrange-
ments on Clayton, Buddie [NRO Bud/22. p.86] took the initiative in setting out the arrangements that he considered satisfactory,

I have.....found from experience that the more my employers know of their own affairs and my manner of acting in them, the more comfortable and satisfactory it is to myself. I am therefore desirous in undertaking the trust, which you have so kindly reposed in me, to establish a system of management, and correspondence, which may keep you in regular communication with your affairs in this quarter - not to tease you with trifling matters but to give you sufficient information on all material points.

In his review and analysis of the agency literature, Baiman [1990, p.363] addresses the question as to why the principal would ever find it in his best interests to delegate the choice of monitoring system to the agent. However, there is no evidence that, at Tanfield Moor, Pitt used the accounting and costing systems to monitor Buddie. The word “trust” appears to be a highly significant word in the context of this particular principal-agent relationship and the trust engendered by Buddie’s reputation is an important theme running throughout the current research. Thus both parties felt secure enough to allow the agent, rather than the principal, to implement not only accounting arrangements but also banking procedures. At the outset, Buddie gave Pitt details of the banking arrangements he proposed to make and set out his plans to prepare a bank account for Pitt every 28 days, noting that the monthly cash flow would also provide “a tolerably accurate criterion of the actual profit of the colliery” [ibid, p.87]. Buddie set up this system of accounts [NRO, Bud 37/1-6] and, every 28 days, provided Pitt with accounts detailing transactions and balances with the coal-fitter and with the bank. Additionally, Pitt was provided with a statement showing period and cumulative sales to the coal-fitter, in physical and financial terms, a summary abstract of the bank account and a detailed abstract of cash payments in the period. Thus Buddie himself designed and operated the accounting system he used in reporting to Pitt. However, from Pitt’s viewpoint, useful checks were built into the system. Transactions with the bank and with the coal-fitter could, if required, be checked easily and independently of Buddie and at frequent, regular intervals. Although Buddie’s monthly accounting system was not particularly innovative, as it simply built
upon and extended Tanfield Moor's existing systems, it did pro-
vide the absentee owner with information relevant to obtaining
an overview of the business and its financial position, as well as
checking up on his agent, although there is no evidence that
Pitt ever used the information in these ways.

It is apparent that Buddle was highly trusted, for in 1823
Pitt agreed to Buddle's tactfully worded suggestion [NRO Bud/
22, p.174] regarding the format and preparation of annual ac-
counts:

It occurs to me that as good a Plan as any of choosing
the Colliery Accs for the.... year will be to make out a
Cash Account folio, a journal (and) a profit and loss Acc. The former will show the Cash Balance at the end
of the year, and the latter by giving credit for all debts
due, and charging all debts owing, will give a correct
view of the Year's Profit....I shall however be very glad
to adopt any other mode or form that you may prefer
and shall feel obliged by any suggestion.... you (make)
on this subject. Simplicity and clearness is what we
ought to aim at, and by a little attention I hope we
shall succeed...and in looking forward to the making
up of the Yearly Book it has occurred to me that Mr
Watson would be as proper a person as any other.

Given that Buddle was responsible not only for the design
of the annual accounting system, but also for the choice of the
accountant who would undertake the preparation of accounts,
Pitt appeared to repose a great deal of trust and confidence in
him. The information supplied to Pitt in accounting form was
supplemented by that contained in letters written to him by
Buddle [NRO Bud/22]. The correspondence is voluminous and
is biased in quantity, perhaps not unnaturally, towards the
early years of the principal-agent relationship. However, the
letter book is probably incomplete in that Buddle acknowledged
to Pitt in 1824 that "I very seldom have an opportunity of keep-
ing copies of my letters to you" [ibid, p.186]. Despite the fact
that Buddle had established the system of reporting to Pitt by
accounts and by letters, it is apparent that he did not feel con-
strained by it. It appears that although the accounts were al-
ways prepared and sent to Pitt, at times the letter-writing was
limited, as Buddle noted to Pitt in 1827 [ibid, p.234]:

It is now so long since you received a letter from me,
that I am afraid you will begin to think me an idle
fellow. The fact however is that I am more remiss in
writing than in acting - when I cannot manage both, the former “goes to the wall” and the latter has my exclusive attention.

Thus the letter-writing system was not a rigid requirement imposed on the agent by the principal, but a method of reporting that the agent used at his discretion. Although the letter book is probably incomplete, it is possible to gain from it an understanding of Buddle’s concerns in the management of Tanfield Moor. There were four major areas of importance: production, sales, transport and financial management. The current research examines each of these areas and assesses Buddle’s use of costing and accounting information in dealing with them.

Production: In the late eighteenth century coal was extracted from Tanfield Moor by contractors. Although it cannot be dated precisely because of lack of archival evidence, this form of mining organisation was ended at Tanfield Moor by 1822 [NRO, Bud 37/1]. Generally the practice had died out in the North-East by 1815, largely due to contractors’ tendencies to exploit pits for their own short-term gains rather than the long-term benefit of owners [Taylor, 1960]. Thus Buddle was responsible for the direct management of the colliery workforce. Despite the fact that production was naturally of considerable importance at any colliery, Buddle spent remarkably little time reporting on it to Pitt, probably because it was a relatively problem-free area of colliery operations. In 1825, Buddle [NRO, Bud/22, p.190] wrote to Pitt noting “I am happy to say that the state of the colliery underground is highly satisfactory” and in 1827 [ibid, p.231] he commented that, as regards production, “we are going on very well.” Although the preparation of production cost analyses was a well-established practice in the North-East England coal mining industry, and such costings existed at Tanfield Moor as early as 1749 [NRO, Bud/25,p.31], Buddle devoted little costing effort to this area. Such costing was “extremely complicated” [Flinn, 1984, p.286] and Buddle may have decided not to undertake it, given his expert judgement of the satisfactory state of production matters and the very limited amount of time he could spend on Tanfield Moor’s affairs. Buddle’s satisfaction with mining operations may have been based not only on the expertise with which he directed them, but also by the way in which they were carried out by miners he selected and hired at the annual “binding”. The management of labour relations in the coal mining indus-
try of North-East England was an extremely difficult task. At times bindings and pay negotiations involved miners in strikes, lawlessness, carrying guns, physical violence and killings; coal owners backed their negotiations with the draconian penalties of the established legal system and the use of the militia [Jones, 1986]. Buddie was a key figure in the industry and, as a negotiator for the coal owners was an obvious target for the wrath of the mine-workers. However, he also inspired the respect and admiration of the workers. At times this proved rather overwhelming, as in 1831 when he helped in the successful resolution of a bitter pay dispute and the workers wanted to carry him shoulder-high in procession from his home in Wallsend to Newcastle the regional capital five miles away [Colls, 1987, p.92]. Buddie won the respect of the “pitmen” not simply because of his managerial abilities, but for his attitude towards them and their work. He attached importance to the skills and qualities required of a “pitman” and maintained a strong commitment to pit work. Although the region’s other leading view­ers no longer went underground in pursuit of their duties, Buddie continued to do so and after major accidents insisted upon being among the first to go down the pit to review the situation. Thus although Buddie’s production costing at Tanfield Moor was somewhat limited, it is probable that he more than compensated for this by the way in which he under­took the direct management of the labour force.

Sales (“the vend”): Between 1805-1830, the Joint Durham and Northumberland Coal Owners Association regulated “the vend” or sale of coal by fixing prices and establishing quotas for each colliery. In order to get their coal to market, the owners hired independent shipping agents, known as “fitters”, who owned keels that transported the coal from the staithes down the River Tyne to waiting colliers. The fitter engaged the master of the colliery to carry the coal to market, often down the East coast to London. At times competition between coal-owners caused the system of regulation to break down, and open or “fighting” trade ensued. During these periods of open trade the formal regulation was replaced by a more flexible system known as “freighting” which entailed the shipment of coals to market and sale at whatever price could be obtained. The vend was all-important to Tanfield Moor’s success. As Buddie noted [NRO, Bud/22, p.191] since underground affairs were highly satisfactory, “our prosperity ... will depend entirely upon the extent of our vend.” However, Buddie was faced with funda-
mental problems in this sphere of his management as there was
a limited demand for the type of coal mined at Tanfield Moor
for, while much of the success of the North-East coal industry
was based on high quality household coal, Tanfield Moor pro-
duced soft coal used by specialist manufacturers. This demand
was limited at the best of times and even more so during
recessionary periods such as those which saw the colliery’s
sales fall from approximately 17,000 chaldrons in 1831 to just
over 13,000 chaldrons in 1833, a chaldron weighing approxi-
ately 6,000 pounds [Hiskey, 1978, p.73]. In these circum-
stances, Buddie was forced to use “freighting” as a means of
maintaining sales. However when prices fell to particularly low
levels Buddie [NRO, Bud/22, p.333] reported to Pitt that “to
have pushed the vend under such circumstances would have
been absolutely ruinous. I was glad therefore to work no more
coals than barely necessary to occupy the establishment and
allow the workmen a maintenance.” Buddie did not refer to any
financial analysis to support this decision and the archives do
not contain any such explicit assessments. However, the regula-
tion of the vend had a dramatic impact on selling prices. In
1834, freighting prices were 15s 3½d per chaldron, but, after
the restoration of the regulation of the vend rose to 20s per
chaldron. Nevertheless, Buddie did have the ability to influence
sales price and volume by his management of the marketing
system. For example, in 1835 he decided to consign all of
Tanfield Moor’s coals to one London factor rather than to sev-
eral, and, as a result of the concentration of business and the
greater care and attention given to Tanfield Moor by this single
factor, the coals began to sell at their full nominal price of 24s
per chaldron, although Buddie still had to exercise discretion
over the quantity of coal to send to the market [Hiskey, 1978,
p.74]. Although the fortnightly reports may have enabled
Buddie to keep very close track of vends and prices, there is
little extant evidence to suggest that he employed more detailed
ad hoc revenue-cost analysis in his sales management. Never-
theless, Buddie was capable of using cost data when he thought
it necessary; for example in his negotiations with Clayton re-
garding the latter’s “fitting” fees, he reported [ibid, p.123] to
Pitt:

I took my particulars of my Estimate of the Cost of the
Fitting Establishment; and wished Mr Clayton to dis-
cuss it item by item; but he was not sufficiently with
the minutiae of the business, to enable him to do
so...if he can satisfy himself that my estimate is correct, he will be satisfied with it.

However, underlying all the spheres of sales revenue and cost management lay the issue of corruption. The entire process of the coal industry, from mining through to distribution and marketing, created potential for abuse by agents. Some agents' "perquisites" were accepted throughout the industry: for example viewers supplied owners with corving rods, used to make baskets for hauling coal underground, and in doing so made a profit for themselves. Buddle noted, perhaps somewhat coyly, that the costs of corving rods was "one of the secrets and mysteries of the profession" [quoted in Flinn, 1984, p.62]. However, although this benefit may have been viewed as legitimate, others were more suspect. When coal was sold in the London market, it went through a complex handling and marketing system that "creaked with corruption" [ibid, p.279] and systems nearer home were equally unsatisfactory. Buddle believed that fitting agents' clerks encouraged the use of freighting in order to obtain substantial corrupt payments from shipmasters whose colliers would otherwise have been idle. He considered freighting to be "a woeful practice, being injurious to the Trade at large as well as to the parties immediately concerned, and ought to be abolished" [ibid, p.272]. In 1823, Buddle complained to Pitt that Clayton had taken unilateral action in confirming the colliery's agents on the London market "as much ... for the purpose of personal friendship, as for benefiting the Interests of the Colliery" [Bud/22, p118]. Given that Buddle had previously written warmly of Clayton [ibid, p.97] it appears unlikely that this comment was generated by personal ill-will, but was simply a reflection of the moral hazards inherent in the industry's principal-agent relationships. In such circumstances, Buddle's outstanding reputation within the coal industry and his ability to inspire trust and confidence formed a valuable element of the principal-agent relationship.

Transport: In the early eighteenth century, mining in North-East England was concentrated in a limited area of the upper River Tyne and its southern tributaries, the Rivers Derwent and Team [Flinn, 1984, p21]. This concentration was due to geographical, geological and technological factors: coal deposits could be worked in shallow mines sunk into steep valley sides that allowed the natural drainage of water, other practical means of drainage not being available. By the early eighteenth century these shallow mines were almost worked out,
and the coal-field was gradually extended towards the high land of the Tanfield area. Coal was plentiful in this area, but the geography of the land did pose fundamental problems. A system of waggonways was necessary to transport coal to the Tyne, but "the configuration of this hilly country is such that these waggonways were inevitably channelled into the Derwent valley, a bottleneck in which wayleaves (permission for transport) could be controlled relatively easily by a small number of landowners" [ibid, p.22]. A coal-owning partnership known as the Grand Alliance operated in the North-East, and the Allies often bought land and rented wayleaves "for the sole purpose of denying them to competitors" [ibid, p.41]. One Ally, Lord Ravensworth, controlled wayleaves vital to the transport of Tanfield Moor's coal and, in February 1827, Buddle [NRO, Bud/22, pp.218-9] informed Pitt that the "increased....wayleave to Lord Ravensworth and others is...a heavy tax upon us. This ...has cut down the profit of 1826 most cruelly." However Buddle was willing to use his social standing to gain advantage for Pitt, a reversal of the more usual situation whereby an agent tried to generate social contacts and derive benefits from the principal's higher status and wider contacts [Cowton and O'Shaughnessy, 1991, p.40]. In 1827, Buddle was included in the social gatherings to celebrate the visit of the Duke of Wellington to the North-East and took the opportunity to develop influential contacts. Thus, in October 1827, he was able to write [NRO, Bud/22, p.235] to Pitt stating that:

I am now on terms of intimacy...with Lord and Lady Ravensworth...and don't despair of being able, by and by, to induce his lsp. to relax a little in the amot. of wayleave with which he has saddled us.

The monthly reports [NRO, Bud 37/1-6] provided summaries of actual wayleave and transport costs and, as part of his management of these important areas, Buddle also prepared detailed ad hoc costings [NRO, Bud/22, p.279] and cost estimates [NRO, Bud/22, pp.296; 301-3]. Transport costs and, hence, colliery profitability were influenced tremendously by technological development. An early instance had been the change from transport by road to movement by "rail" transport in which horses pulled coal wagons along wooden rails or "waggonways" to the staithes, or loading points, on the River Tyne. It had been estimated in 1711 that road transport from Tanfield Moor to the Tyne resulted in a profit of £1.17.6 per
“ten,”, a standard unit of measurement, and that transport by waggonway would increase profit to £5.5.9 per “ten” [Flinn, 1984, p.149]. In Buddie’s era, two significant developments in transport technology were the development of railways and the use of “spouts” at the staithes, enabling direct loading onto colliers rather than via the intermediary of keel boats. In 1823 Buddie investigated the possibility of building a railway line to the Tyne and prepared a detailed cost estimate [NRO, Bud/22, p.126] showing a total project cost of over £39,000. However, this project was shelved, perhaps because of Pitt’s lack of capital and the failure of negotiations with prospective partners [Hiskey, 1978, p.72].

Buddie continued to use waggonways to transport Tanfield Moor’s coal until the early 1830s when the use of railways became a very real prospect. Buddie was the viewer for the collieries of the Stanhope and Tyne Railway Company and was involved in the calculation of the railway’s quotation of 8s 3½d per chaldron for leading the coals to the Tyne and shipping them by spout. However, after receiving an offer from a rival railway company, Buddie succeeded in renegotiating a price of 6s 3d per chaldron with the Stanhope and Tyne. “The new leading charge, free of fixed annual wayleaves...amounted to a 4/-reduction per chaldron on the old leading costs” [ibid, p73]. Buddie [NRO, Bud/22, p.322] was in no doubt as to the importance of this arrangement, claiming that “it amounts to a renovation of the colliery, and will I trust enable it to live.” Thus, in his management of transport costs, Buddie was aided both by the costing exercises he undertook at Tanfield Moor and by his standing and influence in the coal industry.

Financial management: Buddie’s continuing concern in financial management was to generate sufficient cash flow to cover the colliery’s wage bills and other operational payments and to provide remittances to Pitt. However, it is probable that the requirements of Buddie’s monthly accounting system also shaped Tanfield Moor’s cash flows, particularly in relation to wage bills. Although it was common practice in the North-East to pay colliery workers on a fortnightly basis, Buddie [NRO, Bud/22, p.87] chose to introduce a variant to this system:

...28 days is named as the (accounting) period....because it its the custom to pay the colliers every 14 days; but I only mean to pay the other classes of workmen every 28 days. This will very much simplify the Cash
Acct. as I shall just have 12 monthly receipts of Mr Clayton (the fitter) and 13 lunar payments in the year.

Buddie also cited the need to maintain the monthly preparation of accounts as being the key factor underlying his acceptance of Clayton's stance in the negotiation of the fitting charge. He reported [ibid, p. 160] to Pitt:

You will no doubt think this rather soft on my part, but the fact is that I could not otherwise bring the matter to a close with Mr C. and might have (negotiated) on with him for the whole year which would have prevented me from Closing my Monthly Statements, in a satisfactory manner.

Buddie regarded the timely preparation of monthly accounts as a matter of some importance and aimed to have those accounts in Pitt's hands in a matter of days after the month-end [ibid, p. 153]. Thus, it is clear that Buddie considered that the monthly accounts were a key element in the principal-agent reporting relationship, as well as a necessary aid to his own cash flow management of the colliery. In writing to Pitt, Buddie [ibid, p. 206] sometimes forecast cash flows several months ahead and reported on his negotiations with Ridleys, the local bankers, to obtain advances and overdrafts. However, Buddie's problems in cash flow management were compounded by the nature of the regional banking system. In 1826 he reported [ibid, p. 206] to Pitt:

I enclose a letter I have received this morning from our Bankers. I called upon them yesterday to make arrangements for remitting...£1,200 ... when to my great disappointment they told me it was not in their power to fulfil their promise in consequence of want of public confidence in their notes. A constant run continues upon all our Banks and Ridleys are paying away 1000 sovereigns or Bank of England notes a day to take up their own notes, which are scarcely well out of the Bank before they are bro\textsuperscript{1} back again for gold....They are afraid to pass their notes to their Customers to make the Colliery pays, and we are all under the most serious apprehension that we shall not long be able to obtain a sufficient quantity of £1 notes to pay the wages of the pitmen - as to obtaining (gold) sovereigns for the purpose, that seems quite out of the question as scarcely one is to be seen in circulation, altho' since the beginning of December the Newcastle Bank has freed...
more than £200,000. The unfavourable state of affairs is compelling the Bankers to call in all their advances... the Commercial affairs of the county are getting into the most embarrassing state imaginable and we are menaced with the melancholy prospect of an almost entire suspension of business.

In these difficult circumstances, Pitt may have been comforted by the knowledge that he had entrusted his affairs into the hands of the industry's most outstanding and respected professional. Despite the vagaries of the banking system and the coal mining industry, Tanfield Moor continued in business and Buddle continued to emphasise short-term cash management in order to meet the operational needs of the colliery and to remit cash surpluses to the owner, although there does not appear to have been any mechanism to set aside funds to meet the long-term capital development of the colliery, probably because such expenditures were minimal and could be met out of current cash flows.

Cash management may have been facilitated by the credit terms available in the coal mining industry but credit arrangements may have accentuated the need for accrual accounting at the year end. In 1824 Buddle [NRO, Bud/22, p.176] noted that:

It is not customary in Colliery affairs to pay off tradesmen within the Year in which the goods are obtained... any Credit for Iron, Ropes and Prop. wood is 6 months but more frequently Twelve.

A possible implication of this particular letter is that, prior to the engagement of Buddle, Tanfield Moor Colliery had not been adopting the usual credit terms and, thus, Buddle's insistence on them may have helped to regulate cash flows. Furthermore, Buddle employed his extensive business and social network to preserve Pitt's cash resources from unscrupulous taxation officials. Buddle [ibid, p.161-2] wrote to Pitt that:

I happen to be intimate with the Surveyor General of the Taxes in this District. I spent last evening with him and asked him if any advantage would arise to you from entering your Colliery establishment in Dorsetshire (Pitt's home area). He replied certainly not....I told him that your surveyor was of the opinion that some benefit would accrue from having the whole of your establishment, Colliery and all, in one return. He replied that the only person who could be benefited....
would be the surveyor or collector himself whose percentage would be increased by the augmentation of the tax schedule.

Thus, in terms of financial management, Buddie brought valuable knowledge, contacts and authority to bear in the pursuit of his principal's interests, in addition to implementing a monthly accounting system that aided financial management and reporting to the principal.

The annual accounts were employed little in the management of the colliery, but did keep the principal informed of annual profit or loss: 1824 £6,374; 1825 £4,490; 1826 £3,747; 1827 £5,591; 1828 £2,934; [Flinn, 1984, p.321] 1829 £107; 1830 £1358; 1833 £774 (loss); [Hiskey, 1978, p.75]. The 1824 results reflected Buddie's first year in complete effective control of Tanfield Moor and Pitt expressed his thanks for Buddie's "extraordinary exertions" and his "real surprise" at the amount of profit. The declining level of profits from 1829 onwards were due largely to the marketing and pricing problems caused by recession and the decline in the "Regulation of the Vend" [ibid, p.75].

CONCLUSIONS

At Tanfield Moor, accounting systems were developed to ensure regular, routine reporting by the agent to the principal and to provide useful management information to the agent. As agent, Buddie also prepared ad hoc costings to help him deal with specific problems, for example in transportation. However, where he judged operations to be satisfactory he did not employ cost data. This non-use of cost data was probably a deliberate choice on Buddie's part and is not indicative of any lack of knowledge or ability in handling such data. Thus, the current research does indicate that accounts were used as direct aids to management at Tanfield Moor, and, taken in the context of the well-established and widespread accounting and costing practices of the North-East England coal-field, does challenge Fleischman and Parker's expectation that "nascent cost accounting would flourish more notably in a factory environment" [1991, p.363] than in extractive industries. The current author's preliminary surveys of the Northumberland Record Office and the Durham Record Office, and reading of the existing literature [Flinn, 1984; Hatcher, 1993; Oldroyd, 1996] suggest
that further research [e.g. Fleischman and Parker, forthcoming] might overturn this expectation.

Principal-agent relationships were vital to organisational control at Tanfield Moor, and the systems of accounting, costing and correspondence combined to keep the principal well appraised of his agent’s management of the colliery. However a distinctive feature of the relationship between Budde and Pitt was the freedom the agent had to develop systems and take managerial decisions that he thought were appropriate. There is no evidence that Pitt ever used any of the available information to monitor Budde in any way. At the heart of this relationship was Budde’s reputation and the authority of Budde as an expert and as a man. It has been argued [Otley, 1980] that accounting is simply one feature in the control structure of an organisation and that this control structure also includes features such as personnel selection. In the case of Tanfield Moor, the appointment as agent of a man of Budde’s reputation lay at the core of the control structure and was probably of greater significance than the development of systems of accounting, costing and correspondence.

The findings of the current research may be related to research undertaken on more recent control structures in coal mining. After World War II, the British coal mining industry was nationalised and a National Coal Board [NCB] was formed. Berry et al [1985] conducted a study of an area of the NCB during the early 1980s and found that although financial planning and control systems existed they were not the primary form of organisational control. Production and technological considerations were in the forefront and a set of cultural rather than financial values pervaded the organisation, emphasising the loyalty and support of managers for miners who did a difficult job in dangerous conditions. However, by the mid-1990s, the privatisation program of the Conservative government had ensured dismemberment of the nationalised industry and the restoration of private ownership. A potential avenue for future research might involve an examination of any changes in financial, organisational and cultural value systems consequent upon the privatisation of the British coal-mining industry.
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McLean: Agent’s Reputation, Accounting and Costing in Organisational Control Structures


EVOLUTION OF PROFESSIONAL ENFORCEMENT IN TEXAS: AN EXAMINATION OF VIOLATIONS AND SANCTIONS

Abstract: The purpose of this paper is to examine the enforcement of the Texas Rules of Professional Conduct (Rules) from 1946 to 1978. This period encompasses the early regulation of the Texas accounting profession after the passage of the Texas Public Accountancy Act (Act) in 1945. The Act and accompanying Rules remained in effect until 1979, when the Texas legislature enacted new accountancy legislation which inaugurated a more regulatory era.

Results indicate that enforcement of the Rules of Conduct was a process evolving over time as both the state and professional political systems impacted the behavior of the Texas State Board of Public Accountancy. During the period under study, internal professional competition between certified public accountants and non-certified public accountants surfaced as a substantial explanatory factor behind rule promulgation and enforcement. Violators differed from non-violators in level of education, type of training, and type of practice. In total numbers, certified public accountants were subject to more hearings and sanctions than non-certified public accountants. However, in accordance with expectations, the public accountants received a disproportionate share of alleged violations and sanctions. Violations implying practice incompetence and those impairing professional integrity were subject to more severe disciplinary actions, but the Board heard more competitive behavior allegations than those involving malpractice.

INTRODUCTION

The purpose of this paper is to examine the enforcement of the Texas Rules of Professional Conduct (Rules) from 1946 to 1978. This period encompasses the early regulation of the Texas accounting profession after the passage of the Texas Public Accountancy Act (Act) in 1945. The Act and accompanying Rules remained in effect until 1979, when the Texas legislature en-
acted new accountancy legislation which inaugurated a more stringent regulatory era.

The paper addresses whether the early regulatory process was able to find and sanction offenders within the profession. The research specifically investigates the following questions:

1. What type of violations triggered hearings and punishment under the 1945 Act and Rules?
2. Did the demographics of violators differ from the demographics of non-violators?
3. Did violations and punishment change as the 1945 Act and Rules were amended?

Rules violations during the period under study are categorized into three classifications: those pertaining to morality and societal relationships (integrity), responsibility to clients and technical competence (practice), and competitive behavior among colleagues (competition). We examine the violations in light of practitioner demographic characteristics that include level of education, type of training, and type of practice. We also compare enforcement activity between certified (CPAs) and non-certified public accountants (PAs) and relate that activity to an increased power of the State to sanction.¹

Based upon the literature from the sociology of professions and the history of the profession in Texas, we expect to find differences in the demographics between alleged violators and non-violators. Results indicate that enforcement of the Rules of Conduct evolved as a process over time as the political system impacted the behavior of the Texas State Board of Public Accountancy (Board). During the period under study, internal professional competition surfaced as a substantial explanatory factor behind rule promulgation and enforcement.² Education, often advocated by accountants as an attribute requisite to maintaining competence and substantiating professional integrity, emerged as a differentiating variable between violators and non-violators. Violators also differed from non-violators in type

¹Non-certified public accountants, who did not become registered until the 1945 Act, performed services similar to those of CPAs and sat on the Texas State Board of Public Accountancy through 1981 [Tinsley, Undated, pp. 22, 24, 27, 29, 85].

²Although Board records indicate an active pursuit of unlicensed bookkeepers and tax preparers holding out as accountants, this study does not examine sanctions against these competitive forces external to the accounting profession.
of training, and type of practice. In total numbers, CPAs were subject to more hearings and sanctions than PAs. However, in accordance with expectations, PAs received a disproportionate share of alleged violations and sanctions. In addition, the Board heard more competitive behavior allegations than those involving malpractice, but violations implying practice incompetence and those impairing professional integrity were subject to more severe disciplinary actions.

In the subsequent sections of this paper we first discuss the literature of the sociology of professions. Then we briefly correlate the history of Texas accounting professional regulation with that prevalent elsewhere in the United States (U.S.) from the period of 1896 to 1979. Testable hypotheses are provided in the next section. A discussion of data collection and statistical methodology appears in section four followed by the results of the analysis. A discussion of the results and conclusions are provided in the final section.

**THE SOCIOLOGY OF PROFESSIONS**

Researchers in the sociology of professions posit that members of occupational groups employ specialized knowledge, credentialism, professional associations, and closure to establish professions that externally delineate their disciplines from other invading occupations [Wilensky, 1964, pp. 142-146; Larson, 1977, pp. x-xi, xvii, 225; Lubell, 1980, pp. 7, 14, 21-23; Freidson, 1986, pp. 63-64, 70, 186, 210, 225-226; Abbott, 1988, pp. 1-2, 5-9, 323]. Rules of Professional Ethics or Conduct, embodying public service as an ideal, not only serve as an alleged standard of practice, but also contribute in achieving social credibility and public confidence [Cerf, 1970, p. 45; Larson, 1977, p. 58-59; Lubell, 1980, p. 42]. Casler [1964, p. iii] states that a code of ethics provides a signal that a given occupation is evolving into an established profession. While the development of abstract specialized knowledge and Rules of Conduct create a mystique that legitimizes professional work and claims to prestige, Abbott [1988, pp. 2, 5, 136] maintains that both are used by professions to defend against attacks from other occu-

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3Freidson [1986, p. 63] describes credentials as items that provide information regarding the ability of a worker. Examples are professional certification and licenses. Closure refers to the ability of a profession to exclude unwanted outsiders in order to achieve group social status and market control [Macdonald, 1985, p. 541].
pations in a highly competitive market for provided services. The resolution of territorial disputes over market domain is the primary factor determining the evolution of a profession [Abbott, 1988, p. 2].

Abbott [1988, pp. 2-3, 18-20, 325] suggests that research should examine how market control of professional services, especially that of accounting, has developed and how conflict over providing those services has impacted practitioners. We suspect that competition for the control of accounting services may have impeded some practicing accountants from adhering to certain Rules of Conduct, especially those concerning competitive behavior. The following sections discuss the evolution of the Rules of Conduct in Texas and observed data regarding the enforcement of such Rules from 1946 through 1978, then concludes with an application of Abbott's [1988, pp. 2-3] theory to the results.

**HISTORY OF PROFESSIONAL REGULATION IN TEXAS: 1896-1979**

Freidson [1986, p. 30-31, 37], Lubell [1980, p. 39], and Caplow [1966, pp. 21] assert that professions emerge through time. In 1896, when the first U.S. CPA law was passed [Edwards, 1960, pp. 68-69; Previs and Merino, 1979, p. 97-98], the public accounting profession in Texas was just emerging [Tinsley, Undated, p. 1]. Texas did not introduce credentialism until the enactment of the initial Public Accountancy Act in 1915. This legislation provided legal recognition of the profession and established a governor-appointed Texas State Board of Public Accountancy.

In accord with the national Progressive Reform movement of the early 1900s and in response to local business scandals, Texas practitioners organized themselves to become politically active in 1911 through the Texas Society of Public Accountants [Tinsley, 1962, p. 17]. This small group of practitioners, which became the predecessor of the Texas Society of Certified Public Accountants (TSCPA), served as the primary originator and

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4 Practitioners first opened offices in Fort Worth and Galveston, with other accounting firms appearing in numerous Texas cities, including Dallas, San Antonio, Houston, and El Paso, during the next decade [Tinsley, Undate, p. 1].

5 Although Texas was far behind New York in legislating certification of public accountants, it was not among the last states to establish legal credentials.
proponent of all professional legislation [Tinsley, Undated, pp. 1, 10; Tinsley, 1962, pp. x, 17]. An important factor in understanding the regulation of the accounting profession in Texas is the circuitous and close relationship between the Board and the TSCPA. Such mutually supportive affiliations are not unusual in Texas politics. Anderson et al. [1989, p. 95] maintain that most of the Texas boards or commissions "have been 'captured' by the industry they are supposed to regulate."

Three aspects of Texas political history demonstrate why special interest groups, such as the public accounting profession, were able to initiate Texas legislation in their self-interests. First, Texas political culture embodied the Social Darwinism and conservative entrepreneurism of its populace, who not only disliked, but distrusted, government [Kraemer and Newell, 1987, p. 27; Anderson et al, p. 35]. Second, Texas legislators, historically possessing relatively low levels of expertise and staff resources, had to rely on external sources for information and direction in writing bills [Kraemer and Newell, 1987, p. 116; Benton, 1972. p. 125]. Third, weak lobbying control laws enabled homogeneous interest factions to mobilize and produce legislative change [Anderson et al., 1989, p. 87; Benton, 1972, p. 125]. The authors suggest that the TSCPA expanded over the years to become a cohesive force that not only could provide requisite technical information and expertise to a legislature with limited knowledge regarding accounting issues, but, as was characteristic of other established business groups in Texas, also could design and promote legislation that protected their interests [Anderson et al., 1989, pp. 82, 87; Kraemer and Newell, 1987, p.116].

The 1915 Act was weak, as was true with most initial CPA legislation throughout the country, in ensuring competence and in restricting the practice of public accounting [Edwards, 1960, pp. 110-114; Previts and Merino, 1979, p. 144, 147; Tinsley, Undated, p. 2]. Protection of occupational jurisdiction was at a minimum. Although some licensing of occupations occurred in Texas after 1905, many legislators, typical of those in southern

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Throughout the United States, state professional societies and individual representatives of the profession often drafted the certification bills passed by state legislatures [Previts and Merino, 1979, pp. 103, 139-142; Lubell, 1980, p. 390]. The Minutes of the State Board meeting January 31, 1953, provide evidence that the Board was not authorized by the State "to concern itself with public accountancy legislation."
and midwestern states, were antagonistic to restricting work to those who held permits to practice an occupation. Professional societies in many states considered themselves fortunate to obtain any CPA laws, however weak [Previts and Merino, 1979, p. 146; Tinsley, Undated, p. 1]. The purpose of the Texas law was to provide for a testing and certification process to indicate competence, not to regulate accounting practice throughout the state [Tinsley, Undated, pp. 2, 16]. Although the Act permitted certificate revocation for felonies and acts discreditable, it did not empower the Board to directly seek out and punish violators or promulgate rules of conduct [Tinsley, Undated, pp. 2, 16].

Evolution of Professional Regulation From 1915 to the 1945 Act

By 1924 all states and territories had passed some form of certification laws governing their membership [Edwards, 1960, pp. 219-220, 302; Previts and Merino, 1979, p. 100]. Whereas in the early 1900s, stigmatizing "acts discreditable" was the primary method of assuring professional competence, the profession during the 1920s avowed that formal knowledge as the key to expertise [Previts and Merino, 1979 pp. 149, 152, 160, 213-215]. During the 1920s and 1930s the training of accountants often included education at universities [Edwards, 1960, pp. 135-136, 179; Previts and Merino, 1979, pp. 213-215]. Although the 1915 Act did not address educational requirements, as did CPA laws in states that required a high school degree or its equivalent, the TSCPA during the 1920s supported a university education through prizes for theses and assistance for graduates in obtaining jobs [Tinsley, 1962, p. 33; Previts and Merino, 1979, p. 152]. Lack of even a high school educational require-

\[7\] By 1956 only 32 states had "legally enforceable" rules of conduct [Carey, 1956, p. 10].

\[8\] By 1930 over 300 colleges offered a baccalaureate degree (B.A.) in accounting [Previts and Merino, 1979, p. 213].

\[9\] Populist sentiment against CPA legislation, particularly in the Midwest and South resulted in a variety of admission requirements leading to diverse levels of expertise and quality of performance [Previts and Merino, p. 146]. A review of the Board Minutes for meetings during the 1920s and 1930s reveals that reciprocity of certification between states, not misconduct, was the prevailing issue being debated in Texas [Minutes, November 16-17, 1920, May 22, 1927, August 20, 1927, December 20, 1933, July 6, 1936, May 17, 1939, October 9, 1939, August 13, 1940]. Inferior certificates devalued certificates of qualified holders who had passed the American Institute of Accountants (AIA) exam and
ment in the 1915 Act was not surprising, given the anti-regulatory climate.

Ensuring technical competence was not the only concern of the accounting profession. While the progressive reform movement raised some serious questions regarding unrestrained competition, by the 1920s politicians condemned cutthroat competition" [Previts and Merino, 1979, pp. 128, 209]. The changing political environment forced the public accounting profession to brand practitioner competition as being in conflict with the public good. Accounting leaders argued that differentiating the profession from commercial activities was paramount to enhancing the image of "professional attitude" and public confidence in the profession [Richardson, 1931, pp. 48-49, 60-63; Carey, 1956, p. 56; Yerkes, 1975, p. 6, 8-10]. During the 1920s, under pressure from the U.S. Treasury, the AIA addressed two ethical issues perceived as not being in the public interest, contingent fees and advertising, banning both practices as inconsistent with professional conduct [Previts and Merino, 1979, pp. 209-213].

Competitive behavior among practitioners also was a concern of the TSCPA during the 1920s. Major problems included open solicitation of clients by both local and national firms, competitive bidding, and advertising [Tinsley, 1962, p. 30]. Despite national and local concern over the detriment that overt competition could bring to the profession, no prohibition against professional competitive behavior existed in Texas regulation. The 1915 Act did not enable the Board to establish Rules of Professional Conduct, even those that might have addressed competitive behavior issues. Two Texas incidents of inappropriate audit report signatures and other "acts discreditable" induced both TSCPA and Board action [Tinsley, Undated, pp. 16-18]. The TSCPA adopted a Code in 1929 that not only denounced acts of gross negligence in financial reporting, but prohibited advertising, commissions, contingent fees, and solicitation [Tinsley, Undated, p. 18; Tinsley, 1962, p. 30].

In 1932 the Board, despite the lack of statutory authority, asserted its prerogative and drafted its own Rules of Conduct. The initial Rules, emphasized professional integrity and identified two forms of misconduct: misrepresentation in audit reports and engaging simultaneously in inconsistent occupations. followed state professional standards [Tinsley, Undated, p. 16; Tinsley, 1962, pp. 5, 29].
The Board, assuming a moderate position in regulation, declined to address advertising or solicitation [Tinsley, Undated, p. 18].

By 1939, the TSCPA had revised its own 1929 Code of Ethics. Debate persisted about retaining rules against contingency fees, but the major issue of contention was competitive bidding, which many Texas practitioners perceived as part of normal business [Tinsley, 1962, pp. 43-44]. Although the AIA had proposed banning the practice as impairing professional integrity and being contrary to the public interest, conflict among TSCPA members prevented the Texas Society from banning competitive bidding [Tinsley, 1962, p. 44; Carey, 1970, p. 244].

Jurisdictional disputes over provided services was no more clearly evident than in the conflict that existed between two competitive groups of accountants: the non-certified and the certified public accountants. Lubell [1980, pp. 45-46, 55, 96-97, 368] discusses the conflict between CPAs and PAs as being both internal and external. The National Society of Public Accountants (NSPA) claimed that PAs were part of the public accounting domain. The AICPA maintained that only CPAs were members of the profession of public accounting. PAs performed services similar to those of the CPAs [Edwards, 1960, p. 174; Lubell, 1980, p. 146], and in 1946, outnumbered certified accountants by a ratio of three to one [Tinsley, Undated, p. 27]. Eventually PAs, in Texas and other states licensing non-certified accountants, became a dying class of accountants because restrictive legislation provided a one-time only opportunity for registration. Such legislation closed the profession in the future to anyone who had not passed the CPA examination and was not a CPA [Edwards, 1960, p. 176; Lubell, 1980, pp. 2, 6].

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10Tinsley [Undated, p. 16] notes that in 1935 the AIA was opposed to state boards issuing rules of conduct prohibiting competitive behavior for fear the rules would be construed by the public as benefitting the profession.

11The authors do not intend to resolve the dispute of whether PAs were internal or external to the public accounting profession. Although performing the same services and initially perceiving themselves as part of the same profession as their CPA counterparts [Lubell, 1980, p. 96], they evolved during the period under study into an external, dying class of practitioners. Our study examines violations of all registered accountants from 1945 through 1978 and treats this second tier of accountants as intraprofessional.

12Despite the significant influence of the TSCPA on the Board, the Texas Association of Public Accountants (TAPA) was successful in obtaining legislation in 1951 that permitted PAs to be appointed to the Board from 1951 until
Promotion of legislation permitting a two-tiered profession, became the most important issue of the TSCPA from 1927 to 1931 [Tinsley, 1962, p. 34]. Some Society members in Texas, as well as some CPAs throughout the country, perceived PA registration as demeaning the credentials belonging to the certified practitioners and confusing to the public. These members sought to invalidate the second-class registration [Tinsley, 1962, pp. 34, 56; Lubell, 1980, pp. 18, 160, 388]. In addition, lack of support from the AIA, and later the AICPA, who argued against strong registration laws, weakened the Society's efforts to achieve licensing for non-certified public accountants until 1945 [Tinsley, Undated, p. 20].

Promulgation of laws to curb competitive behavior was not the only issue before the Board during the 1920s and the 1930s [Tinsley, Undated, pp. 14-20]. Frequent discussion at Board meetings concerned the inability to prosecute violators of existing standards. The Depression brought lapses in payments of dues to the Society and permit fees to the Board [Minutes, June 24, 1938, August 13, 1940]. Inadequate funding and legal authority left the Board impotent. Corrective actions consisted mostly of written notification of infractions, frequently followed by the voluntary compliance of practitioners.13 Lack of meaningful enforcement, competitive behavior between firms and practitioners, and, most of all, TSCPA support of a two-tiered profession to stipulate practitioner jurisdiction brought increased professional regulation beginning with the 1945 Act.

1975. Lubell [1980, pp. 22] notes that as a result of legislative compromise numerous state PA societies succeeded in placing PAs on state accountancy boards. The three objectives of the NASPA were: equal representation of PAs on state boards, initial registration to grandfather-in PAs, and perpetuity for the second class of accountants through examination [Lubell, 1980, p. 79]. The ratio of PAs to CPAs sitting on the Texas Board averaged 44% until 1975. From 1975 through 1981 two sitting PA Board members were permitted to complete their terms making the percentage of PAs to CPAs 22%. For a limited twenty-four years this second tier of professionals possessed sufficient power to not only share in but also influence the decision-making process regarding the promulgation of rules and the enforcement of such rules [Tinsley, Undated, pp. 24, 30-32, 42, 45, 80-85; Tinsley, 1962, pp. 70-71].

13Board Minutes November 24, 1939, rationalized the sufficiency of written infraction notifications by reasoning that most violations were due to practitioner ignorance of the law rather than intent to disobey standards.
The 1945 Act and Accompanying Rules of Conduct

Whereas the 1915 Act did not overtly restrict accounting practice to licensed practitioners, the 1945 Act explicitly prohibited the practice of public accounting without a state permit. The Act defined both the "Practice of Public Accounting" as well as use of the term "Public Accountant" by practitioners and delineated practitioners as either CPAs or PAs. The one-time registration of existing PA practitioners lasted for two years with only a few isolated cases of grandfathering occurring after 1947 [Tinsley, Undated, pp. 21-22]. The Texas profession had clearly established its domain of services offered to the public.

The 1945 Act provided similar education and work experience standards for PAs and CPAs. Both groups of practitioners could employ various combinations of college and on-the-job training to prepare themselves for their careers. The major difference in admission requirements between the PAs and the CPAs was that CPA applicants were required to pass a rigorous exam, which became the delineating factor and signal for expertise. Retention standards were also different. Unlike CPAs, failure of PAs to annually renew the state occupational permit brought loss of the right to practice. Such restrictions on practice ensured that non-certified practitioners would become a perishing class.14

The 1945 Act also legitimized efforts of the Board to promulgate rules of professional conduct viewed as requisite in establishing professional integrity and in preventing competitive behavior. In July 1946, the Board adopted sixteen Rules of Professional Conduct to accompany the new Act in regulating the profession. These Rules prohibited solicitation, advertising, and competitive bidding. They also provided evidence of the profession's increasing cognizance of misconduct by defining acts of gross negligence and, for the first time, introduced the issue of auditor independence.15

14 The Board often illegally delayed acceptance of fee payment as a means to discipline PA Rule violators [Tinsley, Undated, p. 29]. Permit records at the offices of the Texas State Board indicate that only 40 registered non-certified accountants remain in practice today.
15 The Rules banned examiners from owning a substantial financial interest in any enterprise on which they expressed an opinion regarding the financial statements.
Enforcement of the 1945 Act and Rules of Conduct was as problematic as the efforts to generate the regulations. During the 1940s and the 1950s, the Board could not independently initiate legal proceedings to suspend or revoke permits of violators without the cooperation of the Texas Attorney General. Lack of adequate funding also limited the pursuit of violators of the Act and Rules.\textsuperscript{16}

Despite legal and monetary constraints, \textit{Minutes} [January 20, 1951, April 7, 1951, June 10, 1951, September 21, 1951, October 20, 1951, March 29, 1952, January 2, 1954, January 22, 1955, July 15, 1957, March 24, 1958, March 8, 1961] reveal that the Board assumed a proactive stance in investigating and sanctioning violations. Written and verbal complaints received from other practitioners and the TSCPA provided the basis for most investigations into alleged violations [Tinsley, Undated, pp. 28, 36; Tinsley, 1962, p. 71; Tinsley, 1983, p. 31]. As late as January 30, 1961, Board \textit{Minutes} disclose that accountants accused of lesser infractions were reprimanded by the Board as a whole or by individual Board members. Cases concerning substandard practice were directed to the Attorney General for court action.

During the 1950s and early 1960s, lack of enforcement was a serious concern of both the TSCPA and the Board [Tinsley, 1962, pp. 72, 81; Minutes, August 8, 1952, October 18, 1952, September 10, 1954, May 25, 1959, March 8, 1961]. Evidence of substandard audits of insurance companies by Society members led the TSCPA to conclude that lack of knowledge or an unwillingness to meet professional standards was the at the root of malpractice [Tinsley, 1962, p. 81]. Practitioner intent became recognized by the profession as a possible factor in the incidence of violations. Amendments to Board Rules in 1959 addressed some TSCPA concerns by enhancing the integrity of audit opinions and empowering the Board directly to institute proceedings against accountants convicted of felonies or professional misconduct. Prior to this time, the 1945 Act, unlike the Act of 1915, did not specifically list felonies as one of the charges subject to revocation or suspension.

\textsuperscript{16}Minutes [September 18, 1959] reveal that the Board's cash balance increased until 1959 when rising administrative costs eroded the cushion. Tinsley [Undated, pp. 27, 47] reveals that by 1978 the Board was in a deficit situation with examination costs making up 67.9\% of total expenditures and enforcement only 4.8\%.

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Board Minutes for an August 1, 1960, meeting indicate that for the first time, the State Board became proactive in recommending that the Texas legislature promote TSCPA sponsored regulation to enhance Board enforcement power. In a 1961 amendment to the Act, the Board finally received the power to subpoena evidence and directly discipline violators through certificate revocation or suspension. The Board immediately began employing its new power. The number of meetings increased from approximately eight to ten a year in the 1950s to fifteen in 1962 [Minutes, 1950-1962].

Continued Need for Professional Reform

During the late 1960s and 1970s, national and state criticism continued to mount against public accountants due to the perceived failure of the profession to curb work that neither complied with standards nor met public expectations [Tinsley, 1983, pp. 97, 121, 123; Previts and Merino, 1979, pp. 316-324]. The image of “professional attitude” was once again revisited and found lacking. TSCPA concern over auditor responsibility to the public corresponded to national concerns and spurred the Society to take steps during the late 1970s to support legislative reform [Tinsley, 1983, pp. 143-145].

Concurrent with the debate pertaining to professional integrity, competence, and competition, rules of conduct were challenged by government at the national level. The Federal Trade Commission (FTC) attacked rules banning advertising, solicitation and competitive bidding, as providing evidence of professional price fixing and being contrary to the public interest. The U.S. Justice Department filed suit against both the Texas State Board and the TSCPA in 1977, alleging that Rule 14 on competitive bidding restricted price competition [Tinsley, 1983, pp. 133-137]. The TSCPA had neither the political clout nor the financial means to fight the U.S. Justice Department.

The 1961 amendment also altered the substance of certification from a restrictive license to practice public accounting to a registered title for qualified practitioners. Competence continued to be an issue as educational and experience requirements for certification also were strengthened.

The authors made a count of Board meetings per year during the period 1950-1962 by examining the books of Minutes.

The major concern of the Board during the 1970s was the definition and regulation of competitive bidding. Minutes [February 3, 1964, April 23, 1968, February 5, 1972] disclose that competitive bidding on government contracts had been a concern starting in 1964 and continued to consume much of the Board’s time throughout the 1960s and 1970s.
Ultimately, the Texas Sunset Act of 1977, which called for a systematic review of all state agencies, induced passage of a new Act [Tinsley, 1983, pp. 149-153; Kraemer and Newell, 1987, pp. 253-255; Anderson et al., 1989, pp. 222-225]. If an agency or board did not pass review, it ceased to exist. The Sunset Advisory Commission urged Board independence from the licensees it governed, and questioned current rules on advertising, solicitation, and competitive bidding as not being in the public interest. The Commission also noted the lack of mandated continuing education requirements for Texas professionals. The Texas State Board of Public Accountancy, finding itself in the position of having to justify its existence to the Commission by September 1, 1979, worked with the TSCPA to launch professional reform through new legislative activity and by promulgating new Rules of Professional Conduct.

During the period that the 1945 Act and accompanying Board Rules were in effect, the Texas accounting profession evolved similarly to that in the rest of the country. Despite the rhetoric of the TSCPA and Board efforts to ensure competence through the enforcement of higher admission standards, substandard audits and accounting practice continued to be a major concern of both the public and the government. The regulatory history of the accounting profession generates several issues regarding enforcement. Specifically, was enforcement activity responsive to public concern or was it more enmeshed in professional efforts to preserve status and competitive position? The following section describes how this study examines these issues.

**HYPOTHESES**

The evolution of the accounting profession during the period covered by the 1945 Act and its emerging regulation suggests several hypotheses. First, the history of the Texas accounting profession and the conflict therein during the period under study suggests that PAs and CPAs differed demographically in terms of education, type of training, and form of practice. We further posit that certain demographic characteristics might be linked to increased vulnerability to Rules violations.

Throughout this period, professional preparation involved formal education and/or on-the-job training. The profession maintained that increased formal education and more rigorous on-the-job training would provide a stronger background for public accounting practice, and thus enhance an individual's
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likelihood of passing the exam required to become a certified public accountant. Yerkes [1975, pp. 80, 98-99, 101,102, 104, 137-139, 150] found differences in both education and training between CPAs and PAs, as well as differential attitudes toward professional ethical standards. Therefore, we posit that less education and/or more localized training would increase the likelihood that a given practitioner would violate a rule.

Certain forms of practice also might make the accountant more vulnerable to Rules violation. Cook [1962, p. 238] found that larger and national firms provided more unconditional support for professional ethical standards than smaller and local firms. Loeb [1971, p. 290] noted, while compiling his sample of CPAs for a study of ethics, that all the CPAs who had been sanctioned were members of small local firms or individual practitioners. In addition, practitioners in larger CPA offices expressed more disapproval of a number of unethical behaviors than those in small offices [Loeb, 1971, pp. 297, 305]. In addition, Schaefer and Welker [1974, pp. 113-114] observed more violations in small firms. Large national firms should have the shared expertise which would enable their professionals to better avoid technical errors than small, local practices. However, such firms might be viewed as being more overtly competitive by other accountants, and thus more prone to reported competitive violations. For purposes of this study, we refer to those professionals called before Board hearings for Rules violations as "violators," and to those professionals not subject to Board hearings for Rules violations as "nonviolators."

The above demographic characteristics are reflected in the first two hypotheses.

H1: During the period 1946 through 1978, the demographics of CPAs and PAs differed.

H2: During the period 1946 through 1978, the demographics of violators and non-violators of the Rules of Professional Conduct associated with the Act differed.

The history of the Texas profession indicates that, during the period 1946 through 1978, PAs were in conflict with CPAs for provision of accounting services. Yerkes [1975, p. 294] found evidence of less internalization of professional ethics among PAs than among national CPAs. Comments from one non-certified accountant indicate that those PAs being disciplined by the board believed that this second tier of accountants had been singled out for attention [Cornell Deposition,
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1960, p. 20]. However, some certified practitioners argued that PAs lacked technical expertise, which may have led to more PA violations. This conflict lead to the proposal of our third hypothesis.

**H3:** During the period 1946 through 1978, enforcement activity, violation citations and sanctions, would be greater for PAs than for CPAs.

Public criticism of accounting practice and professional concern over preservation of integrity [Tinsley, 1983, pp. 121-123] reflects reaction to behavior considered injurious to the client and public. Violations perceived to cause such harm should have resulted in more severe sanctions. We categorize punishments which withdraw the practitioner’s right to practice, i.e., revocation of the certificate and revocation of the permit, as severe sanctions.\(^{20}\) Loeb [1972, p. 6] and Tidrick [1992, p. 171] found evidence of a link between the seriousness of the violation and the severity of the sanction. Conversely, competitive behavior violations, which impair intraprofessional relationships, while subject to vigorous enforcement, should result in less punitive sanctions. This belief is expressed in Hypothesis 4.

**H4:** During the period 1946 through 1978, violations related to integrity and practice issues would trigger more severe sanctions than violations related to competitive issues.

Our study subdivides the interval during which the 1945 Act was in effect into two periods to examine hypothesized trends regarding violations and punishments. During the first period, from 1946 through 1961, the Board possessed minimal enforcement power. Two events occurred which contributed to the expectation that there would be more enforcement activity in the second period, from 1962 through 1978. First, in 1959, four new Rules were added, including Rule 19 that permitted the Board to institute sanctions for felony convictions.\(^{21}\) Second, in 1961, an amendment to the 1945 Act gave the Board legal power to enforce rules without the aid of the Texas Attor-

\(^{20}\) Both CPAs and PAs received permits, but only CPAs received certificates. Because PAs did not receive certificates, revocation of certificate could apply only to CPAs.

\(^{21}\) Before the 1945 Act, although specific disciplinary authority regarding felonies was lacking, certificates were revoked for felony convictions, including draft evasion during World War II [Records, 1942]. From 1946 to 1959, three practitioners were cited for felonies, before adoption of Rule 19 [Records, 1951, 1956, 1961].

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ney General. Thus, enforcement activity during this period was expected to exceed that of the first period. These changes lead to Hypothesis 5a and 5b.

H5a: Enforcement activity increased following the 1961 statutory change allowing the Board autonomous enforcement in terms of the number of citations for violations.

H5b: Enforcement activity increased following the 1961 statutory change allowing the Board autonomous enforcement in terms of the number and severity of sanctions.

Next we discuss the methodology used to test these hypotheses.

**METHODOLOGY**

Several sources provided information for our study. We obtained enforcement data from available files of the Texas State Board of Public Accountancy. Tinsley [Undated, pp. 27, 45] offered details regarding the numbers of actual practitioners.

The records of formal hearings conducted during this time provided information regarding the nature of the offense(s) which triggered the formal hearing(s), the Rule(s) violated, and the action(s) taken by the Board to resolve the problem(s). Records of hearings, as well as the computerized and microfiche records of individuals subjected to hearings offered demographic information. In addition to records of violators, a random sample of non-violating CPAs and PAs was drawn to test for hypothesized differences. We first compared demographic characteristics between non-violating CPAs and PAs, and then compared violator attributes with those free from Board citations to see if they differed. While the State Board did not maintain continuous records tracking the number of active complaints regarding an alleged violation often triggered multiple hearings, due to postponements, prolonged communication processes, etc. If there were multiple hearings for one event, a large proportion of the hearings involved the rescheduling of the practitioner's appearance for another hearing. This study employs one hearing, the earliest recorded, per complaint event. Also, one hearing could entail violation of more than one rule.

Attribute testing, with a tolerable error rate of 5%, was performed on a random sample of 231 CPAs and PAs practicing during the same period as the violators to determine if the file of formal hearings was complete. Results, one omission, indicated an upper occurrence limit of 2.4%, well below the tolerable error rate. The hearings file was determined to be substantially complete and representative of the practitioner population. The authors additionally relied on the random sample for demographic information representative of the population of CPAs and PAs as a whole.
practitioners during the period under study, we were able to obtain useful data from Tinsley [Undated, p. 27]. During the period under study, the largest number of active permits for PAs was 3,942 in 1947. The number of PAs with permits had fallen to 2,112 by 1965, 1,670 by 1970, and 923 by 1979 [Tinsley, Undated, p. 45]. In the same years, the number of permits issued to CPAs was 1,116, 6,414, 8,635, and 19,533, respectively, [Tinsley, Undated, p. 45].

The application to either take the CPA exam or to receive a practice permit provided information about both education and training. We assigned individuals to one of four educational groups according to the highest level completed: college degree, some college training, technical training or correspondence courses, and high school. The forms also indicated whether the individual obtained on-the-job training from Big Eight CPA firms, local CPA firms, companies, governmental entities, or a university. The permit applications or renewals, or correspondence often indicated whether the professional worked as an accountant for a Big Eight CPA firm, a local partnership, a corporation, or the government; or was a sole practitioner or a professor.

All Minutes of both the hearings and other Board meetings were read to gain further insight into the enforcement process. The hearings records identified both the specific Rule(s) broken by the violator and provided a description of the activity that triggered the complaint.

Several sources, addressing professional ethics, employ different models for classifying rules of conduct [Carey, 1956, p. xi; AICPA 1962 Code, in Casler, 1964, pp. 122-127; Casler, 1964, p. iii; Loeb, 1971, p. 289]. Each utilizes its own terminology and classification system. We grouped the Rules in effect from 1946 through 1978 into three categories: integrity, practice, and competition. The categories and labels are based on a combination of the models found in Exhibit 1, which we merged to better represent the spirit of the Texas Rules in ensuring integrity, in promoting practice competence and responsibility, and in regulating competitive behavior among colleagues.24

24Although Loeb [1971, pp. 302-303] also categorizes rules of conduct into three groupings, public, client, and colleague, that article does not incorporate many of the rules that are included in this study. We found the models of Carey [1956], the AICPA 1962 Code, and Casler [1962] usually more appropriate for our purposes because they encompassed most of the rules analyzed in this paper.
## EXHIBIT 1
### COMPARISON OF MODELS FOR RULES OF CONDUCT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHOOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHROCCU</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFIDE</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>EMPSVCS</td>
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<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NONINDPRT</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>FELONY</td>
<td>X</td>
<td></td>
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<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGNREVVW</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORECAST</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOLICIT</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEALEMP</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTINGT</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADVERT</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPETE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DESCRIBE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CORP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

EXHIBIT 1
COMPARISON OF MODELS FOR RULES OF CONDUCT

AICPA 1962 CODE OF PROFESSIONAL ETHICS

CASLER [1964]

LOEB [1971]
### TABLE 1

**Texas Rules of Professional Conduct in Effect During Term of 1945 Act (1946-1978)**

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrity</strong></td>
<td></td>
</tr>
<tr>
<td>Rule 8</td>
<td>A public accountant may not accept contingent fees except in cases where the fee was determined by the findings of a court or administrative body. <em>(CONTINGT)</em></td>
</tr>
<tr>
<td>Rule 12</td>
<td>A public accountant may not express his opinion on the financial statements in which he had a beneficial interest. <em>(FINTRST)</em></td>
</tr>
<tr>
<td>Rule 13</td>
<td>A public accountant may not affiliate with any school that conducts its operations in a manner discreditable to the profession. <em>(SCHOOL)</em></td>
</tr>
<tr>
<td>Rule 18^</td>
<td>A public accountant may not allow his name to be associated with financial statements in such a manner as to imply he was acting as an independent accountant when he was not. <em>(NONINDPT)</em></td>
</tr>
<tr>
<td>Rule 19^</td>
<td>A public accountant convicted of a felony or offense involving moral turpitude is also guilty of professional misconduct. <em>(FELONY)</em></td>
</tr>
<tr>
<td><strong>Practice</strong></td>
<td></td>
</tr>
<tr>
<td>Rule 4</td>
<td>A public accountant may not be grossly negligent in disclosing material facts and applying generally accepted accounting principles. <em>(NEGLECT)</em></td>
</tr>
<tr>
<td>Rule 5</td>
<td>A public accountant may not sign a report unless reviewed by himself or an employee. <em>(SIGNREVW)</em></td>
</tr>
<tr>
<td>Rule 10</td>
<td>A public accountant may not practice under a corporate charter unless authorized to do so before 1945. <em>(CORP)</em></td>
</tr>
<tr>
<td>Rule 11</td>
<td>A public accountant may not permit his name to be used in conjunction with estimates of future earnings that seem to vouch for the accuracy of a forecast. <em>(FORECAST)</em></td>
</tr>
<tr>
<td>Rule 16</td>
<td>A public accountant may not violate the confidential relationship between himself and his client. <em>(CONFIDE)</em></td>
</tr>
<tr>
<td>Rule 17^</td>
<td>A public accountant may not allow an employee to perform services which the accountant was not permitted to perform. <em>(EMPSVCS)</em></td>
</tr>
<tr>
<td><strong>Competition</strong></td>
<td></td>
</tr>
<tr>
<td>Rule 1</td>
<td>A public accountant may not allow any person to practice in his name unless a partner or employee. <em>(PRACNAME)</em></td>
</tr>
<tr>
<td>Rule 2</td>
<td>A public accountant may not pay or receive commissions from the laity. <em>(COMMISS)</em></td>
</tr>
<tr>
<td>Rule 3</td>
<td>A public accountant may not engage in a business incompatible with his practice. <em>(INCOMPAT)</em></td>
</tr>
</tbody>
</table>
TABLE 1 (CONTINUED)

Texas Rules of Professional Conduct in Effect During Term of 1945 Act (1946-1978)

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule 6</td>
<td>A public accountant may not solicit clients or encroach upon the practice of another accountant. (SOLICIT)</td>
</tr>
<tr>
<td>Rule 7</td>
<td>A public accountant may not offer employment to an accountant employed by another without first notifying the employer. (STEALEMP)</td>
</tr>
<tr>
<td>Rule 9**</td>
<td>A public accountant may not advertise. (ADVERT)</td>
</tr>
<tr>
<td>Rule 14**</td>
<td>A public accountant may not make a competitive bid for professional engagements. (COMPETE)</td>
</tr>
<tr>
<td>Rule 15</td>
<td>A public accountant may not be immune from these rules when engaged simultaneously in the practice of another occupation. (OTHROCCU)</td>
</tr>
<tr>
<td>Rule 20^</td>
<td>A public accountant may not use certain descriptive designations, such as “Tax Accountant,” “Head of Audit Section,” “Business Counseling,” and “Business Engineering.” (DESCRIBE)</td>
</tr>
</tbody>
</table>

* Term in parentheses is descriptive variable name given to rule.
** This rule was amended in 1978.
^ This rule was added to the Code in 1959.

Casler’s [1964, pp. iii, 74] three categories, integrity, professional standards and responsibility, and professional attitude reflect the public accounting profession’s concern regarding its obligations to the public, clients, and internally between members. Integrity suggests that accountants should possess moral principles and avoid conflicting relationships with others in society [Casler, 1964, pp. 6-7]. Casler’s [1964, p. 7] integrity classification includes the topics of both Texas Rules 12 and 18 concerning independence. Carey [1956, pp. 21, 33] also classified the content of these two Rules under integrity, and Loeb [1971, pp. 302-303] related them to a practitioner’s obligation to the public. In concurrence with Carey [1956, p. 20] and Casler [1964, p. 7] our study labels Rules in this category as integrity. In agreement with Casler [1964, p. 28, 34], we include Rule 8 on contingency fees in this group. Our study also classifies Rule 13, concerning affiliation with a discreditable school, and Rule 19 on felony convictions in the integrity category since both involve morality issues and do not specifically relate to practice standards or competitive behavior.
Professional standards concern the practitioner’s responsibility to both client and society [Casler, 1964, p. 71]. This classification embodies Carey’s practice and relations with clients groupings [1956, p. 46-57, 77, 82-93], the AICPA 1962 Code technical and operating classifications [in Casler, 1964, pp. 122-127], and Loeb’s client category [1971, p. 302]. Following Casler’s model [1964, p. 45], we place Rules 4, 5, 10, 11, 16 and 17 in this second category. We have chosen, however, to name this group practice, a more all-inclusive term encompassing both responsibility to clients and technical competence issues. Breach of these Rules indicated that the individual lacked the necessary knowledge or skill to perform the task, failed to exercise due care, or disregarded the client’s interests.

Professional attitude includes rules that not only serve to preserve the collegiality and unity of the accounting profession, but more importantly condemn practice which is “incompatible with professional status” [Casler, 1964, p. 74]. Casler [1964, pp. 112, 116] depicts them as efforts to control the competition between practitioners that is in conflict with the professional image of altruism. The connection of the rules to the collegiality of the profession is also described by Carey [1956, pp. 50-83, 184-195] as issues affecting both professional attitude and relations with fellow practitioners. Loeb [1971, p. 302-303] classifies them as obligations to colleagues. Since colleague rules concern the competitive behavior of practitioners, we have relabeled this category competition to better relate the classification to the theory of Abbott [1988, pp. 2-3]. Our competition category includes all Texas Rules (Rules 1, 6, 7, 9, 14, 15, and 20) found in Casler’s [1964, pp. 80, 112-115] professional attitude. In addition, we concur with the AICPA 1962 Code [in Casler, 1964, pp. 122-127] and Loeb [1971, p. 303] that Rule 2 on commissions be placed in this category of competition among colleagues. We also place Rule 3 on incompatible occupations, which Loeb [1971, p. 302] describes as colleague type issues, in this category.25 The details of all 20 rules discussed in this paper are briefly summarized in Table 1.

The hearings and microfiche records also provided information regarding punishments. Sanctions were examined in

25Casler [1964, pp. 80-81] includes “practice in the name of a member,” Texas Rule 1, in his discussion of “Professional Attitude” because the intent of the AIA rule was to prevent CPAs from acting as fronts for non-certified public accountants, a colleague issue.
three respects. First, we tested for a relationship between the nature of the violations and severity of sanctions imposed. In addition, we compared punishments imposed on CPAs versus PAs for violation of the same rules. Lastly, we examined the trend of both violations reported and punishments meted out over time to determine if the nature of sanctions changed.

We analyzed the data gathered through the use of descriptive statistics. The analysis of nominative information was accomplished through the construction of contingency tables and the generation of Chi-square statistics. Univariate statistics and t-tests were calculated for the numeric data.

RESULTS

Hypothesis 1 posited that during the period 1946 through 1978, the demographics of CPAs and PAs differed. CPAs and PAs did differ along certain dimensions within every demographic characteristic, supporting this hypothesis. Table 2 provides a summary of these findings.
TABLE 2

**Demographic Comparisons Between Certified Public Accountants and Public Accountants Not Found to Have Violated the Texas Rules of Professional Conduct in Effect (1946 - 1978)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>CPAs (Total n = 173)</th>
<th>PAs (Total n = 58)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>% of available n</td>
</tr>
<tr>
<td>Education (highest level attained)*</td>
<td>Information available</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>College degree</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>Some college</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Technical/correspondence</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>High school or less</td>
<td>0</td>
</tr>
<tr>
<td>Type of Training*</td>
<td>Information available</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Big Eight CPA firm</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Local partnership/proprietorship</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Corporate accountant</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Government accountant (federal, state, or local)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>University academic</td>
<td>5</td>
</tr>
<tr>
<td>Type of Practice*</td>
<td>Information available</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Big Eight CPA firm</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Local partnership</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Sole proprietorship</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Corporate accountant</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Government accountant (federal, state, or local)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>University accounting educator</td>
<td>6</td>
</tr>
</tbody>
</table>

* Records did not provide information for 100% of n for the individual demographic categories. Percentage for information available is percentage of total n, not available n.
* Demographic category exhibits significant between CPAs and PAs at .05 probability level.
** Individual category exhibits significant difference between CPAs and PAs at .05 probability level.

The differences in both education and training obtained between the two groups were notable. Yerkes found similar differences [1975, pp. 80, 99]. PAs acquired significantly more training at the technical and high school level and earned sig-
nificantly fewer college degrees than CPAs. PAs received significantly more training at the local firm level, and less than their certified counterparts at Big Eight CPA firms. Proportionally more PAs both trained with federal, state, or local government entities, and then continued to work in the government accounting sector than did CPAs. Fewer PAs than CPAs worked for corporations.

The second hypothesis stated that the demographics of violators and non-violators of the Rules of Professional Conduct associated with the Act differed. The comparison of the demographic characteristics of the violating and non-violating groups yielded partial support for Hypothesis 2. Violating CPAs exhibited significantly different demographic characteristics from their non-violating counterparts. These differential characteristics may reflect attitudinal differences found by both Cook [1963, p. 238] and Loeb [1971, pp. 297, 305]. Schaefer and Welker [1994, p. 113-114] found more violations among small firms. Table 3 provides information regarding these differences between the two CPA groups. Table 4, however, reveals that the demographic characteristics of PAs did not differ with respect to their violation status.
# TABLE 3

Demographic Comparisons Between Certified Public Accountant Violators and Nonviolators of the Texas Rules of Professional Conduct in Effect (1946 - 1978)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Violators (n=88)</th>
<th>Nonviolators (n=173)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of available n</td>
<td>% of available n</td>
</tr>
<tr>
<td><strong>Education (highest level attained)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available x</td>
<td>53</td>
<td>158</td>
</tr>
<tr>
<td>College degree</td>
<td>43</td>
<td>146</td>
</tr>
<tr>
<td>Some college</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Technical/correspondence</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>High school or less</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Type of Training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available x</td>
<td>64</td>
<td>151</td>
</tr>
<tr>
<td>Big Eight CPA firm</td>
<td>12</td>
<td>61</td>
</tr>
<tr>
<td>Local partnership/proprietorship</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>Corporate accountant</td>
<td>16</td>
<td>34</td>
</tr>
<tr>
<td>Government accountant (federal, state, or local)</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>University academic</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Type of Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available x</td>
<td>74</td>
<td>73</td>
</tr>
<tr>
<td>Big Eight CPA firm</td>
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<td>5</td>
</tr>
<tr>
<td>Local partnership</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>Sole proprietorship</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Corporate accountant (federal, state, or local)</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Government accountant</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>University accounting educator</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

* Records did not provide information for 100% of n for the individual demographic categories. Percentage for information available is percentage of total n, not available n.

* Demographic category exhibits significant between violators and non-violators at .05 probability level.

** Individual category exhibits significant difference between violators and non-violators at .05 probability level.
TABLE 4

Demographic Comparisons Between Public Accountants
Violators and Nonviolators of the Texas Rules of Professional Conduct in Effect (1946 - 1978)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Violators (n=22)</th>
<th>Nonviolators (n=58)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of available n</td>
<td>% of available n</td>
</tr>
<tr>
<td>Education (highest level attained)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available¹</td>
<td>15</td>
<td>68.2</td>
</tr>
<tr>
<td>College degree</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Some college</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Technical/correspondence</td>
<td>6</td>
<td>40.0</td>
</tr>
<tr>
<td>High school or less</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Type of Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available¹</td>
<td>8</td>
<td>36.4</td>
</tr>
<tr>
<td>Big Eight CPA firm</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Local partnership/proprietorship</td>
<td>4</td>
<td>50.0</td>
</tr>
<tr>
<td>Corporate accountant</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Government accountant (federal, state, or local)</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>University academic</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Type of Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information available¹</td>
<td>6</td>
<td>27.3</td>
</tr>
<tr>
<td>Big Eight CPA firm</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Local partnership</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Sole proprietorship</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Corporate accountant</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Government accountant (federal, state, or local)</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>University accounting educator</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

¹ Records did not provide information for 100% of n for the individual demographic categories. Percentage for information available is percentage of total n, not available n.

No significant differences were found in demographic characteristics at the .05 probability level, either as a whole, or individually between violators and non-violators.

Increased technical knowledge, as evidenced by both greater education and better on-the-job training, were negatively associated with illicit CPA behavior. The Board cited CPAs without a college education significantly more frequently for Rules violations than those with at least some college education. Furthermore, CPAs who had trained under the tutelage of a Big Eight CPA firm triggered significantly fewer hearings.
than did those who worked with a local partnership or individual practitioner.

Certain forms of practice also were linked significantly to hearings for CPAs. The CPA most likely to be cited by the State Board was the person employed by local partnerships, and the CPA least likely worked for a corporation or university.

**Violations**

Hypothesis 3 posited that during the period 1946 through 1978, enforcement activity, hearings and sanctions, would be greater for PAs than for CPAs. Yerkes [1975, p. 294] found evidence of less internalization of professional ethics among PAs than among national CPAs. Table 5 reports the Rules violations, arranged by integrity, practice, and competition classifications. It also provides information regarding differences in violation incidents between CPAs and PAs.

TABLE 5

Violations of the Texas Rules of Professional Conduct for Which Hearings Were Held (1946 - 1978) Classified by Type and Violator

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>CPAs</th>
<th>PAs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Violations</td>
<td>% of CPA Violations</td>
<td>% of Total Violations</td>
</tr>
<tr>
<td>Integrity Rules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTINGT</td>
<td>2</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>FINTRST</td>
<td>1</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>SCHOOL</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
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<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>FELONY</td>
<td>17</td>
<td>15.3</td>
<td>12.6</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>18.9</td>
<td>15.5</td>
</tr>
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<td>Practice Rules</td>
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<td>CONFIDE</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>EMPSVCS</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>NEGLECT</td>
<td>27</td>
<td>24.3</td>
<td>20.0</td>
</tr>
<tr>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>FORECAST</td>
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<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>24.3</td>
<td>20.0</td>
</tr>
</tbody>
</table>
### TABLE 5 (CONTINUED)

#### Violations of the Texas Rules of Professional Conduct for Which Hearings Were Held (1946 - 1978)
**Classified by Type and Violator**

<table>
<thead>
<tr>
<th></th>
<th>CPAs</th>
<th></th>
<th></th>
<th>PAs</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Violations</td>
<td>% of CPA Violations</td>
<td>% of Total Violations</td>
<td>Number of Violations</td>
<td>% of PA Violations</td>
<td>% of Total Violations</td>
<td>Number of Violations</td>
</tr>
<tr>
<td><strong>Competition Rules</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>4.2</td>
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<td>1</td>
</tr>
<tr>
<td>OTHROCCU</td>
<td>5</td>
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<td>3.7</td>
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<td>0</td>
<td>0.0</td>
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<td>4.2</td>
<td>1</td>
<td>0.7</td>
<td>1</td>
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<tr>
<td>INCOMPAT</td>
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<td>0.7</td>
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<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
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<td>26</td>
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<td>19.3</td>
<td>12.5</td>
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<td>0</td>
<td>0.0</td>
<td>4</td>
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<td>10.4</td>
<td>12.5</td>
<td>3</td>
<td>2.2</td>
<td>17</td>
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<tr>
<td>COMPETE</td>
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<td>9.7</td>
<td>8.3</td>
<td>2</td>
<td>1.5</td>
<td>15</td>
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<td>4.2</td>
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<td>1</td>
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<tr>
<td><strong>Total</strong></td>
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<td>56.8</td>
<td>46.8</td>
<td>45.8</td>
<td>11</td>
<td>8.0</td>
<td>74</td>
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</tbody>
</table>

**Total Violations**: 111  100.0  82.2  100.0  24  17.8  135x  100.0

x One individual may be cited for more than one rule violation.
* Significantly more PAs than CPAs at .05 probability level.
xx One advertising violation not identified by type of professional.

Hypothesis 3 received only limited support in terms of the number of violations cited. Overall, CPAs received more citations than PAs. Only in five instances of rarely cited Rules violations did the Board cite PAs for violating specific Rules proportionally more frequently than CPAs. Competition Rules violations accounted for over half of total citations, with the rest being split approximately equally between integrity and practice Rules violations. Citations were absent for five Rules, 10 (form of practice), 11 (certifying forecast estimates), 13 (affiliation with a discreditable school), 16 (violating a client's confidentiality), and 17 (allowing an employee to perform services for which the professional cannot perform). The discussions of sanctions and enforcement periods below further address the contention of Hypothesis 3 regarding greater enforcement activity directed at PAs when compared to CPAs.

The only demographic characteristic which significantly affected the types of violations which occurred was the type of practice in which the CPA or PA was employed. Form of practice was identifiable in 80 of the hearing files. Table 6 reflects these results.
<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>% of Identified Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Big Eight CPA Firm</td>
<td>Corporate</td>
</tr>
<tr>
<td>Integrity Rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td></td>
<td></td>
</tr>
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<td>0</td>
</tr>
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<td>FINTRST</td>
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<td>0</td>
</tr>
<tr>
<td>SCHOOL</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NONINDPT</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FELONY</td>
<td>1</td>
<td>3</td>
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<tr>
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<td>3</td>
</tr>
<tr>
<td>% of integrity violations</td>
<td>5.3</td>
<td>15.8</td>
</tr>
<tr>
<td>% of total violations</td>
<td>0.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Practice Rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFIDE</td>
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<td>0</td>
</tr>
<tr>
<td>EMPSVCS</td>
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<td>0</td>
</tr>
<tr>
<td>CORP</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NEGLECT</td>
<td>0</td>
<td>2</td>
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<tr>
<td>SIGNREVW</td>
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<td>0</td>
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<td>Total practice violations</td>
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<td>2</td>
</tr>
<tr>
<td>% of practice violations</td>
<td>0.0</td>
<td>8.0</td>
</tr>
<tr>
<td>% of total violations</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Competition Rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRACNAME</td>
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<td>0</td>
</tr>
<tr>
<td>OTHROCCU</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>COMMISS</td>
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<td>0</td>
</tr>
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<td>0</td>
</tr>
<tr>
<td>SOLICIT</td>
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<td>1</td>
</tr>
<tr>
<td>STEALEMP</td>
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<td>0</td>
</tr>
<tr>
<td>ADVERT</td>
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<td>2</td>
</tr>
<tr>
<td>COMPETE</td>
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<td>1</td>
</tr>
<tr>
<td>DESCRIBE</td>
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<td>0</td>
</tr>
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<td>5</td>
</tr>
<tr>
<td>% of competition violations</td>
<td>17.5</td>
<td>7.9</td>
</tr>
<tr>
<td>% of total violations</td>
<td>10.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Total Violations *</td>
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</tr>
<tr>
<td>% of total violations</td>
<td>11.2</td>
<td>9.4</td>
</tr>
</tbody>
</table>

* Information regarding form of practice was missing from some violation data.
Practitioners working in certain forms of practice were cited more frequently for the different types of violations than would have been expected, given their practice's representation among all identifiable forms. For instance, the nine corporate accountants (11.3% of the identified practices) accounted for 15.8% of the violations of integrity Rules (all felonies), a disproportionately large number. Additionally, local firms, 33.7% of identified practitioners, committed 42.1% of this type of violation. While Big Eight CPA firms were not cited once for practice violations, sole practitioners, 43.7% of the violators identified by practice, accounted for 60.0% of the violations in this area. Specifically, they were cited for 15 instances gross negligence. Regarding competition violations, given their 10.0% proportion among the group of violators, the eight accountants identified as Big Eight CPA firm practitioners were over-represented, accounting for 17.5% of the competition violations identifiable with a specific practice. The Board cited them for five solicitations of clients or encroachments on the practice of another accountant, three instances of advertising, two of competitive bids, and one instance of engaging in an occupation incompatible with the profession.

Sanctions

The fourth hypothesis stated that during the period 1946 through 1978, more serious violations in terms of harm to the public and client (i.e., breach of Integrity and Practice Rules) would trigger more severe punishments than would violation of rules impairing intraprofessional relationships (i.e., breach of Competition Rules). We classify sanctions which withdraw the practitioner's right to practice, i.e., revocation of the certificate and revocation of the permit, as severe. The results of the comparison of violation categories with sanctions, shown in Table 7, support Hypothesis 4.
### TABLE 7

<table>
<thead>
<tr>
<th>Type of Sanction by Type of Violation (1946 - 1978)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrity</strong></td>
</tr>
<tr>
<td>Number Assessed</td>
</tr>
<tr>
<td>% of Total</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>Violations</strong></td>
</tr>
<tr>
<td><strong>Sanction</strong></td>
</tr>
<tr>
<td>Revoke Certificate*</td>
</tr>
<tr>
<td>Revoke Permit*</td>
</tr>
<tr>
<td>Letter of Reprimand</td>
</tr>
<tr>
<td>Advise/Warn</td>
</tr>
<tr>
<td>Other Letter</td>
</tr>
<tr>
<td>Publicize</td>
</tr>
<tr>
<td>Close File</td>
</tr>
<tr>
<td>Wait</td>
</tr>
<tr>
<td>Subtotals</td>
</tr>
</tbody>
</table>

* Significant difference in sanctions assessed for violation category at .05 probability level.

Integrity and practice Rules violations resulted in the most severe punishments, accounting for six times the serious sanctions assessed for competition violations. Specifically, if the practitioner was convicted of a felony, the certificate and/or permit to practice was revoked. When CPAs were found guilty of gross negligence, they also received revocations of certificate and permit. For both categories of violations, the Board also published the names of those sanctioned. Loeb [1972, p.6] and Tidrick [1992, p. 171] also found linkage between the nature of the violation and the severity of the sanction.

Competition violations accounted for two-thirds of the less severe punishments, issuance of various types of formal letters. Four different competition violations were significantly linked with sanctions. The Board wrote letters of reprimand for solicitation of clients of another accountant or for offering the employee of another accountant a job without receiving permission. Although the Board only issued letters of Rules clarification for advertising offenses, it also publicized those sanctioned. The Board also issued an advisory or warning letter for making a competitive bid for an engagement.

Competition between CPAs and PAs, and the perception of some practitioners that PAs were inferior in expertise could have led to greater and more severe sanctions of PAs. Table 8 presents punishments by professional designation, as well as by type of violation.
TABLE 8
Type of Sanction by Type of Violation (1946 - 1978)
Comparison Between CPAs and PAs

### Summary of Total Violations

<table>
<thead>
<tr>
<th></th>
<th>CPAs</th>
<th>PAs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>111</td>
<td>24</td>
<td>135</td>
</tr>
<tr>
<td>% of Total Violations</td>
<td>82.2</td>
<td>18.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Summary of Total Sanctions

<table>
<thead>
<tr>
<th>Sanction</th>
<th>Number Assessed</th>
<th>CPAs % of CPA</th>
<th>CPAs % of Total</th>
<th>PAs % of PA</th>
<th>PAs % of Total</th>
<th>Total For Sanction</th>
<th>% of All Sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revoke Certificate</td>
<td>34</td>
<td>23.0</td>
<td>19.6*</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>34</td>
</tr>
<tr>
<td>Revoke Permit</td>
<td>28</td>
<td>18.9</td>
<td>16.1</td>
<td>15</td>
<td>57.7</td>
<td>8.6*</td>
<td>43</td>
</tr>
<tr>
<td>Letter of Reprimand</td>
<td>28</td>
<td>18.9</td>
<td>16.1</td>
<td>4</td>
<td>15.4</td>
<td>2.3</td>
<td>32</td>
</tr>
<tr>
<td>Advise/Warn</td>
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<td>1.4</td>
<td>1.1</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
</tr>
<tr>
<td>Other Letter</td>
<td>5</td>
<td>3.4</td>
<td>2.9</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>5</td>
</tr>
<tr>
<td>Publicize</td>
<td>28</td>
<td>18.9</td>
<td>16.1</td>
<td>5</td>
<td>19.2</td>
<td>2.9</td>
<td>33</td>
</tr>
<tr>
<td>Close File</td>
<td>21</td>
<td>14.2</td>
<td>12.1*</td>
<td>2</td>
<td>7.7</td>
<td>1.1</td>
<td>23</td>
</tr>
<tr>
<td>Wait</td>
<td>2</td>
<td>1.4</td>
<td>1.1</td>
<td>0</td>
<td>0.0</td>
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</table>

### Summary of Integrity Violations

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<th>PAs</th>
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</tr>
</thead>
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<td>Percent of Integrity Violations</td>
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<td>22.2</td>
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</table>

### Sanctions for Integrity Violations

<table>
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<tr>
<th>Sanction</th>
<th>Number Assessed</th>
<th>CPAs % of CPA</th>
<th>CPAs % of Integrity</th>
<th>PAs % of PA</th>
<th>PAs % of Integrity</th>
<th>Total For Sanction</th>
<th>% of All Sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revoke Certificate</td>
<td>14</td>
<td>31.8</td>
<td>25.9*</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>14</td>
</tr>
<tr>
<td>Revoke Permit</td>
<td>10</td>
<td>22.7</td>
<td>18.6</td>
<td>5</td>
<td>50.0</td>
<td>9.3*</td>
<td>15</td>
</tr>
<tr>
<td>Letter of Reprimand</td>
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<td>9.1</td>
<td>7.4</td>
<td>1</td>
<td>10.0</td>
<td>1.8</td>
<td>5</td>
</tr>
<tr>
<td>Advise/Warn</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<td>2.3</td>
<td>1.8</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Publicize</td>
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<td>20.4</td>
<td>16.7*</td>
<td>3</td>
<td>30.0</td>
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<td>12</td>
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<tr>
<td>Close File</td>
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<td>9.3</td>
<td>1</td>
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<tr>
<td>Wait</td>
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<td>2.3</td>
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<td><strong>100.0</strong></td>
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</table>
Table 8 (Continued)

Type of Sanction by Type of Violation (1946 - 1978)
Comparison Between CPAs and PAs

<table>
<thead>
<tr>
<th>Table entries</th>
<th>CPAs</th>
<th>PAs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
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<td>34</td>
</tr>
<tr>
<td>Percent of Practice Violations</td>
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<td>20.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Sanctions for Practice Violations

<table>
<thead>
<tr>
<th>Sanction</th>
<th>Number Assessed</th>
<th>CPAs</th>
<th>% of CPA</th>
<th>% of Practice</th>
<th>PAs</th>
<th>% of Practice</th>
<th>Total</th>
<th>For Sanction</th>
<th>% of All Sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revoke Certificate</td>
<td>17</td>
<td>17</td>
<td>31.5</td>
<td>27.4**</td>
<td>0</td>
<td>0.0</td>
<td>17</td>
<td>9.8</td>
<td></td>
</tr>
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<td>11.4</td>
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</tr>
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<td>0.6</td>
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</tr>
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<td>11</td>
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Summary of Competition Violations

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Sanctions for Competition Violations

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<th>% of Competition</th>
<th>PAs</th>
<th>% of CPA</th>
<th>% of Competition</th>
<th>Total</th>
<th>For Sanction</th>
<th>% of All Sanctions</th>
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<td>0.0</td>
<td>3</td>
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</tr>
<tr>
<td>Revoke Permit</td>
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<td>4</td>
<td>8.0</td>
<td>6.9</td>
<td>4</td>
<td>50.0</td>
<td>6.9*</td>
<td>8</td>
<td>4.5</td>
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</tr>
<tr>
<td>Letter of Reprimand</td>
<td>19</td>
<td>19</td>
<td>38.0</td>
<td>32.7**</td>
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<td>25.0</td>
<td>3.5</td>
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<td>12.1</td>
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</tr>
<tr>
<td>Advise/Warn</td>
<td>2</td>
<td>2</td>
<td>4.0</td>
<td>3.5</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
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* Significant difference between CPAs and PAs in sanction assessed at .05 probability level.

^ Significant relationship between violation type and sanction assessed at .05 probability level.

Of total sanctions received by CPAs, 41.9% resulted in the loss of the ability to continue to practice. Regarding PAs sanctions, 57.7% resulted in the loss of the ability to continue to
practice. This appears to lend support to the notion of Hypothesis 3, that PAs were subject to more severe sanctions.

We further examined sanctions between the two groups of professionals to determine whether the more severe sanctions accorded PAs could be linked to differences in the types of violations they committed. Given the number of integrity violations each committed, we found little difference between CPAs and PAs in the proportion of total sanctions accorded to each which were serious (54.5% and 50.0%, respectively). However, variation in sanctions was found for practice and competition violations. The Board cited CPAs for 79.4% of practice violations, but assessed them with 87.1% of the sanctions. However, of these sanctions, 57.4% were serious, compared with 75.0% of those imposed on PAs. Fourteen percent of the sanctions meted out to CPAs for competition violations were serious, versus 50.0% of those meted out to PAs. Additionally, three of the four CPAs who lost their permits due to violation of competition rules were also cited for practice or integrity violations for the same incidents. Three of the four PAs, however, lost their permits when they engaged in competition violations only. In summary, while similar punishment was meted out for integrity violations, CPAs received more sanctions for practice violations, and PAs received more severe punishment for both practice and competition violations. These findings tend to support Hypothesis 3 regarding sanctions.

Comparisons Between Enforcement Periods

Hypothesis 5a proposed that enforcement activity would have increased following the 1961 statutory change allowing the Board autonomous enforcement in terms of the number of citations for violations. Table 9 separates information regarding offense categories and specific violations into the time periods in which they occurred. The two periods in this study were almost equal in length: the early period, from 1946 through 1961, encompassed 16 years, and late period, from 1962 through 1978, comprised 17 years.
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<th>Time Period</th>
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<th>% of Violations</th>
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<td>15</td>
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<td>27</td>
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<tr>
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<td>15</td>
<td></td>
<td>20</td>
<td>27</td>
<td>100.0</td>
</tr>
<tr>
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<td>100.0</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Practice Rules</td>
<td>21</td>
<td>27</td>
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**Harston and Welch: Evolution of Professional Enforcement in Texas: An Examination of Violations and Sanctions**

Published by eGrove, 1997
## TABLE 9 (CONTINUED)

### Specific Violations Over Time

<table>
<thead>
<tr>
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<td>Number</td>
<td>%</td>
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<td>%</td>
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<td>4.2</td>
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<td><strong>Total violations in period</strong></td>
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<td>83.3</td>
<td>4</td>
<td>16.7</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* One advertising violation in first period not identified by type of professional.
* Significant difference between CPAs and PAs in sanction assessed at .05 probability level.
The Board initiated much more enforcement activity following its empowerment. It issued four integrity violation citations in the early period, compared with 23 citations from 1962 through 1978. Practice violation citations were as follows: nine citations in the early period, and 25 citations in the late period. Competition violation citations increased from 11 from 1946 through 1961, to 63 from 1962 through 1978. However, these numbers may reflect the increase in the overall number of licensed practitioners.

An examination by type of professional yields additional insight. In the first period, during which CPA and PA numbers reached approximate parity, CPAs were subject to five times the number of the citations as PAs. In the late period, the increase in the number of citations is more proportional to the increase the number of CPAs. While the number of CPAs slightly more than tripled during late period, from 5,686 professionals in 1962 to 19,533 in 1979 [Records, 1962; Tinsley, Undated, pp. 27, 45], the number of violations cited increased over fourfold. PA numbers dropped to approximately a quarter of their highest membership by 1970 [Tinsley, pp. 27, 45], yet the number of violations for which they were cited quintupled, from four to 20. The CPAs' share of total citations declined slightly (from 83.3% to 82.0%) as their numbers increased significantly, while there was a slight increase in the proportion of total citations issued to PAs (from 16.7% to 18.0%). These results lend support for both Hypotheses 3 and 5a regarding citations. Violation citations increased for both CPAs and PAs, but especially for PAs, given the decline in their numbers.

We additionally examined the citations in light of the types of violations enforced, and found that the relative mix of violations also varied between periods. The ratio of integrity violations increased from 16.7% to 20.7% of total violations between the early and late periods, reaching approximate parity with practice violations in the late period. The proportion of practice violations to total violations decreased significantly, from 37.5% to 22.5% of total violations between periods. The proportion of competition violations over the periods increased significantly, from 45.8% to 56.8% of all citations for which hearings were held. The increasing professional concern regarding substandard practice during the late period is not reflected in the number of citations for practice violations, where it would be expected, but it may be reflected in the increase in integrity rules enforcement. Competitive behavior continued to command the largest
share of the Board's attention.

Hypothesis 5b predicted that enforcement activity would have increased following the 1961 statutory change allowing the Board autonomous enforcement in terms of severity of sanctions. Tables 10 and 11 present information regarding sanctions in the two enforcement periods.
## TABLE 10
Specific Sanctions Over Time

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<td>CPA Number %</td>
<td>CPA Number %</td>
<td>CPA Number %</td>
</tr>
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<td>Violators Involved</td>
<td>17 81.0 4 19.0 21 100.0</td>
<td>71 79.8 18 20.0 89 100.0</td>
<td>110 100.0</td>
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<tr>
<td>Violations Involved</td>
<td>24 100.0 91 82.0 20 18.0 111 100.0</td>
<td>135 100.0</td>
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<tr>
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<td>4 13.8* 0 0.0 28 19.4* 0 0.0 28 19.4 32 18.5</td>
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<td></td>
</tr>
<tr>
<td>Revoke Permit</td>
<td>4 13.8 2 6.9* 6 20.7 27 18.7 13 9.0* 40 27.7* 46 26.6</td>
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<td></td>
</tr>
<tr>
<td>Letter of Reprimand</td>
<td>5 17.2 2 6.9 7 24.1 21 14.6 3 2.1 24 16.7 31 17.9</td>
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<td></td>
</tr>
<tr>
<td>Advise/Warn</td>
<td>0 0.0 0 0.0 0 0.0 2 1.4 0 0.0 14 7.2 2 1.2</td>
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<td></td>
</tr>
<tr>
<td>Other Letter</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Publicize</td>
<td>2 6.9^ 0 0.0 2 6.9 25 17.4* 5 3.5 30 20.9* 32 18.5</td>
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<td></td>
</tr>
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<td>Close File</td>
<td>9 31.1* 0 0.0 9 31.1* 12 8.3 2 1.4* 14 9.7 23 13.3</td>
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<tr>
<td>Wait</td>
<td>0 0.00 0 0.0 0 0.0 3 2.1 0 0.0 3 2.1 3 1.7</td>
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<td></td>
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<tr>
<td>Total sanctions</td>
<td>25 86.2 4 12.8 29 100.0 121 84.0 23 16.0 144 100.0 173 100.0</td>
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<tr>
<td>Per violator</td>
<td>1.47 1.0 1.38 1.70 1.28 1.62* 1.57</td>
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<tr>
<td>Per violation</td>
<td>1.25 1.0 1.21 1.33 1.15 1.30 1.28</td>
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<td></td>
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</table>

x Single individual may be subject to more than one sanction.
+ Significant difference between periods for sanctions at .05 probability level.
^ One letter of reprimand for advertising violation in first period not identified by type of professional.
### TABLE 11

Sanctions Dispensed To Type of Professional by Type of Violation Over Time

<table>
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<th>Early Period (1946-1961)</th>
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<th></th>
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</thead>
<tbody>
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<td></td>
<td>In Period</td>
<td>Integrity</td>
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<td>Competition</td>
<td>Total</td>
<td>% of PA</td>
<td>% of Total</td>
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<tr>
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</tr>
<tr>
<td>+ Revoke Permit</td>
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<td>+ Revoke Permit</td>
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<td>56.5</td>
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TABLE 11 (CONTINUED)
Sanctions Dispensed To Type of Professional
by Type of Violation Over Time

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<tr>
<th>CPA</th>
<th>Type of Violation</th>
<th>In Period</th>
<th>In Period % of PA</th>
<th>In Period % of Total</th>
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<td>Early Period (1946-1961)</td>
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<td>Integrity</td>
<td>Practice</td>
<td>Competition</td>
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<td>0</td>
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<td>8</td>
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<td>Late Period (1962-1978)</td>
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<td>91</td>
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<tr>
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<td>45</td>
<td>42</td>
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<tr>
<td>Total serious sanctions</td>
<td>21</td>
<td>27</td>
<td>7</td>
<td>55</td>
</tr>
</tbody>
</table>

x Single individual may be subject to more than one violation and sanction.

^ If more than one instance of the same type violation in one hearing, type was counted only once.

@ One reprimand for advertitizing violation in first period not identified by type of professional.

+ Significant relationship between sanction and type of violation in period at .05 probability level.

s Serious sanctions involve loss of ability to practice (revocation of certificate and revocation of permit.)
As discussed in the section on the history of enforcement, an increase in the number and severity of punishments was expected. Results, shown in Table 10, indicate an increase, overall, in both the number of sanctions levied per practitioner and the number levied per violation between the two periods. Sanctions averaged 1.38 per person in the early period, versus 1.62 per person in the late period. Each violation earned, on average, 1.21 sanctions from 1946 to 1961 versus 1.30 sanctions from 1962 to 1978. In addition, the proportion of all sanctions considered to be severe (revocation of certificate and revocation of permit) increased from 34.5% in the first period to 45.1% in the second period. The results support Hypothesis 5b.

We made a comparison of sanctions levied against CPAs versus those levied against PAs, grouped by the period in which the punishment was levied. Results, also shown in Table 10, indicate that the proportion of total sanctions (combination of both CPAs and PAs) represented by revocation of certificates and revocation of permits increased in the second period for both CPAs, from 27.6% to 38.1%, and for PAs, rising from 6.9% to 9.0%.

Further examination involved a comparison of the sanctions between the two periods and professional designations, given the type of violation. Our results, shown in Table 11, indicate that while the proportion of serious sanctions to total sanctions against both CPAs and PAs increased from the early to the late period, in both periods severe PA punishments exceeded those for CPAs on a proportional basis. This occurred while the proportion of serious violations (integrity and practice) committed by PAs dropped, from 23.1% of all early serious violations (committed by both PAs and CPAs) to 20.8% of all late serious violations. Of the total CPAs violations during the early period, 50.0% were serious. Of their sanctions during that period, 32.0% resulted in revocation of certificates and permits. During the early period, 50.0% of PA sanctions resulted in loss of permit, when 75.0% of the violations were serious. In the late period, the proportion of CPA sanctions resulting in loss of ability to practice was 45.4%, while the proportion of serious to total violations was 41.8%. For PAs, 56.5% of the sanctions were serious, punishing violations of which 50.0% were serious. However, it should be noted that the Board initiated a 42.2% increase in the number of severe sanctions for CPAs, for only a 3.0% increase in the proportion of serious violations committed by them. In addition, a higher proportion of PAs than CPAs lost
their ability to practice in the late period for competition violations. These results lend support for Hypothesis 5b. PAs, however, appeared to receive more severe treatment for less serious violations, providing partial support for Hypothesis 3.

DISCUSSION

From 1945 through 1978, certain demographic characteristics were associated with the incidence of Rules violations of CPAs. College-educated professionals and those trained by Big Eight CPA firms appeared better prepared to adhere to standards. Education, championed by the accounting profession as the path to expertise and passage of the CPA exam, was used not only to signal competence for applicant accountants, but to differentiate CPAs from PAs. The results of this study lend credence to the linkage between education and expertise. Those CPA practitioners with less education, may have possessed less accounting knowledge and may have been more prone to Rules violations. However, the study does not examine whether lack of expertise specifically caused illicit behavior.

CPAs engaged as sole practitioners or in local partnerships were more likely to be cited for violations. Loeb [1971, pp. 297-298, 301] in a 1969 study of Wisconsin CPAs found that accountants in large public accounting firms were more accepting of and possessed greater adherence to ethical norms than medium and small firms. He reasoned that large firms may have faced greater responsibility and higher penalties than small firms for unethical behavior. Yerkes [1975, p. 139] argued that since accountants working for national firms perform more audits and have closer relations with professional colleagues than those with smaller firms, they should exhibit higher ethical behavior than practitioners from smaller firms and firms solely consisting of PAs. Abbott [1988, pp. 137-138], however, suggests that dominant professions often possess sufficient power to define services and measurements of success that make them appear effective and, in the short run through these definitions, protect their members from claims of incompetence from external forces. Abbott’s [1988, pp. 137-138] theory may apply to professions at a micro level. Big Eight CPA firms may have been sufficiently empowered and positioned within the business community to shelter their practicing accountants from allegations. Alternatively, the CPA working alone or in the local partnership may have accepted engagements for which requisite
competence was lacking. However, considering Loeb's results [1971, pp. 297, 305], the Big-Eight CPA offices may have had a slightly higher acceptance of ethical norms than local partnerships and sole practitioner offices, and acted accordingly.

Abbott [1988, pp. 2, 316-319] alleges that interprofessional competition over the jurisdiction of provided services is one of the major factors in determining the evolution of any profession.26 Both the theory regarding professions and the history of the Texas accounting profession point to conflict between CPAs and PAs over the domain of accounting services. Given the majority power of the more prestigious CPA tier on the Board, the literature leads to an expectation of more enforcement activity taken against PAs than CPAs, especially during the second period when PA strength on the Board began to decline. While enforcement in the first period appeared to target CPAs, the expectation of a proportionately higher incidence of violations and sanctions for PAs appears to be born out in the second period, when the Board had stronger enforcement power. PAs received more severe punishment in both periods.

Two elements may explain the higher overall incidence of competition violations: Board constraints and practitioner accessibility to facts. Board Minutes provide evidence that lack of funding, resources spent on administering applications and examinations, and insufficient legal power were primary factors in determining the degree and quality of enforcement procedures. The Board frequently employed an uncomplicated, inexpensive method to detect competitive behavior by canvassing telephone directories and newspaper listings for advertising and solicitation infractions [Minutes, June 8, 1954, September 29, 1958]. Such canvassing produced numerous Board-initiated citations concerning competitive behavior. In addition, practitioners usually had no access to audit records of their competitors and may not have been able to detect and report practice violations concerning negligent practice. The percentage increase in competition violations from the early to the late period indicated a continued Board emphasis in competitive behavior issues. Regarding the less punitive use of rep-

26 Although Abbott [1988, p. 2] discusses competition for work between professions, his theory is also applicable to jurisdictional disputes between two sub-groups of a profession such as CPAs and PAs. Lubell [1980, p. 368] concludes that the conflict between CPAs and PAs was external or inter-professional.
rimands and other letters for competitive behavior citations, accounting leaders, although concerned about maintaining "professional attitude" and distinguishing the profession from ordinary commercial enterprises, possibly were not willing to inflict severe punishment for competitive behavior, a part and parcel of "doing business." Pressure from government, and public and professional concern over cases of malpractice called for a more punitive response for practice and integrity violations.

This partial analysis of the enforcement activity in Texas concurs with literature from the sociology of professions, maintaining that professions are a process [Caplow, 1966, pp. 20-21; Wilensky, 1964, pp. 142, 157; Lubell, 1980, pp. 44, 57; Freidson, 1986, pp. 30-32]. Proof of professional process is evidenced by the fact that Board enforcement activities increased for all types of violations during the early 1960s. While the Board increased the proportion of integrity violations heard during from 1962 through 1978, it continued to process more competition than integrity or practice violations. As the records do not indicate whether member activity grew more competent, or whether fewer complaints resulted in formal hearings, no conclusion can be drawn regarding the true incidence of malpractice versus competitive behavior violations. The lack of enforcement funding and legal power, ease in detecting advertising and solicitation offenses, fear of losing control over the competitive behavior of practitioners, a tenacious concern with preventing competitive bidding, and during the 1970s, a defensive stance against attack by the Federal government over Rules banning competitive behavior were probable reasons for the proportionally small enforcement efforts against more serious practice violations [Tinsley, 1983, p. 133].

The historical evolution of the Texas accounting profession, especially that period covering the decline of non-certified practitioners, may offer implications for the accounting profession in the future. Abbott [1988, pp. 19, 137] warns that a profession is determined by the manner in which the content of "work" and jurisdiction over provided services change and by the manner in which that "work" is controlled by various occupational groups. Despite a majority in numbers, in 1946, PA practitioners choosing to remain as PAs, lost jurisdictional domain due to a lack of understanding of shifting market demands for more complex services requiring expert judgment as evidenced through certification. Perceived expertise, as embodied in the CPA exam, placed certified accountants above their less creden-
tialed counterparts. PAs forfeited the ability to define the accountant’s task by failing to become the experts in abstract knowledge. The ability of current practicing CPAs to define their “work” may be in jeopardy today. Chenok [1995, p. 68] alerts the profession that survival of public accounting depends not only on the provision of quality service, but upon the ability of firms to provide a “broad range of specialized services” in order to compete against providers external to the accounting profession. Abbott [1988, pp. 317, 324] maintains that professions constantly need to reassess services, redefine professional knowledge, and redetermine division of labor.

CONCLUSIONS

This paper discusses the evolution of accounting professional regulation in Texas from 1915 through 1979 and associates the competitive process within the profession to Rules violations and enforcement during the period in which the 1945 Act was in effect. The Act and the Rules of Professional Conduct reflected the emergence of professional self-regulation through the influence of the TSCPA on the Board. In an effort to determine compliance with professional standards in the workplace, this study indirectly observed the behavior of practitioners by examining violation and sanction records.

Anecdotal evidence from the history of the Texas accounting profession, in addition to the results of this study, raise questions regarding the ability of the Board and the profession to obtain access to critical information regarding malpractice and to regulate practitioner behavior. Despite national and local concern over malpractice issues, results of the study suggest that intraprofessional competition surfaced as a substantial explanatory factor with professional preparation appearing as a differentiating variable between violators and non-violators. CPA practitioners with a college education and Big Eight firm training were less prone to be cited for Rules violations. Conflict between CPAs and PAs over the domain of accounting services may have impacted enforcement activity. Proportionately more violations were heard and more severe sanctions were issued against PAs than CPAs during the second period under study. Although the percentage of citations involving integrity violations increased over time, those concerning practice Rules declined. A large portion of enforcement activity continued to pertain to competitive behavior allegations. Although sanctions
were greater during the 1960s after the Board became empowered by legislative amendments to investigate and discipline violators, continued evidence of substandard practice in the history literature raises questions about the effectiveness of the accounting profession’s regulatory framework.

REFERENCES


 Deposition, The Texas State Board of Public Accountancy vs. George W. Cornell (September 9, 1960), 129th Judicial District Court of Harris County, No. 516,984.


The Accounting Historians Journal, June 1997


Abstract: An earlier article reviewed income smoothing in literature published up through 1953. This article extends that review through 1965, the year preceding the publication of the first modern empirical earnings management studies. The focus of this article is on the 1964 Gordon article which was the stimulus for those early income smoothing studies that began to appear in 1966 and marked the beginning of modern empiricism in accounting literature. Critical reading of Gordon's article suggests that he drew upon both earlier accounting and economics literature in formulating his theory of income smoothing. Review of the relevant earlier literature demonstrates that the primary elements of Gordon's article were present in both the earlier accounting and economics literature. Gordon's contribution was a more disciplined formulation of a theory of accounting choice than was present in the literature of this period and that theory included a series of seemingly straightforward, testable hypotheses.

INTRODUCTION

A continuing series of studies that tested for income smoothing represents the beginning of modern earnings management research that have appeared in accounting literature since 1966. The first studies generally referred to Gordon [1964] or Hepworth [1953] and Gordon and Hepworth. Only one of the early studies contained a reference earlier than Hepworth. None contained any references dated between Hepworth and Gordon. There was, however, frequent consideration of income smoothing behavior in literature prior to the Hepworth article and in the period bounded by the Hepworth and Gordon articles. The income smoothing literature prior to the Hepworth article was reviewed recently [Buckmaster, 1992]. This paper extends the earlier review up through 1965, the year preceding the appearance of the first modern income smoothing articles. Much of the paper is directed toward examining the degree to
which Gordon's work should be considered seminal work. The 1964 Gordon article was particularly important because it motivated most of the early modern income smoothing studies that followed in the next few years.\(^1\)

The documentation in the early modern income smoothing literature suggests that Hepworth and Gordon were unique in their consideration of income smoothing prior to 1966. That is not the case. The two important elements that provide the foundation for Gordon's article appeared in other publications during 1954-1964 period. This paper documents the existence of Gordon's foundation elements, the smoothing quality of an accounting method as a criterion for accounting choice and stockholder satisfaction as managers' motivation for smoothing, in earlier accounting literature. The significance of Gordon's 1964 article is attributed to the form that he used to state his theory of manager motivation to smooth income and to the timing of the appearance of the article rather than to the originality of his position. The 1964 article provides a more forceful and explicit treatment of ideas that were presented in his 1960 *Accounting Review* article. When both articles are considered, we find his ideas can be traced to the traditional economics, the newly emerging managerial (behavioral) theories of the firm, and earlier accounting literature. Gordon's combination of these ideas into a statement of a theory of accounting choice makes his 1964 article historically significant. The relevant literature on managerial theories of the firm as well as some accounting income smoothing references not relevant to the discussion of Gordon's contribution are also identified and briefly discussed.

The remainder of this paper is composed of four short sections and a longer section on the 1964 Gordon paper and re-

lated literature. The first section of the paper describes the process used to identify references to income smoothing behavior. The second section describes the relevant portions of the earlier tradition of income smoothing in the accounting literature and the Hepworth [1953] and Gordon [1964] articles in order to provide context for the discussion of smoothing literature published from 1953 through 1965. The third section examines the Gordon [1964] article and related literature. The next section is devoted to recognition of additional references to smoothing in accounting literature that are not relevant to earlier sections. The concluding discussion summarizes the paper and contains a brief discussion of the lack of citation of the early smoothing literature in modern earnings management work.

IDENTIFICATION OF REFERENCES TO SMOOTHING BEHAVIOR

Identification of smoothing references in the economics literature was relatively straightforward. Several years after the first influx of accounting income smoothing studies, some accounting researchers [Smith, 1976, Kamin and Ronen, 1978; Koch, 1983; Belkhoui and Picur, 1984; Hunt; 1986] began to consider income smoothing within the context of the managerial theories of the firm. References (including post-1965 references) in these economics-based studies in accounting literature were read for statements about income smoothing behavior. Then likely references in the economics literature referred to by the accounting researchers were read for statements about income smoothing behavior.

The search for relevant accounting literature has been much less systematic. As indicated earlier, there is only one reference in the post-1965 accounting income smoothing literature to the pre-1966 accounting literature other than to Hepworth [1953] and Gordon [1964]. I searched the Accountants Index for entries for income smoothing, income stabilization, income volatility, income fluctuation, profit smoothing, profit stabilization, and profit volatility for the period, 1950-1965. There were no entries. The accounting entries identified in this paper are the result of both chance and experience. I have been "collecting" references to income smoothing behavior for the past several years and when, in the course of other research, I see a source that might contain a reference to such behavior, I read it. Thus, the search for income smoothing ref-
erences prior to 1965 has not been systematic and only a portion of the body of literature has been examined in the identification of the references in accounting and business literature. However, it is not unreasonable to assume that the identified references are representative of the total body of references to smoothing during the 1954-1965 period.

THE EARLIER TRADITION TO 1953 AND HEPWORTH

I identified thirty-four works published from 1893 through 1953 which contain some sort of reference to the smoothing properties of an accounting method or to an accounting or business practice used in such a way as to dampen the fluctuations of reported income were identified in my 1992 paper. Several recurring characteristics and changes in context were identified in this group of publications. Those characteristics and changes in context include the change from a balance sheet to an income statement context, flexibility in the capitalize/expense decision, and advocacy of specific accounting methods because they reduce the volatility of the income time-series. This last characteristic is particularly important in the development of Gordon’s 1964 paper.

Hepworth’s paper was the first obvious publication on income smoothing which probably accounts for the recognition it received in the early tests for smoothing. The primary objective of the Hepworth article was to identify accounting tactics that managers might use to smooth income. He starts with a brief discussion of managers’ motivation for smoothing which includes the impact of income volatility on stockholder satisfaction. Then Hepworth lists several smoothing tactics in the main body of his paper.

GORDON [1964]

The overall objective of Gordon’s 1960 and 1964 Accounting Review articles was to plea for the formulation of testable accounting theories in order to facilitate regulators’ choice of accounting methods and the subsequent testing of those theories. The 1964 article, the historically significant article, was com-

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2 Several additional pre-1954 references have been identified since the publication of the earlier review. However, the basic characteristics of the literature suggested in that article are not altered by the discovery of the new references.
posed of three elements, two of which are important. The first element was a demonstration of the failure of ARS Nos. 1 and 3 to provide regulatory guidance for the selection of accounting practices. This reaction is an abbreviated version of his 1960 argument and he uses the newly published ARS No. 1 and 3 to restate his position. The section exists as a lead into the two more important elements of his article.

Gordon moves from the discussion of the failure of traditional normative accounting research as represented by ARS No. 1 and 3 to the main body of the paper and the first important element of the paper. In this section of the paper, Gordon rejects the purpose of accounting as the measurement of wealth and argues instead that the purpose of accounting is the maximization of wealth. From this position, he develops his argument that “the criterion that should be used [by regulators] in choosing among principles is the minimization of stockholder bias in extrapolating past income to estimate future income.” [Gordon, 1964, p. 26] in order for stockholders to better estimate the value of the firm. Application of the criterion presumably results in a smoother income time series and is equivalent to income smoothing. This proposal was the specific objective of the 1964 article.

Gordon then develops his theory of motivation for income smoothing because of its impact on stockholder satisfaction. His stated reason for this formulation is that “By considering a different but related problem in the choice among accounting principles, it is possible within the space remaining to present a concrete research proposal that illustrates our approach to the choice among accounting principles in greater detail” [Gordon, 1964, p. 261]. This last element is the historically significant contribution of this article.

3 This position appears to be inconsistent with Gordon’s position in a 1953 article in which he promotes a specific price change income model. Price change models can be expected to produce more volatile income time-series than historical cost based models. Several empirical studies in the late sixties and seventies confirmed the expectation of greater volatility [Frank, 1969; Simmons and Gray, 1969; Buckmaster, et. al., 1977]. However, careful reading of Gordon’s 1960 article makes it clear that he believed that price change income would produce less volatile income series than historical cost. One reviewer questions this interpretation of Gordon’s statement that “minimization of stockholder bias in extrapolating past income to estimate future income.” He argues that Gordon did not necessarily have smoother income time series in mind when he proposed the criterion for the selection of accounting methods by regulators.
While the proposal of income smoothing as a criterion for accounting choice by regulators was the specific objective of the 1964 Gordon article, this proposal was, for the most part, ignored in the subsequent empirical literature. His development of the theory of management motivation to smooth income was much tighter than customary in accounting literature of the period. This model proved to be the most influential element of his paper because it provided the stimulus and justification for subsequent empirical tests for income smoothing.

Smoothing as a Criterion for Accounting Choice by Regulators

Advocacy of the smoothing quality of specific accounting methods as a criterion for accounting choice by managers appeared frequently in pre-1954 literature. Joplin [1914] supported the creation of secret reserves to smooth income. Nash [1930] and Polak [1930] advocated flexible depreciation charges as smoothing tactics. Dicksee [1931] suggested the use of reserves for future losses as an appropriate smoothing technique. A number of authors [Warshaw, 1924; Davis, 1937; Nickerson, 1937; Cotter, 1940] promoted base stock inventory methods including LIFO because of the smoothing properties of these cost-flow assumptions.

Johnson [1954] continued the literary tradition of promoting the smoothing quality of an accounting method as a criterion for accounting choice. However, he shifted from the traditional argument directed towards management to a regulatory context. That is, Johnson [1954] was not trying to convince managers to adopt specific accounting methods because of their smoothing quality. Rather he wanted regulators to use the relative smoothing quality of an accounting method as a criterion for the selection of regulatory accounting requirements. He suggested that if national economic policy is to dampen business cycles, then smoothing quality should be a criterion for the acceptance of accounting methods. Gordon's 1960 paper is an embryonic version of his 1964 paper. He discusses and calls for empirical testing of accounting theories as well as mentioning "stabilization of income" as if it were a widely recognized criterion on a par with conservatism. Dickens and Blackburn [1964, p. 314] specified two criteria for accounting policy choice, one of which was, "To provide the best possible basis for the stockholders to project the earnings and financial condition of the corporation," in the same Accounting Review issue in which

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Gordon published his influential article. Dickens and Blackburn's [1964] analysis translated the criterion into an income smoothing criterion. Consequently, a primary reason for Dickens and Blackburn's [1964, p. 318] rejection of holding gains and losses as an element of income was that, "The inclusion of these holding gains and losses creates a lever which can produce wide fluctuations in reported income due to relatively minor changes in replacement cost."

The preceding three papers published during the 1954-1965 period as well as the 1964 Gordon article continue a longer tradition of supporting accounting methods because of their smoothing quality. There is, however, a distinct departure from the earlier literature. Earlier work discussed a specific accounting tactic or method within the context of manager choice. The four articles published during the 1954-1964 period discuss accounting method choice within the context of accounting regulation. One gets the impression that there was a group of academics at that time for which a smoothing criterion by regulators was perceived as desirable and appropriate.

Although there appears to be an influential group of academics that supported accounting methods that result in less volatile income time series, smoothing as a criterion for accounting choice was not universally accepted. The preparers of the American Accounting Association's Accounting and Reporting Standards [1957, p. 63] reiterated the CAP's [1946, 1947A, 1947B] earlier censure of the "artificial stabilization of the income series through the use of operating reserves." Two articles [Anreder, 1962; Business Week, 1963] in the financial press identified the use of pension expense funding to smooth income as an accounting or auditing problem. Zeff and Maxwell [1965] responded vigorously to Dickens and Blackburn's [1964] arguments against reporting holding gains and losses as an element of income. Zeff and Maxwell [1965] argue that there is no justification for a criterion for accounting choice based upon the relative income volatility induced by a method. Also, Hendriksen [1965, p. 274] censured income smoothing. He reasoned:

smoothing is not a desirable attribute of financial accounting particularly if it is artificial. The goal of smoothing confuses an operational goal of the firm with an accounting goal. If the results of operations are not, in fact, smooth, accounting should not make them appear as if they were.
Stockholder Satisfaction as the Motivator for Income Smoothing

The second significant and most influential element of Gordon's article was his development of a theory of managers' motivation to smooth income in order to enhance stockholder satisfaction. Gordon developed his position in a much more complete and systematic manner than other attempts at accounting theory during that period. This model appears to have been the inspiration for the series of empirical studies that began to appear in 1966.

There are occasional references in accounting literature prior to Gordon's 1964 article that refer to smoothing in order to satisfy stockholders or, similarly, to manipulate security prices. Johnson and Mead [1906] believed that the primary incentive for U.S. railroads to charge large amounts of capital expenditures to expense in periods of high profits was to manipulate securities prices. Warshaw [1924] listed stockholder and creditor satisfaction as secondary incentives for smoothing. Devine [1942] suggested that since the market seemed to discount accounting income time-series in setting market prices, smoother income might result in more stable securities prices.

Even though no accounting references dated from 1954 through 1964 are identified in Gordon or subsequent accounting income smoothing literature that suggest stockholder satisfaction as the smoothing motivator, such references were available to Gordon in the earlier accounting literature. However, several years after accounting income smoothing studies began appearing, Smith [1976, p. 721] asserted that the income smoothing hypothesis was originally derived from economics and the behavioral sciences. Smith appears to have been referring to the managerialist literature since that is the economics literature identified in his literature review and his tests were for differential smoothing behavior by owner controlled and management controlled firms, a central idea of the managerialists.

These managerialist theories were newly emerging in the late fifties and early sixties and the basic ideas for income smoothing were in these theories. Cyert and March [1956] introduced the concept of organizational slack; their discussion of slack implies a smoothing effect around some satisfactory profit goal. Baumol [1959] treated sales maximization as managers' goal rather than the traditionally assumed goal of profit
maximization in his theory of oligopolist behavior. He defines the profit goal as that profit that is large enough to make the firm's securities attractive on the market. Anticipated profits in excess of the goal will be used to attempt to increase sales. Baumol provides additional motivations for avoiding excessively high profits: (1) High profits will induce additional competition, and (2) Excessively high temporary profits create unrealistic expectations by stockholders. The effect of Baumol's hypothesized manager behavior is to reduce income time-series volatility. Kayson [1960] examined the structure of firms in the industrial sector and concluded that, in general, the constraints imposed by market forces are loose for large firms and the scope for managerial choice is wide. He suggests that powerful firms use this discretion to seek some level of return without much variation.

Alchion and Kessel [1962, p. 162] relate to smoothing via the argument that, "the cardinal sin [of monopolies] is to be too profitable." Since managers do not have unlimited access to direct pecuniary compensation, they consume excess profits in other welfare enhancing activity. This, of course, has the effect of smoothing the income time series. Cyert and March refined and expanded their earlier position with the development of a behavioral theory of the firm in their 1963 monograph. Their definition of the profit goal was changed to an average of the achieved profits over past periods which is, of course, a smoothed series. Williamson [1963] provided an important chapter for the Cyert and March [1963] monograph with the development of a behavioral model of management decisions for a public utility. An upper limit to acceptable income is dictated by political costs and the lower limit is reported income equal to the minimum profit negotiated by other members of the firm coalition. This, then, is an income smoothing model and Williamson maintains that the model can be generalized so that it is also applicable to unregulated firms.

The preceding discussion demonstrates that there was an adequate tradition in both accounting literature and the managerialist theories to have provided Gordon with the foundation for the development of his income smoothing theory. Gordon's interests were broad and when we examine his 1960 and 1964 articles carefully, we find ideas and concepts drawn from traditional microeconomics, macroeconomics, and managerial accounting as well as financial accounting and manage-
rial theories of the firm. For example, Gordon [1960, pp. 604-605] draws upon macroeconomics through his use of the multiplier - accelerator theory of national income determination as an example of the formulation a testable theory. He hints at income smoothing during this discussion of the model. Later the theories of income smoothing as a regulatory criterion for accounting choice and income smoothing by management are formulated in the same manner in the 1964 article. He uses managerial accounting concepts are used in his discussion of intra-firm income measurement, transfer prices, and standard cost systems [Gordon, 1960, p. 615-617]. He also uses the underlying assumption of traditional theories of the firm when he relies upon the "old fashioned" objective of the maximization of firm wealth as the basis for his formulation of the income smoothing criterion for regulators [Gordon, 1964]. Three rather clear references to important managerialist concepts are his discussion of organizational (budgetary) slack [Gordon, 1960, p. 604], expense preference [Gordon, 1964, p. 255], and the explicit assumption that managers maximize their welfare when making accounting choices [Gordon, 1964, p. 261]. Gordon's reference [1964, p. 262] to the use of hidden reserves to smooth income provides an explicit example of recognition of an old accounting idea. He called upon his broad knowledge of both accounting and economics to construct his income smoothing hypothesis that provided the basis for the earliest surge of modern empirical research in accounting. The hypothesis was a statement of a common idea in earlier accounting and early managerialist literature framed specifically to test a theory of management choice of accounting practice. Again, the form in which the idea is stated is the source of the historical significance of the 1964 Gordon paper. Unlike others in accounting that called for empirical research, Gordon provided a theory, a hypothesis, and a specific, practical approach for testing the hypothesis.

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4The Accountants Index lists five articles authored by Gordon in the 1950-1965 period, yet the Index of Economic Articles lists ten of his articles published during that period. There is no duplication in the listings. Also, the University of Delaware holds five of his books, two on accounting and three on economics.
OTHER REFERENCES TO INCOME SMOOTHING

There were several other references to smoothing during the 1954-1964 period that are not relevant to the discussion of the antecedents of modern earnings management literature. These references generally continued the tradition of the pre-1953 literature identified in Buckmaster [1992].

Husband [1954] followed the pattern of other authors after the acceptance of LIFO for tax purposes and objected to LIFO because its only justification was that it smoothed income. Garner [1955] identified the smoothing effect of an inventory cost flow method as one of six considerations guiding accounting choice and, in the style of the period, he uses hypothetical case data to demonstrate that LIFO provides a smoother income time series. Devine [1955] discussed the theory and practice of depreciation during the period. The greater highs and lows of income during prosperity and depression were identified as a problem with valuation at expected present value [Devine, 1955, p. 332]. Retirement reserves in connection with the retirement depreciation method were perceived as nothing more than a smoothing device [Devine, 1955, p. 334]. Interestingly, Devine [1955, p. 349] believed that while depreciation based on revenues is frequently used in a non-systematic way in order to smooth income, orthodox depreciation methods provide just as much opportunity for manipulation. Another Devine essay [1963, p. 134] contained a passage on the differential behavioral impact of good news and bad news. He raised the question of the behavioral impact of a single charge against income versus smoothing bad news. He called for and anticipated the contemporary research on good news/bad news effects on the market. Jacobsen [1963] perceived a trend in the “practice of optimeasurement” which is to defer income and to use methods that maximized expense recognition. Smoothing was discussed in the context that firms practice “optimeasurement” in reasonably profitable years and then the firms change to profit increasing methods in “lean” years. Tax benefits appeared to be the underlying motivation for minimizing income and increasing stock prices the motivation for increasing income in lean years.

Outside of Gordon’s 1960 and 1964 articles, Yamey’s [1960] essay on the nineteenth century origins of several mid-century accounting practices contained the most substantive discussion of smoothing published from 1954 through 1965. He identified
depreciation, hidden reserves, unusual non-recurring items, excessive provision for contingencies, and expensing capital assets as early smoothing tactics in the course of his essay.

CONCLUDING DISCUSSION

Early modern income smoothing studies attribute the origins of income smoothing in accounting literature to either Hepworth [1953] or Gordon [1964]. The Gordon article provided the rationale for early smoothing studies that launched the era of hypothesis testing in modern academic literature. Buckmaster, [1992] documented a long tradition of recognition of income smoothing behavior; this paper documents a continuing recognition of income smoothing in literature in the period between the publication of the Hepworth and Gordon papers. The focus of this paper has been to identify the primary elements of Gordon's 1964 paper in earlier literature. Those elements were present in the earlier literature.

One significant change of the income smoothing literary tradition that occurred in 1954 was that the context of the advocacy articles changed from efforts to convince managers of the merit of a specific method's smoothing properties to advocating or opposing the relative smoothness of accounting choices as a criterion for regulator's decisions. This idea that regulators should select accounting practices that result in the least volatile income time-series was one of the two primary ideas in Gordon's 1964 article.

The other primary and the most significant element of the Gordon article was his income smoothing theory that contained several hypotheses which he maintained could be tested. While some researchers have suggested that Gordon derived the basis of his theory from the newly emerging managerial theories of the firm in economics, Gordon's assumed objective of profit maximization conflicts with the managerialists contention that managers of large modern corporations depart from profit maximizing behavior. Since the idea of smoothing income had appeared occasionally in earlier accounting literature, the earlier accounting literature seems to be a more likely primary source of Gordon's theory than the managerialist theories.

In any event, Gordon did not introduce any new or radical ideas despite the significance of his work for early empirical accounting research. Rather, Gordon's contribution was that he provided a more disciplined formulation of a theory of account-
ing choice than his contemporaries and that theory included a series of seemingly straightforward, testable hypotheses. Ultimately, significant design problems became apparent; however, the methodological difficulties of testing for income smoothing quickly became apparent.\(^5\)

The contribution of timing to the importance of Gordon's theory cannot be overlooked. Other prominent academics were calling for empirical research [Devine, 1963; Mautz, 1965; Green, 1966] and many of them were pushing the increased number of Ph.D. candidates of the late sixties and early seventies away from traditional normative research. The income smoothing hypothesis provided an opportunity for new accounting researchers to advance their careers and make their reputations. Several took the fullest advantage of the opportunity.

My experience with this paper along with my earlier paper on income smoothing in the pre-1964 literature represents a case study of a situation where there is a long literary history of recognition of a phenomenon that is ignored in modern investigations of that phenomenon. This is consistent with Bricker's [1988] finding that earlier literature (pre-1960) is rarely cited in contemporary literature. Bricker [1988, p. 94] limited his speculation on why early literature is infrequently cited in modern literature to the observation, “accounting academicians moved away from a practice orientation, towards a social science model of research. The pioneering work done during this period and thereafter often provides a year zero for later work, and previous studies are therefore often not considered”. This change in literary approach coincided with accounting literature related to income smoothing. Specifically, the questions being examined in the literature changed. Early modern income smoothing researchers were asking “Do companies smooth reported income?” The questions evolved into “To what degree and under what conditions do companies smooth reported income?” in later and contemporary literature. The earlier tradition of merely arguing that smoothing reported income is desir-

\(^5\)For example, Foster [1986, p. 228] observed: The academic research literature has not been able to provide strong evidence that income smoothing behavior is widespread. However, the problems of research in this area, rather than the limited nature of such behavior could well explain the limited evidence documenting its existence.
able or undesirable or using hypothetical examples to illustrate that a method has smoothing qualities is not crucially linked to the questions being raised in modern income smoothing literature.

There were other literary and environmental characteristics that contributed to the disregard of the pre-modern income smoothing literature. Accounting literature has traditionally been poorly documented and this tradition generally continued even in the academic literature until well into the sixties. Also, income smoothing was a relatively new term in 1966 and a number of terms had been used to refer to smoothing over the years. Finally, the Accountants Index, the primary bibliographical tool of the period, is totally inadequate as a "key word" index. Thus, even though the volume of early literature is less than overwhelming in quantity, searching that literature for useful sources is costly. A rational contemporary researcher has little, if any, incentive to investigate pre-1966 literature if the link between early income smoothing literature and modern earnings management literature is representative. Of course, this discussion is only applicable to modern earnings management and accounting choice research. The potential contribution of early publications to contemporary research in other areas of financial accounting or managerial accounting or tax accounting is potentially strong. Systematic studies of pre-1964 literature might contribute to the discovery of old ideas that will now be useful, the prevention of recycling inappropriate ideas, and the identification of neglected areas of contemporary research.

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EARLY EFFORTS OF THE U.S. PUBLIC ACCOUNTING PROFESSION TO INVESTIGATE THE USE OF STATISTICAL SAMPLING

INITIAL AICPA RESEARCH EFFORTS, LEGAL REVIEWS, AND FIRM SPECIFIC EXPERIMENTATION

Abstract: The study suggests that the AICPA’s efforts to investigate the use of statistical sampling appear to have been catalyzed by the confluence of the growing dissatisfaction with the traditional approach to sampling and the widespread recognition of the benefits of statistical sampling which were being realized in other professions and in industry. The fact that large corporations had begun to use statistical sampling in accounting and auditing lent additional urgency to the need to address the issue. In addition, some doubted the tenability of traditional sampling if challenged in court by a statistician.

The study also examines the research efforts of the AICPA which include case studies, legal opinions, a review of the mathematical underpinning of statistical sampling, and the initiation of an interdisciplinary collaborative effort with the American Statistical Association. The research suggests that from the very beginning, the AICPA was most cognizant of the legal implications of statistical sampling and that the legal opinions obtained played a key role in the profession’s eventual acceptance of this new technology. The study also indicates that the AICPA’s research led it to reexamine basic auditing concepts and challenge existing standards.

The national CPA firms shared information regarding their individual in-house experimentation with statistical sampling which suggests that a spirit of collegial cooperation existed rather than competition-related secrecy. Lastly, the research demonstrates the importance of individual leadership in the profession’s efforts to adopt new technology; here, the study provides a glimpse of two Accounting Hall of Fame members, Robert M. Trueblood and Oscar Gellein, and the first recipient of the Distinguished Service in Auditing Award, Kenneth W. Stringer, making one of their many profes-
sional contributions. The study suggests that without the strong leadership provided by these three individuals, the profession's adoption of this technology would have taken significantly longer.

WANTED: EXAMPLES OF USE OF STATISTICAL SAMPLING

The American Institute's committee on statistical sampling which is exploring the possible usefulness of statistical sampling techniques in accounting and audits by independent certified public accountants, desires to obtain information as to experimentation with these techniques that may have been carried out by our readers. In particular, the committee is interested in information regarding experiments that have been conducted by smaller accounting firms or individual practitioners in their audits of small businesses. It would also be interested in having information as to any use that has been made of statistical sampling in the accounting or internal control procedures.

If any of our readers has information of this kind . . .

[Journal of Accountancy, July 1957]

RESEARCH OBJECTIVES AND IMPORTANCE OF THE STUDY

The purpose of this study is twofold. The study first seeks to provide an overview of the issues and conditions that provided the impetus for the U.S. public accounting profession's efforts to investigate the use of statistical sampling. Second, the study attempts to provide insight into the initial research efforts taken by the AICPA to determine the feasibility of using statistical sampling to improve the practice of accounting and auditing. Such insight may increase our understanding of the manner in which the accounting profession reacts to emerging issues and problems.

Specifically, the study first examines the issues and conditions which led to the formation of the AICPA Committee on Statistical Sampling (AICPA-CSS). Second, the study focuses upon the AICPA's initial efforts to educate itself in a discipline in which it had little or no educational background. Insights provided by the interdisciplinary aspect of these educational efforts appear especially useful to the profession as it seeks to adapt to the ongoing fusion of traditional accounting, information systems, and computer science.
Tucker: Early Efforts of the U.S. Public Accounting Profession to Investigate the Use of Statistical Sampling

Third, the research examines the concerns of the AICPA regarding the legal implications of the use of statistical sampling, as well as its efforts to resolve these concerns. This focus seems particularly appropriate given the current litigation crisis. Also, the research attempts to provide insight regarding the profession's level of "legal awareness" in this "pre-litigation" era.

Fourth, the study presents an overview of the earliest efforts of major accounting firms regarding the use of statistical sampling as described by Oscar Gellein in 1959. This analysis is undertaken to gain a greater understanding of how individual firms react to emerging issues, as well as the magnitude of diversity of these reactions. Such insights may be useful to the profession in its efforts to encourage or require the adoption of technological innovations by its membership.

Lastly, the study documents the importance of leadership in initiating and pursuing technological innovation. Here, the research provides insight into the pioneering efforts of Robert Trueblood, Oscar Gellein and Kenneth W. Stringer, to harness new technology for the improvement of accounting and auditing practice. (Trueblood and Gellein have been inducted into the Accounting Hall of Fame and Stringer was the first recipient of the American Accounting Association's Distinguished Service in Auditing Award.) The research also documents and recognizes these individuals contributions with the hope of facilitating a feeling of pride and continuity in a profession characterized by significant turnover; such research also may provide young professionals with role models.

RESEARCH METHODOLOGY

To provide an overview of the issues and conditions which contributed to the AICPA's interest in the use of statistical sampling, all articles regarding statistical sampling appearing in the Journal of Accountancy for the 10-year period prior to the formation of the AICPA-CSS and five years after its formation were examined (1947 to 1961). Second, telephone interviews were conducted with Oscar Gellein and Kenneth W. Stringer who were heavily involved in the profession's investigation of the use of statistical sampling. (Their involvement is described later.) Third, a number of studies were examined which focus upon the history of individual firms.

A special focus is placed upon two books which provide insights into the thoughts, efforts and convictions of Robert M. Trueblood [Trueblood and Cyert, 1957; Bryson, 1976]. Trueblood was the first chairman of the AICPA-CSS and also was the primary author of what is probably the first book written by an accountant regarding the use of statistical sampling in accounting and auditing (see Trueblood and Cyert, 1957). Trueblood's efforts to apply statistical sampling to resolve auditing problems in the early 1950s, while he was a partner at Touche, Niven, Bailey & Smart, constitute one of the earliest experiments with and applications of statistical sampling of any major firm [Bryson, 1976, pp.109-128].

Surviving documents of the earliest AICPA statistical sampling committees and subcommittees were examined at the AICPA library. One part of the study is organized around a key report delivered orally by Robert M. Trueblood, as recorded in the minutes of an AICPA Council meeting.

The authors also acquired and are in possession of the personal business files of Kenneth W. Stringer. Stringer was a member of the AICPA-CSS for four years (1961-1965) and chaired the Committee for three of those years (1962-1965). Stringer's files contain all documents which he accumulated during his 24-year career (1957-1981) at the Executive Office of Haskins & Sells. A search of Stringer's extensive files produced several of the earliest reports prepared by the AICPA-CSS. One of the reports contains the first legal opinions obtained by the AICPA concerning the use of statistical sampling. The authors have been unable to find any evidence that suggests that these reports were ever published or made available to the public.

THE AICPA AND STATISTICAL SAMPLING

A number of factors provided the impetus for the AICPA's efforts to investigate the use of statistical sampling. One important factor was the successful application of statistical sampling in other fields. In 1957, Trueblood and Cyert observed that "Perhaps the greatest impetus for a considered evaluation of the possible application of statistical sampling to auditing problems comes indirectly from the success of scientific sampling techniques in other professional fields, many of which are no less judgment-based in character than auditing." [1957, p.61]
To illustrate, Trueblood and Cyert note that the decision to inoculate millions of children with Salk polio vaccine during 1955 was based upon conclusions reached on statistical grounds and that testing and inspection procedures in many critical manufacturing processes involve "scientific sampling", as do many problems of engineering design and military logistics [p. 61].

In addition, the value of statistical sampling as a management tool received broad recognition during World War II when statistical sampling became integrated into manufacturing quality control programs in the nation's effort to supply the Allies; as Trueblood and Cyert note: "In the manufacturing field, statistical quality control came of age during World War II" [1957, p.v].

Trueblood and Cyert also provide insight regarding the manner in which the widespread use of statistical sampling in World War II "carried-over" from the factory to the office:

A considerable amount of material has been published over the years with respect to the adaptability of statistical quality control procedures to the control of clerical accuracy, as it relates to the day-to-day workload of a business enterprise. This type of application has been particularly attractive to statisticians, since the regular flow of paper work can be regarded as reasonably comparable to the continuously flowing manufacturing production line. . . . It can be accepted that, as a general rule, the carry-over of statistical control methods from the factory into the purely clerical function of accounting is feasible. There are, however, many situations in which tests for clerical accuracy are somewhat more complex than the measurement of physical characteristics in a straightforward manufacturing process. Accordingly, the forthright application of statistical quality control methods should not be accepted blindly. [p. v.]

The use of statistical sampling in the war effort was a manifestation of a broader movement toward the increased use of quantitative methods in management decision-making. As an early observer notes:

The post World War II period has been characterized by the development of "scientific" management techniques. The extension of operations research from military to commercial application is a prime example of
the utilization of mathematical models and statistical probability theory for management decision-making. Certain statistical techniques offer advantages to professional accountants in their decision function, the opinion regarding fairness of the financial statement presentations. [Brown, 1961, p. 46]

Another factor which had an impact upon the development of quantitative management techniques was the growth of big business during World War II. As McQuaid observers:

The production miracle that turned the United States into the arsenal of democracy and made it the source of half the manufacturing output of the planet by 1945 was impossible without big business. . . . Big business grew during war emergency because of their comparative economic, technological, and organizational advantages. . . . Big firms were much more likely to have corporate research laboratories to develop new technologies quickly [1994, p. 15].

STATISTICAL SAMPLING AND THE INDEPENDENT AUDITOR

Another major factor which contributed to the AICPA’s investigation of the use of statistical sampling was the perceived need for a more objective and scientific approach to determining the number of items to be tested when performing various audit procedures. Traditionally, the number of items to be tested was usually determined by each individual auditor on a subjective non-statistical basis. In 1949, Vance commented that “Accountants have long been aware of the need for an objective criterion for determining the size of the sample of accounting detail they examine in an audit.” [p. 214] One early writer observed that “there has been no method for specifying the size of sample to be taken. Therefore, the feeling that any such specification was certain to be arbitrary was inevitable.” [Shartle, 1952] In a more graphic comment, Allen and McDermott observe: “Traditional sampling had been done by an accountant’s ‘horse sense’.” [1993, p. 113] Trueblood and Cyert describe the traditional approach below:

. . . it must be agreed that sample selection techniques are completely based on judgement in present auditing practice. Auditors use their own opinions, checked by whatever experience and facts they may muster for
each occasion, in order to determine the size of the samples with which they work, the method of their selection, and the interpretation of sampling results. [1957, p. 58]

Regarding the perceived benefits of statistical sampling, Trueblood and Cyert note that statistical sampling may be used to reduce the area in which purely subjective judgements are required and to improve the quality of, or to serve as a substitute for, the "judgmental test-check" procedures used so widely in both accounting and auditing [1957, p. iv]. (During this era, "judgmental" was the term frequently used in place of the term "non-statistical"; also, "test-checking" was a phrase used interchangeably with the term "sampling").

Dissatisfaction with the subjective nature of traditional non-statistical sampling proved to be the catalyst which drew the attention and galvanized the efforts of Kenneth W. Stringer to develop one of the most frequently used statistical sampling approaches, probability-proportional-to-size sampling [Tucker, 1994, p. 238]. Since his early years as an auditor, Stringer had been dissatisfied with the lack of authoritative guidelines regarding sample selection and believed that in similar audit situations there existed an unjustifiably wide variation in the extent of testing prescribed by various auditors [Tucker, 1989, p. 29].

Stringer's dissatisfaction with the traditional "judgmental" or non-statistical approach to sampling provided the impetus for what is probably the earliest foray into behavioral research in auditing [Tucker, 1994, p. 247]. In 1959, Stringer conducted a laboratory experiment in which 92 senior auditors were asked to determine the sample size that they would test in four different cases. The results revealed a very wide distribution of sample sizes selected by these senior auditors in each of the four cases. When the senior partners of his firm were presented with the results of his experiment, Stringer stated that they were "shocked and dismayed at the disparity that the survey showed" [Tucker, 1994, p. 248]. Both Gellein [1994] and Stringer [1994] believe that the desire for a more objective method of determining sample size was the primary reason that the U.S. public accounting profession pursued the possibility of using statistical sampling in audit practice.

Another issue that focused the AICPA's attention upon statistical sampling was the growing use of statistical sampling by major corporations. By 1958, organizations that were using statistical sampling in accounting and auditing included Esso
The use of statistical sampling by corporate clients required that independent auditors acquire at least a general understanding of statistical sampling and the related accounting and auditing implications. This issue will be examined in greater detail later.

LEGAL TENABILITY OF THE TRADITIONAL SAMPLING APPROACH

Since the traditional approach to determining the extent of testing was viewed by many auditors as too subjective, these auditors may have had doubts concerning tenability of the non-statistical "judgmental" approach if challenged in litigation. This concern is reflected below:

Should auditors' present methods of test-checking prove inadequate in a particular case, would it not be difficult for the profession to justify its failure to use a technique found to be of such material help in other professional fields? Is it possible to argue, at the present time, that the profession has adequately tested the practicability of scientific sampling and mathematical probability? What would happen if in a court proceeding involving accountants' liability, a competent statistician were to demonstrate mathematically that the auditor's sampling procedures or conclusions were not statistically justifiable? [Trueblood and Cyert, 1957, p.61].

Litigation-related concerns also appear to have fueled the efforts of Price Waterhouse (PW) to develop a more objective sampling approach [Allen and McDermott, 1993, p. 113]. PW's liability insurance had increased dramatically in the early 1950s after another national accounting firm had been sued and a $1.4 million settlement had been obtained by plaintiffs. Spurred by the threat of litigation, PW increased its efforts to improve the effectiveness of its auditing procedures. One of the results of these efforts was the development of a statistical sampling plan which PW implemented in 1958 [McDermott and Allen, 1993, p. 113]. The statistician who helped develop PW's plan commented that statistical sampling "will provide a sampling technique which is not only objective but defensible from a legal viewpoint." [Arkin, 1958, p. 67]
POTENTIAL FOR REDUCING THE EXTENT OF TESTING

A few early writers note that in some situations, statistical sampling "can considerably reduce the presently required volume of work" for accountants [Trueblood and Cyert, 1957, p. iii] and "reduce the amount of work done by the auditor while maintaining the risks at the present level." [Neter, 1949, p. 397] Another author presented the results of a case study in which the time to conduct the taking of a physical inventory was reduced from 560 hours which was required for a 100% physical count to 260 hours using statistical sampling [Obrock, 1958, p. 53]. However, based upon the research conducted for this study, the authors believe that the potential value of statistical sampling to reduce testing was viewed by most as a "point of interest" rather than a primary goal.

STATISTICAL SAMPLING RESEARCH EFFORTS OF THE AICPA CIRCA 1956

By November 1956, the accounting profession's interest in statistical sampling had progressed to the point that a special AICPA committee, the Committee on Statistical Sampling (AICPA-CSS), was formed to research the issue. The AICPA-CSS advised and reported to its senior committee, the Committee on Auditing Procedure. (The Committee on Auditing Procedure was the authoritative auditing standard-setting body during this period.) The newly appointed special committee was chaired by Robert M. Trueblood, who had just co-authored a book on the applications of statistical sampling to accounting and auditing [Trueblood and Cyert, 1957]. Oscar Gellein represented Haskins & Sells (H&S) on the Committee. (Gellein also was serving on the New York Society of CPAs Advisory Committee on Application of Statistical Sampling to Accounting and Auditing, which was formed in the same year.) [A listing of the AICPA-CSS members for the years 1956-65 is presented in the Appendix.]

A report presented orally by Trueblood at the Council Meeting of the AICPA on October 11, 1958 (as recorded in the minutes of the Meeting) lends insight to the AICPA-CSS's early activities [AICPA, 1958a]. The first page of the report (presented below) reveals the paucity of knowledge regarding statistical sampling that existed within the profession at this time:
Mr. President, members of the Council. The Committee on Statistical Sampling has held five two-day meetings since it was first organized in October or November, 1956. It is, of course, regarded as a satellite committee to the Committee on Auditing Procedures and our purpose and our function is investigative and exploratory in a rather new area.

For this reason, during the first year, our meetings were almost totally of a self-educational nature. They were devoted to exploring the subject of statistical sampling both from the accountant's point of view and from the statistician's point of view. They were also devoted to studying problems involved in the possible or ultimate utilization of statistical sampling techniques as an auditing tool.

During our second year we have gone into a slightly more productive type of program. Our production is modest at best. First, we have developed a glossary of statistical terms which, in a sense, is a layman's dictionary of such terms and a bibliography of literature on the general subject of statistical sampling. This glossary and bibliography is now in the process of production and will shortly be available to members on request. It is believed that this glossary may be of some help to those who are interested in exploring the subject.

[Regarding the glossary noted above, see reference: AICPA, 1958b.]

AICPA-CSS SUBCOMMITTEES

First Subcommittee

Trueblood's report also noted that three subcommittees had been appointed within the AICPA-CSS to investigate specific issues related to statistical sampling. The first subcommittee was charged with examining the use of random selection without statistical evaluation of results. Two related issues addressed by the first subcommittee included the implications of using only a part of a statistical approach to sampling and "the question as to whether randomization is, in fact, desirable in sampling for audit purposes." Concerning the forthcoming report of the first subcommittee, Trueblood noted that "this report has been informally polled and is now being formally
polled" and would be submitted to the Committee on Auditing Procedure upon completion.

A search of Stringer's personal business files produced a copy of the subcommittee's unpublished report entitled Report of Subcommittee on Applicability of Random Sampling in Auditing, dated October 7, 1958 [AICPA, 1958c]. The report first presented a general discussion of advances in sampling by statisticians, terminology frequently used in sampling, and the concept of stratification. An important question raised in the report was whether "the use of random number tables carries with it an obligation to use statistical measurement." The portion of the report which addresses this issue and the related legal ramifications is reproduced below [AICPA, 1958c]:

When we turn to the legal questions we should, of course, lean on the opinion of the legal profession. Mr. Fontaine Bradley said in his letter of November 15, 1957 to the Executive Director of the A.I.C.P.A.:

Testimony of a statistician to the effect that sampling techniques generally used by the profession are at variance with statistical techniques should not, standing alone, be sufficient to increase the danger of liability.

Mr. Bradley's letter, a copy of which is attached, [the authors were unable to locate this letter] points out that the statistician would have to demonstrate to the satisfaction of a judge and jury that the sampling techniques used by the accounting profession are outmoded and immature and would have long since been discarded by any reasonable-minded man. The introduction into our discussion of the conclusions of a reasonable-minded man means that our legal question will not stand or fall by itself and must depend for its answer upon the logic of the conclusion otherwise reached. We assume, of course, that any conclusion reached by a committee of eleven practitioners after deliberations covering a period of years would be "reasonable" in the eyes of a judge and jury. It is the view of the committee, therefore, that our conclusions should be based on our own best judgment arrived at after sufficient study. As Mr. Bradley expressed it:

... the risk of increased liability resulting from giving the statistician such an additional argument is too remote to warrant its being a
deterrent to further study directed toward determining the extent to which statistical techniques should be used in auditing sampling.

Specifically, we conclude that we can consider statistical selection solely on its own merits and not be obligated thereby to link our conclusion to the merits of statistical measurement. . . . the committee endorses the use of random selection as a permitted, but not required, auditing technique.

The authors believe that the results of the above legal opinion and a favorable legal opinion rendered by Saul Levy (described later) were critically important. Given the AICPA’s keen awareness of the legal implications, it is likely that if these opinions had been unfavorable, the AICPA would have ceased its investigation of statistical sampling.

Second Subcommittee

In his oral report [AICPA, 1958a], Trueblood stated that the second sub-committee of the AICPA-CSS had been given the responsibility of:

. . . . studying the literature on the broad subject of the purposes of audit sampling which question is necessarily raised when you get into the analysis of the statistical sampling movement. Some of the questions that are involved are these kinds of things:

Should the sample, the audit sample, be representative of the universe as is implied in a great deal of the audit literature?

Does the auditor, in fact, make inferences in the mathematical sense about the universe on the basis of the sample results?

How does one appraise relatively the purpose of sampling as a means of testing internal control and as a means of establishing the bonafides of accounts?

Another issue addressed by this subcommittee was the clarification of the circumstances in which a sample “should be self-sufficient for a particular purpose as distinguished from those cases in which using a sample is just one step in a long chain of events on the basis of which we come to an audit conclusion.” [AICPA, 1958a] Trueblood stated that by the nature of issues under investigation, much more work needed to
be done, more studies needed to be conducted, and no report was yet available from the second subcommittee. (The authors have not been able to find any reports or other documents related to the efforts of this subcommittee.)

Third Subcommittee

Trueblood reported that a third subcommittee of the AICPA-CSS was charged with "... examining the use of statistical sampling for the development of prime accounting data." [AICPA, 1958a]. This subcommittee conducted two case studies (one manufacturing firm and one merchandising firm) which documented the determination of ending inventory through the use of statistical sampling rather than a 100% physical count.

The subcommittee issued a report of its findings which had already been received by the Committee on Audit Procedure. As Trueblood notes in his report, the subcommittee's report regarding the case studies "... raises certain questions to the Committee on Auditing Procedure." [AICPA, 1958a]. Although Trueblood did not elaborate on the nature of these "certain questions", a copy of the subcommittee's unpublished report, dated June 6, 1958 [AICPA, 1958d], reveals four questions which were addressed by the subcommittee. These questions and the related conclusions reached by the subcommittee are examined below.

Mathematical underpinnings. The report first questioned "whether the statistical sampling method ... furnishes a reasonable basis ... for computing an inventory figure that is directly determinative of financial position and operating results. The Committee believes that it does." The Committee reached its conclusion observing that statistical sampling "is designed to give results with specified degrees of accuracy and confidence and ... is supported by a well-developed mathematical theory." [AICPA, 1958d]

Physical Inventory. The second question addressed by the subcommittee was "whether in these cases there was a physical inventory in the sense that 'Extensions of Auditing Procedures' and other AICPA literature call for observation of the taking of the physical inventory." The report noted that existing authoritative literature "implied that every inventory item should be counted at least once each year." However, the report then observed that it was not uncommon to use various methods of estimation in taking physical inventories. The subcommittee then concluded that in each of the two case studies, a physical
inventory was taken in a manner which satisfied existing authoritative guidelines. However, the subcommittee recommended that “the Committee on Auditing Procedure should consider revising the Codification to remove any implication that estimates, including those based on statistical sampling, might not be acceptable in particular circumstances.” [AICPA, 1958d].

**Competence.** The subcommittee then addressed the question of “what the auditor must do and what competence he must possess to satisfy himself in connection with inventories based upon statistical sampling.” The subcommittee concluded that “if a company applies statistical sampling, the auditor must in one way or the other learn about its limitations and the significance of its results. In some cases he may have to engage the services of an independent statistician to satisfy himself.” [AICPA, 1958d]

**Error and Risk.** Lastly, the subcommittee noted: “An essential question for the auditor is what limits of error and what degree of risk are acceptable. How much accuracy and how much confidence is the question.” The subcommittee stated that when statistical sampling is used to estimate “a prime figure in the balance sheet and that enters directly into the determination of income, . . . the auditor probably will be mainly concerned that the maximum error . . . is within the range of what he considers to be immaterial in the circumstances.” [AICPA, 1958d]

Concerning the question of materiality the report observes that “the maximum error that is acceptable in particular circumstances . . . is not for statistics to decide. This is a matter first for the company to resolve, and then for the auditor to consider in the light of the accounting tests for materiality in relation to fairness of the over-all presentation.” The level of risk was addressed next by the subcommittee. The subcommittee noted that “the statistician thinks of slight risk in terms of 95% or more confidence. . . . There is no categorical answer. . . . It is like the question of what is the dividing line between materiality and immateriality. Manifestly, circumstances alter cases.” [AICPA, 1958d]

**Impact and Reaction to the Subcommittees’ Reports**

The research also suggests that the profession’s investigation of emerging technology forced it to reexamine and sometimes challenge basic auditing concepts and standards. Issues
addressed by the first subcommittee led it to reexamine the fundamental purpose of sampling and evaluate the benefits and shortcomings of both existing methods and the proposed method. Likewise, the third subcommittee formally questioned what level of error and risk is acceptable to the auditor, what degree of competence in statistics an auditor should possess, and to what extent sampling can be used in the taking of a physical inventory. Regarding the third subcommittee’s report, Gellein stated in a H&S internal memo dated June 8, 1959: “Initially, all members of our committee concurred in the views expressed in the case studies. Later, . . . two dissents were filed (by Peat, Marwick, Mitchell & Co. and Price Waterhouse & Company). I understand that the Institute committee on auditing procedures is finding it difficult to formulate the position it will take.” [Gellein, 1959]

INTERDISCIPLINARY EFFORT

Lastly, Trueblood commented on the efforts of the AICPA-CSS to develop an “informal cooperative arrangement” with the American Statistical Association (ASA) “for the purpose of exchanging viewpoints.” [AICPA, 1958a] Trueblood noted that the AICPA-CSS had recently communicated this desire to the ASA, which responded enthusiastically with a list of five statisticians with whom the AICPA-CSS might seek consultation. He concluded, “At the last meeting of our committee in September it was agreed that such an informal meeting should be arranged with the American Statistical Association to further explore our mutual problems and questions.” [AICPA, 1958a].

PROGRESS OF INDIVIDUAL FIRMS
CIRCA 1959

Since Gellein had been a member of the AICPA-CSS since its inception, he prepared a memo for the management of H&S in which he commented on that committee’s progress and any findings that might be relevant to H&S’s efforts regarding statistical sampling. The memo is dated June 8, 1959, and is the source of Gellein’s observations as described below [Gellein, 1959]. (Gellein was an AICPA-CSS member for five years (1956-1960) including one year as Chairman (1958).)

Gellein first observed that the AICPA-CSS had been organized for three years and that all of the national firms were currently represented except Ernst & Ernst and Touche, Niven,
Bailey & Smart. The membership also included one small practitioner, two accounting educators, and a representative of the U.S. Army Audit Agency. He also noted that Robert M. Trueblood had been the Committee's chairman for two years.

Gellein next observed that during the first year the members spent most of their time attempting to catch up with developments that had taken place in the application of statistical sampling to accounting. The Committee perceived its mission to be that of keeping abreast of developments in the field and keeping the profession informed. He noted that the Committee had compiled a comprehensive bibliography and "a glossary of technical terms cast in a form purporting to be helpful to an accountant seeking to learn more about statistical sampling." In addition, from the beginning of the Committee's activity, members had exchanged information about applications of statistics to accounting and auditing that had come to their attention.

Gellein then addressed the legal implications of statistical sampling. This segment of his report is reproduced below:

LEGAL HAZARD - An early point of concern to the members of the committee was whether a new legal hazard might develop if auditors made use of some, but perhaps not all of the statisticians' methods, in testing the records as a part of an examination of financial statements. For instance, if items to be tested were selected randomly (in the statistician's sense of randomness), but the results of the sample were not evaluated in the way that the statistician would draw his inferences and the area tested later should be a trouble area, there is the question of whether conditions are created in which a statistician could qualify as an expert in judging the reasonableness of an auditing procedure. The Committee obtained an opinion of the Institute's legal counsel on this point and several of the members discussed the matter with Mr. Saul Levy. The conclusion was that any new risk that might be created would generally be more than offset by the advantage of being able to show that the testing was done objectively and scientifically, assuming the audit conditions called for testing on such a basis. Mr. Levy seemed not to be concerned about the creation of a new risk. As a result of consideration of this matter, the Committee has submitted to its senior committee, Committee on Auditing Procedure, a statement on the applicability of random sampling to auditing.
Activities and developments of other firms regarding statistical sampling also were discussed by Gellein. He noted that his observations were based on his conversations with other members of the Committee. Touche, Niven, Bailey, and Smart (TNB&S) (the firm in which Trueblood was a partner) had experimented extensively with statistical applications in accounting and had assisted a number of their clients in developing applications. They also were making applications to auditing where "the conditions for statistical sampling are clearly present." TNB&S was still experimenting with applications to transactions work and "to those areas of the audit intended to give satisfaction about internal control." TNB&S took a "dim view of acceptance sampling" for the purpose of transactions testing but believed that estimation sampling could be used for a number of applications.

Price Waterhouse & Company (PW) had experimented considerably with the application of statistical sampling to auditing, with the assistance of Dr. Arkin who had served as an outside consulting statistician for several years. Dr. Arkin developed for PW an approach termed "discovery sampling" which was designed to assist in the selection of a sample with the use of especially constructed tables. This method gives measurable assurance that at least one error (accounting deficiency or variation) will be included in the test when the population from which the sample is drawn contains a designated number of errors. Gellein also noted that it was his understanding that PW was presently preparing a manual on statistical sampling for internal staff use. The manual was intended to serve as a training aid and provide the guidance needed to make applications. Sampling tables, descriptions of conditions of table applicability, instructions as to their use, and random number tables were included in the manual.

Gellein observed that Arthur Andersen & Company (AA) had only recently started a firm-wide study of the application of statistical sampling and were drawing on their operations research personnel for technical advice. Gellein had reviewed three case studies that AA prepared concerning audit applications. The studies focused upon the testing of stock transfer transactions, accounts receivable confirmation, and voucher selection. It was his opinion that AA had not yet taken a position on the applicability of statistical sampling to auditing.

Lastly, concerning the other national firms, Gellein commented, "As far as I can tell, the other firms have not done
more than to consider ways in which they might approach the study of the subject. Lybrand, Ross Bros. & Montgomery may have gone a little beyond this point.”

Gellein’s memo reveals that large CPA firms shared information regarding their individual in-house experimentation with statistical sampling as well as their progress-to-date. This suggests that a spirit of collegial cooperation existed among the firms rather than one of competition-related secrecy. The research also reveals significant variation in the efforts and progress achieved by the various firms regarding the use of statistical sampling.

CONCLUSION

The AICPA’s efforts to investigate the use of statistical sampling appear to have been catalyzed by the confluence of the growing dissatisfaction with the traditional approach to sampling and the widespread recognition of the benefits of statistical sampling which resulted from U.S. efforts to supply the Allies during World War II. Many auditors appear to have been very dissatisfied with the traditional approach to determining the extent of testing, which they perceived as too subjective. Due to the subjective “unscientific” nature of the traditional approach, some doubted the tenability of the traditional approach if challenged in court by a statistician. The use of statistical sampling in quality control programs during World War II increased the accounting profession’s awareness of the potential benefits of statistical sampling to provide a more objective approach. Lastly, the fact that large corporations had begun to use statistical sampling in accounting and auditing lent additional urgency to the need to address the issue.

The study reveals that until the mid-1950s, there was an almost complete lack of knowledge in the accounting profession regarding statistical sampling. The study also reveals the two-pronged manner in which the profession attempted to educate itself. First, the AICPA appointed a committee which identified the principal issues and concepts regarding statistical sampling. The committee assembled a series of subcommittees to address these individual issues. Their research efforts included case studies, a legal opinion, a review of the mathematical underpinning of statistical sampling, a glossary of statistical sampling concepts and terms, and a bibliography. Second, the AICPA-CSS contacted the American Statistical Association to
initiate an interdisciplinary collaborative effort. The American Statistical Association responded enthusiastically.

The research also suggests that from the very beginning of its investigation of statistical sampling, the AICPA was very cognizant of the legal implications. The AICPA-CSS obtained a written legal opinion from Fontaine Bradley and discussed the issue with Saul Levy. Bradley concluded that the risk of a statistician being able to successfully attack the auditor’s use of statistical sampling was too remote to deter the profession’s further study of the use of statistical sampling in auditing. Levy concluded that this risk was “more than offset by the advantage of being able to show that the testing was done objectively and scientifically.” In the authors’ opinion, the results of these legal opinions were critically important. Given the AICPA’s keen awareness of the legal implications, it is likely that if these opinions had been unfavorable, the AICPA would have ceased its investigation of statistical sampling.

The research also suggests that the profession’s investigation of emerging technology forced it to reexamine and sometimes challenge basic auditing concepts and standards. Issues addressed by the first subcommittee led it to reexamine the fundamental purpose of sampling and evaluate the benefits and shortcomings of both existing methods and the proposed method. Likewise, the third subcommittee formally questioned what level of error and risk is acceptable to the auditor, what degree of competence in statistics an auditor should possess, and to what extent sampling can be used in the taking of a physical inventory. Regarding this last issue, the third subcommittee recommended that the CAP “should revise the Codification to remove any implication that estimates, including those based on statistical sampling, might not be acceptable in particular circumstances.” [AICPA, 1958d] Concerning the resolution of these questions, Gellein stated that the CAP “is finding it difficult to formulate the position it will take.” [Gellein, 1959]

Gellein’s memo reveals that the large CPA firms shared information regarding their individual in-house experimentation with statistical sampling as well as their progress-to-date. This suggests that a spirit of collegial cooperation existed among the firms rather than one of competition-related secrecy. The research also reveals significant variation in the efforts and progress achieved by the various firms regarding the use of statistical sampling.
Lastly, the study demonstrates the importance of individual leadership in the profession's efforts to adopt new technology. Trueblood was one of the earliest accountants to identify the potential use of statistical sampling. Trueblood co-authored one of the earliest books which described applications of statistical sampling to the practice of accounting and auditing. He then spearheaded the AICPA's initial effort to address the issue by chairing the AICPA-CSS for the first two years (1956 and 1957). The fact that the statistical sampling issue was brought to the attention of the profession by a person of Trueblood's professional stature and credibility lent additional urgency to the issue and increased the visibility of statistical sampling as an issue to be addressed.

The long-term commitment and leadership provided by Oscar Gellein and Kenneth Stringer also were crucial. Gellein served as a member of the AICPA-CSS for the first five years and served as chairman in the third year (the year after Trueblood stepped down as chairman.) Gellein was involved from the very beginning and was very influential as the Director of Research in H&S's Executive Office. He encouraged and supported the research efforts of Kenneth Stringer who developed probability-proportional-to-size sampling which was integrated into H&S's audit practice in 1962 (Tucker, 1989 & 1994). Kenneth Stringer became a member of the AICPA-CSS for four years (1961-62 to 1964-65), two of which he served as chairman (1961-62 and 1962-63). Stringer also was the primary author of a committee report that described what is now refer to as the audit risk model (Tucker, 1989). Without the strong leadership provided by these three individuals, the harnessing of this technology to improve the practice of accounting and auditing certainly would have taken significantly longer.

**APPENDIX**

**Listing of the AICPA Committees on Statistical Sampling for Fiscal Years 1956-65**

( * ) New Appointee

**1956-57**

Robert M. Trueblood, Chairman
Jerome Abrams
Carl J. Bohne, Jr.
Thomas J. Cogan
Russell B. Driver

(Touche, Niven, Bailey & Smart)
(Jerome Abrams & Co.)
(Authur Andersen & Co.)
(Lybrand, Ross Bros. & Montgomery)
(Russell B. Driver & Co.)
Tucker: Early Efforts of the U.S. Public Accounting Profession to Investigate the Use of Statistical Sampling

Oscar S. Gellein
Henry P. Hill
J. Robert Malone
Howard F. Stettler
Lawrence L. Vance
Frank T. Weston

(Haskins & Sells)
(Price Waterhouse & Co.)
(University of Kansas)
(University of California)
(Authur Young & Co.)

1957-58
Robert M. Trueblood, Chairman
Carl J. Bohne, Jr.
Thomas J. Cogan
Russell B. Driver
Oscar S. Gellein
Henry P. Hill
William W. Jones*
J. Robert Malone
Howard F. Stettler
Lawrence L. Vance
Frank T. Weston

(Touche, Niven, Bailey & Smart)
(Authur Andersen & Co.)
(Lybrand, Ross Bros. & Montgomery)
(Russell B. Driver & Co.)
(Haskins & Sells)
(Price Waterhouse & Co.)
(Ernst & Ernst)
(Peat Marwick Mitchell & Co.)
(University of Kansas)
(University of California)
(Authur Young & Co.)

1958-59
Oscar S. Gellein, Chairman
Carl J. Bohne, Jr.
Thomas J. Cogan
Russell B. Driver
Henry P. Hill
William W. Jones
J. Robert Malone
William A. Newman, Jr.*
Howard F. Stettler
Lawrence L. Vance
Frank T. Weston

(Haskins & Sells)
(Authur Andersen & Co.)
(Lybrand, Ross Bros. & Montgomery)
(Russell B. Driver & Co.)
(Price Waterhouse & Co.)
(Ernst & Ernst)
(Peat Marwick Mitchell & Co.)
(University of Kansas)
(University of California)
(Authur Young & Co.)

1959-60
Thomas J. Cogan, Chairman
Carl J. Bohne, Jr.
R. Gene Brown*
Harold Cohan*
John B. Craig, Jr.*
Russell B. Driver
Oscar S. Gellein
Henry P. Hill
Robert W. Johnson*
Dominic J. Morris*
William A. Newman, Jr.
Arch Rounsaville*
Howard F. Stettler

(Lybrand, Ross Bros. & Montgomery)
(Authur Andersen & Co.)
(Eberhart & Brown & Co.)
(S.D. Leidesdorf & Co.)
Eli Lily & Co.
(Russell B. Driver & Co.)
(Haskins & Sells)
(Price Waterhouse & Co.)
(Touche, Niven, Bailey & Smart)
US Air Force, Auditor General
(Deputy Director, Defense Accounting and Auditing Division, GAO)
Commodity Credit Corporation
(University of Kansas)
Lawrence L. Vance  
J. M. Waterman*  

1960-61

Thomas J. Cogan, Chairman  
Morton Backer*  
Carl J. Bohne, Jr.  
R. Gene Brown  
Harold Cohan  
John B. Craig, Jr.  
Peter A. Firmin*  
Oscar S. Gellein  
Newman T. Halvorsen*  
Henry P. Hill  
Robert W. Johnson  
Dominic J. Morris  
William A. Newman, Jr.  
Lawrence L. Vance  
J. M. Waterman  

(University of California)  
(Author Young)  

(Lybrand, Ross Bros. & Montgomery)  
New York University  
(Arthur Andersen & Co.)  
(Eberhart & Brown)  
(S.D. Leidesdorf & Co.)  
(Eli Lily & Co.)  
(Tulane University)  
(Haskins & Sells)  
(Ernst & Ernst)  
(Price Waterhouse & Co.)  
(Touche, Ross, Bailey & Smart)  
(U.S. Air Force, Auditor General)  
(Deputy Director, Defense Accounting and Auditing Division, GAO)  
(University of California)  
(Author Young & Co.)

1961-62

Robert W. Johnson, Chairman  
Morton Backer  
Roy Gene Brown  
John B. Craig, Jr.  
Marvin M. Deupree*  
Peter A. Firmin  
Dominic J. Morris  
J. L. Roth*  
Kenneth W. Stringer*  
Lawrence L. Vance  

(Touche, Ross, Bailey & Smart)  
New York University  
Harvard University  
(Eli Lily & Co.)  
(Author Andersen & Co.)  
Tulane University  
International Cooperation Administration  
(Price Waterhouse & Co.)  
(Haskins & Sells)  
(University of California)

1962-63

Kenneth W. Stringer, Chairman  
Morton Backer  
R. Gene Brown  
Harold Cohan  
H. Justin Davidson*  
Marvin M. Deupree  
Robert G. Ettelson*  
Peter A. Firmin  
J. Robert Malone  

(Haskins & Sells)  
(New York University)  
(Harvard University)  
(S.D. Leidesdorf & Co.)  
(Touche, Ross, Bailey & Smart)  
(Arthur Andersen & Co.)  
(Arthur Young & Co.)  
(Tulane University)  
(Peat Marwick & Mitchell & Co.)

1963-64

Kenneth W. Stringer, Chairman  
R. Gene Brown  
Harold Cohan  

(Haskins & Sells)  
Stanford University  
(S.D. Leidesdorf & Co.)
Tucker: Early Efforts of the U.S. Public Accounting Profession to Investigate the Use of Statistical Sampling

H. Justin Davidson (Touche, Ross, Bailey & Smart)
Marvin M. Deupree (Arthur Andersen & Co.)
J. Robert Malone (Peat Marwick Mitchell & Co.)
William Piercy* (Main, Lafrentz & Co.)
Marvin Tummins* (University of Virginia)

1964-65

Kenneth W. Stringer, Chairman (Haskins & Sells)
Saul Beldock* (S.D. Leidesdorf & Co.)
H. Justin Davidson (Touche, Ross, Bailey & Smart)
William D. Hall* (Arthur Andersen & Co.)
Harry W. Kirchheimer* (Arthur Young & Co.)
William Piercy (Main Lafrentz & Co.)
Morton J. Rossman* (Peat Marwick Mitchell & Co.)
Marvin Tummins (University of Virginia)

1965-66

Morton J. Rossman, Chairman (Peat Marwick Mitchell & Co.)
Saul Beldock (S.D. Leidesdorf & Co.)
William D. Hall (Arthur Andersen & Co.)
Harry W. Kirchheimer (Arthur Young & Co.)
C. W. Maurer* (Alexander Grant & Co.)
James M. Owen* (Louisiana State University)
Anton Petran* (Touche, Ross, Bailey & Smart)
William Piercy (Main Lafrentz & Co.)
A. Karl Scharff* (Lybrand, Ross Bros. & Montgomery)
Charles G. Steele* (Haskins & Sells)
Marvin Tummins (University of Virginia)

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Gellein, O., Telephone interview, April 4, 1994.


Stringer, K. S., Telephone interview, April 7, 1994.


THE INFLUENCE OF SCOTTISH ACCOUNTANTS IN THE UNITED STATES: THE EARLY CASE OF THE SOCIETY OF ACCOUNTANTS IN EDINBURGH

Abstract: This study represents part of a long-term research program to investigate the influence of U.K. accountants on the development of professional accountancy in other parts of the world. It examines the impact of a small group of Scottish chartered accountants who emigrated to the U.S. in the late 1800s and early 1900s. Set against a general theory of emigration, the study's main results reveal the significant involvement of this group in the founding and development of U.S. accountancy. The influence is predominantly with respect to public accountancy and its main institutional organizations. Several of the individuals achieved considerable eminence in U.S. public accountancy.

INTRODUCTION

In 1854, Queen Victoria granted a royal charter of incorporation to 61 members of The Society of Accountants in Edinburgh (SAE) (Lee, 1996). Under this banner of professional legitimacy, the SAE membership prospered and, by 1914, totalled 580 chartered accountants. However, not all SAE members admitted between 1854 and 1914 remained in Edinburgh. Research of the early history of the SAE reveals more than 23% of its admittants in this period moved overseas to develop their careers (Walker, 1988, p.44). Indeed, only 49% of the 726 SAE members admitted between 1854 and 1914 remained in Edinburgh after admission.

Fifty-nine SAE members emigrated to the United States

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(U.S.) between 1883 and 1926. They comprise approximately 10% of the 600 admissions to the SAE membership between 1881 (the year of admission of the first SAE emigrant to the U.S.) and 1914 (the beginning of the First World War, and the year of admission of the last U.S. emigrant in this study). They were therefore a significant proportion of a growing chartered accountancy profession in Edinburgh in the late 1800s and early 1900s. Forty-six of the emigrants remained in the U.S. throughout their working lives, 8 returned to the U.K., and the remaining 5 moved on to other parts of the world to develop their careers.

The purpose of this paper is to report on the first phase of a long-term research program to identify the impact of U.K. accountants on the development of professional accountancy in other parts of the world. In this first study, the research focus is on the early SAE influence in the U.S. It is therefore an extended case study of the effect of emigration on the development of professional accountancy. As accounting histories such as Kedslie (1990a), Lee (1995), and Shackleton and Milner (1995) demonstrate, there were significant differences in the membership and organizational features of the early U.K. chartered accountancy bodies (i.e., with respect to members’ backgrounds, training and examining standards, and clients). It is therefore important to examine each community on an individual basis prior to generalizing from the separate results.

In this study, the SAE is the body of professional accountants examined. Only accountants who were SAE members at the time of their emigration are included in the data base. The main empirical analysis therefore ignores SAE members who resigned prior to emigration, SAE apprentices who never became members, and Edinburgh accountants unconnected with the SAE. Future research will observe other U.K. bodies (e.g., The Institute of Accountants and Actuaries in Glasgow [IAAG], and The Institute of Chartered Accountants in England and Wales), as well as developments in countries other than the U.S. (e.g., Australia and Canada).

Within a general context of emigration to the U.S. in the late 1800s and early 1900s, and with respect to a theoretical
Lee: The Influence of Scottish Accountants in the United States: The Early Case of the Society of Accountants in Edinburgh

perspective on emigration, the current study describes 59 identifiable SAE emigrants, and reports on what they achieved as professional accountants in the U.S. More specifically, the study attempts to identify the degree of influence these accountants had on the foundation and development of the U.S. accounting profession (with particular reference to its institutionalization processes and practice formations).

Data sources used in the project are indicated in the bibliography with an asterisk. In this respect, it should be noted that available sources of information about the SAE emigrants were limited, and the detailed content of what was available was relatively restricted. Early membership records of professional accountancy bodies such as the SAE tend to describe mainly address changes.

EMIGRATION TO THE U.S. AND EMIGRATION THEORY

U.K. Emigration

The SAE emigrants in this study are examined in the context of a general pattern of emigration from Scotland to the U.S. in the late 1800s and early 1900s. Emigration from Scotland was part of a wider European migration which gathered momentum in the late 1700s, and began to diminish in the last two decades of the nineteenth century (Brander, 1982, pp.55, 73). More than 33 million emigrants from around the world arrived in the U.S. between the early 1800s and the early 1900s (Baines, 1991, pp.8-9; and Nugent, 1992, p.30). Over a comparable period, it is estimated that nearly 17 million individuals left the U.K. for other parts of the world (Nugent, 1992, p.30; see also Baines, 1991, pp.8-9). How many U.K. emigrants travelled to the U.S. is not precisely known, and those estimates which have been made tend to vary. Nugent (1992, p.45), for example, suggests that, for the period 1871 and 1900, between 60% and 70% of emigrants from England, Scotland and Wales arrived in the U.S. This datum drops to 37% for the period 1901 to 1914. Musgrove (1963, p.19) reports 60% of U.K. emigrants leaving for the U.S. in the 1890s.

Scottish Emigration

How many Scots emigrated to the U.S. is equally problematic. Prentis (1983, p.27) calculates that between 9% and 10% of U.K. emigrants from the 1850s to the 1890s were of Scottish
origin. Baines (1991, p.10), on the other hand, estimates that the annual average Scottish emigration rate (per 100 of population) ranged from approximately one-half percent (for the decades from 1851 to 1880) to approximately one percent (for the decades 1901 to 1930). Nugent (1992, p.46) translates these rates into absolute terms, and claims that approximately 635,000 Scots entered the U.S. between 1871 and 1910. Aspinwall (1985, p.113) estimates the figure at 800,000 for the period 1820 to 1950. Brander (1982, p.104), on the other hand, puts forward a figure of 500,000 for the period 1861 to 1901. Berthoff (1953, p.5) states a datum of 567,000 for a century of Scottish emigration to the U.S. (i.e., from 1820 to 1920). In contrast, Anderson and Morse (1990, p.15) disclose two million Scots emigrants world-wide between 1830 and 1914, with an estimated one-half arriving in the U.S. between 1853 and 1914.

Despite these variations in emigration data estimates, it is clear that, within the period of emigration in this study (i.e., 1883 to 1926), many hundreds of thousands of individuals left Scotland for the U.S. The U.S. population census statistics bear this out. For example, according to Brander (1982, p.89), in 1790, the recorded U.S. population of Scottish birth was 189,000. Nugent (1992, p.151) reports it grew to 261,000 by 1910. This suggests a large number of Scots emigrants either died, returned to Scotland, or disappeared. For example, Nugent (1992, p.35) reports that 53% of U.K. emigrants to the U.S. between 1908 and 1914 returned to the U.K. Whatever the level of overall Scottish emigration to the U.S., however, it is certainly unsurprising to find (as in the current study) that it included a number of Edinburgh chartered accountants.

Emigration Theory

There are two basic theoretical approaches to emigration (Woods, 1982, p.131). The first approach relates to descriptions of emigrants and their emigration (including economic, political, and social reasons why they emigrated). The second approach deals with the economic, political, and social effects of emigration. The current study of SAE emigrants incorporates recognition of both theoretical bases in its analyses. For example, much of the paper's empirical content deals with descriptions of the SAE emigrants, and their emigration locations and employment. Also included are descriptions of how their careers progressed. What is lacking because of insufficient data are specific reasons for the SAE emigration. It is therefore use-
ful to initially describe what emigration researchers typically state as the major reasons for emigration generally and emigration of skills particularly.

Emigration takes place for a number of economic, political, and social reasons. These can be generally categorized as "push" factors (e.g., economic decline, unemployment, and oppression), and "pull" factors (e.g., employment, better wages, education, and improved social status) (De Jong and Fawcett, 1981, p.20; and Lewis, 1982, p.100). Typically, emigration occurs because of differentials between the departing and host countries which allow emigrants to maximize on economic opportunity and social aspiration (Lee, 1969, pp. 285-7; De Jong and Fawcett, 1981, p.17; Lucas, 1981, pp.85-6; and Clark, 1986, p.80). The greater the differentials with respect to emigration factors, the greater the level of emigration (Lee, 1969, pp.289-92).

A common feature of emigration appears to be the frustration of the emigrant with conditions in the country of departure (Aspinwall, 1982, p.201; and Brander, 1982, p.73). It is therefore presumed in this study that the SAE emigrants were sufficiently frustrated with their economic and/or social conditions in Edinburgh to emigrate to the U.S. The latter supposition appears reasonable within the specific context of researched reasons for Scottish emigration in the second half of the nineteenth century. The major stimulus for such emigration was economic, particularly with respect to the importing of necessary skills from Scotland to the U.S. As Devine (1992, pp.2-3) reports, Scottish emigration during this period was a paradox because Scottish economic resources were sufficient to sustain a larger population. The emigrants left mainly industrial locations, and a large proportion were skilled and found similar employment in the U.S. (Aspinwall, 1985, p.114). For example, Berthoff (1953, p.21) finds more than 40% of Scots emigrants between 1873 and 1918 had disclosed skills when they emigrated. Musgrove (1963, p.22) identifies a comparable effect. He reports that the proportion of skilled U.K. emigrants to the U.S. increased from 15% to 45% between 1900 and 1913.

The reason for the early transfer of skills between Scotland and the U.S. was the Scottish influence on industries such as textiles, railroads, cattle, coal, and engineering (Aspinwall, 1985, pp.95, 100, 115-16). However, with the later consolidation of large U.S. businesses, labor problems, and an erosion in value of imported Scottish skills and status, emigration from
Scotland to the U.S. became less attractive (Aspinwall, 1985, p.82). For example, Scottish expertise was no longer needed in U.S. iron and steel industries by the 1870s, nor in coal mining by the 1880s (Brander, 1982, p.102; and Aspinwall, 1985, p.120).

By 1914, the main emigration from the U.K. to the U.S. was what Musgrove (1963, p.28) describes as élite. Indeed, he concludes that middle class, white collar individuals were over-represented within the U.S. emigration population (Musgrove, 1963, p.17). Of interest to the current study is Musgrove's more detailed finding that, as the emigrating proportion of individuals in the established professions slowed down in the late 1800s and early 1900s, the comparable proportion in the new professions increased (Musgrove, 1963, p.23). This would have included chartered accountants such as the SAE members. Professional qualifications were expected to give emigrants a significant start in the host country (Erickson, 1972, p.394), and the 1890 U.S. Census discloses 3.1% of Scots male emigrants were professionals (Berthoff, 1953, p.121). The equivalent datum for females is 3.6%. Within this general context, the SAE emigration in the late 1800s and early 1900s is not unexpected. Economic and social status differentials between Scotland and the U.S. were presumably sufficiently great to cause a significant proportion of SAE members to be frustrated enough to emigrate.

The literature of emigration contains general pointers of relevance to the location of the SAE emigration. Lee (1969, p.292) concludes that emigration is typically along defined routes. This can be evidenced more specifically in relation to Scots emigrating to the U.S. during the last half of the nineteenth century. For example, in the early part of the period 1861 and 1901, Scots emigrants located mainly in New York, Pennsylvania, and Massachusetts. Later emigrants were typically found in Illinois, Michigan, and Ohio (Brander, 1982, p.104). The major cities hosting these emigrants during the same periods were New York, Chicago, Philadelphia, and Detroit. The 1920 U.S. Census confirms these data (Aspinwall, 1985, p.123). Thus, in the current study, it is unsurprising to find a considerable proportion of SAE emigrants located in the above states and cities.
The first SAE members known to have emigrated to the U.S. were W. H. K. Skinner (to Kansas in 1883) and T. R. Fleming (to Colorado in 1885). No information is available as to why they emigrated. According to SAE records, both men resided in the U.S. for three years. Skinner was the son of a lawyer and last recorded as an SAE member in Kansas in 1886. Fleming, the son of a banker, moved from the U.S. to South Africa in 1888, and remained there until at least 1924. Fleming’s locations suggest he may have been concerned with mining operations.

The main SAE emigration started in the mid 1890s. Twenty SAE members arrived in the U.S. between 1883 and 1904. A further 39 entered between 1905 and 1926. Twenty-nine of the 59 emigrants were admitted as SAE members prior to 1905. The remaining 30 became chartered accountants between 1905 and 1914. Thirty-eight of the 59 emigrants were educated at four leading Edinburgh private schools (in order, George Watson’s College, George Heriot’s School, the Edinburgh Academy, and Daniel Stewart’s College). The largest group (17) was educated at George Watson’s College.

Walker (1988, pp.40-51; see also Brown, 1905, p.332) characterizes the late 1800s and early 1900s in Edinburgh as a period of oversupply in professional accountancy, and this is supported by data in this study. All 59 emigrants were admitted to the SAE by 1914, and 47 had entered the U.S. by that year. Table 1 provides a complete analysis of the time period between admittance as an SAE member and arriving in the U.S., and the length of stay. It discloses that 42 (71%) of the emigrants entered the U.S. within 5 years of becoming SAE members, and 36 (61%) stayed for 21 years or more. Thus, for most of these individuals, emigration to the U.S. was a decision taken at an early stage in their professional accountancy careers, and resulted in these careers being located for the most part in the U.S.
TABLE 1: SAE MEMBERSHIP, U.S. EMIGRATION AND U.S. RESIDENCY

<table>
<thead>
<tr>
<th>Period (years)</th>
<th>To Emigration</th>
<th>Of Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 5</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>6 - 20</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>21 +</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>59</td>
</tr>
</tbody>
</table>

The significance of Table 1 is that it suggests the large majority of the SAE emigrants had time to materially influence the development of professional accountancy in the U.S. They were leaving a situation in which a local oversupply of professional accountants existed. In addition, they were members of an institutional body which was arguably well ahead of similar bodies in the setting of professional accounting standards. Each of the 59 emigrants completed a professional training involving a five-year apprenticeship with an SAE member, compulsory attendance at University of Edinburgh law classes, and passing several written professional examinations.² Forty-one individuals were admitted to membership under a national uniform system of training and examination which was administered from Edinburgh. Thirty-eight had SAE-managed evening classes available to assist in their examination preparation.

The 59 emigrants were therefore well qualified to practice their profession in the U.S. They were typical of admittants to the SAE between 1854 and 1914. The occupational classifications of the fathers of the 59 men are proportionally similar to those of all SAE apprentices identified by Walker (1988, p.174) between 1837 and 1911. For example, 22 were from independent or professional backgrounds, 12 from manufacturing, commerce and farming, and 25 from lower middle and working class backgrounds. The majority (38) were educated at respected private schools in Edinburgh. The emigrants therefore do not appear to be significantly different as a social group from the total professional population of which they were initially a part.

²For details of these arrangements, see Lee (1995). At least two of the SAE emigrants (R. L. Cuthbert in his finals in 1891; and M. C. McEwan at the intermediate stage in 1885) were prize winners in their professional examinations.

https://egrove.olemiss.edu/aah_journal/vol24/iss1/11
Why the SAE emigrants left the U.K. is unknown. Lack of employment and career opportunities may fit most cases. Adventure and opportunity may be relevant to others. Escape from an impending World War may be yet another (13 of the 59 accountants emigrated in the years 1913, 1914 and 1915). Whatever the reason, the emigrants joined an accountancy community at the beginning of its journey to maturity, and in need of an influx of expertise. Indeed, Brown (1905, pp.278-9) characterizes the U.S. accountancy profession at the beginning of the twentieth century as behind U.K. standards and undertaking work not usually thought of as mainstream practice in the U.K. (e.g., auditing).

Most of the SAE emigrants entered a world in which organized and institutionalized accountancy was at an early stage. The first organized body of accountants (the New York Institute of Accounts [NYIA]) was formed in 1882, followed soon after in 1886 by the American Association of Public Accountants (AAPA). The AAPA was formed in Philadelphia by 24 individuals who were mainly chartered accountants from the U.K. Of the initial 10 AAPA Council members, 8 were from New York, and one each from Boston and Philadelphia. No SAE members were involved in the formation of the AAPA. The SAE influence on institutionalization was to come later in the AAPA's history. Indeed, 12 of the 59 emigrants are known to have become AAPA members, including J. B. Niven who was its Vice-President in 1915.

### TABLE 2: U.S. ACCOUNTANTS IN THE LATE 1800s

<table>
<thead>
<tr>
<th>Date</th>
<th>New York</th>
<th>Chicago</th>
<th>Philadelphia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>12</td>
<td>2</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>1880</td>
<td>31</td>
<td>3</td>
<td>15</td>
<td>49</td>
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<tr>
<td>1890</td>
<td>66</td>
<td>24</td>
<td>35</td>
<td>125</td>
</tr>
<tr>
<td>1899</td>
<td>183</td>
<td>71</td>
<td>74</td>
<td>328</td>
</tr>
</tbody>
</table>

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4Brown was particularly concerned about the lack of court-related work in the practices of U.S. accountants. Such work was a major part of many SAE members in the late 1890s and early 1900s, and was a major influence in the founding of the SAE (see Kedslie, 1990a and 1990b; and Walker, 1988 and 1995).
New York had the largest community of accountants in the late 1800s, as revealed by figures researched by A. C. Littleton (Zeff, 1988, p.15) (see Table 2). By 1899, there were 328 accountants identified in 3 of the largest U.S. cities. By way of contrast, the SAE in 1900 had a membership of 351, and there were 720 chartered accountants in the 3 Scottish societies formed in Aberdeen, Edinburgh, and Glasgow.

Public accountancy firms gradually emerged in the U.S. during the last decade of the nineteenth century. They were mainly founded by U.K. accountants fulfilling audit and company formation contracts in the U.S. (e.g., in brewing, steel manufacturing, and railroads). Examples of such firms include Barrow, Wade, Guthrie & Co. in New York (formed in 1883), Price Waterhouse & Co. in New York (1890) and Chicago (1891), Broads, Patterson & Co. in Chicago (1894), Arthur Young & Co. in New York (1894), Deloitte, Plender, Griffiths & Co. in New York (1895), Marwick, Mitchell & Co. in New York (1897), and Touche, Niven & Co. in Chicago (1900) and New York (1901). At least 32 of the 59 SAE emigrants are known to have been associated with one or more of the above firms at some time in their U.S. careers.

The U.K. influence of chartered accountants in the organization of the AAPA was increasingly resented in the late 1800s by other accountants with non-U.K. backgrounds (Miranti, 1990, pp.29-47). The greatest competition to the AAPA came from the NYIA which had been formed by non-chartered accountants with the intention of emphasizing "scientific" accounting. In events reminiscent of activities in Scotland between 1884 and 1914, the new U.S. professionals gradually organized to self-regulate public accountants and accountancy standards. The process was engineered through individual state legislation which licensed appropriately qualified individuals, and used state societies of public accountants and boards of accountancy to manage the legislation (Miranti, 1990, pp.48-68).

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5 The driving force behind the formation of the NYIA was C. W. Haskins who, with E. W. Sells, formed Haskins & Sells in 1895 (Miranti, 1990). No SAE emigrant in the current study is known to have worked for Haskins & Sells.

6 The early history of both the Scottish and English accountancy bodies was characterized by inter-body rivalry. In Scotland, this resulted in successful court actions to maintain the monopoly of chartered accountancy (see Walker, 1991), and numerous unsuccessful attempts at obtaining U.K. legislation to effect the same result (see Macdonald, 1985).
The first legislative provision was introduced in New York in 1896, and the New York State Society of Certified Public Accountants was formed in 1897. No SAE members were involved in the New York State Society formation, although at least 25 of the 59 emigrants became members of state societies. Other state societies included those of Pennsylvania (1897), New Jersey (1898), Illinois (1903), Ohio (1903), and Missouri (1904).

Legislative events similar to those in New York took place, for example, in Pennsylvania (1899), Maryland (1900), California (1901), Illinois (1903), and Washington (1903). By 1904, there were 21 state boards of accountancy (Brown, 1905, p.276), and 14 state societies. However, uniformity of standards was rare. This was a situation which also affected the early history of Scottish chartered accountancy. However, there was some standardization between states. Many of the earliest members of state societies were admitted under waiver clauses which allowed previous practical experience to substitute for the passing of examinations. These waivers were of advantage to several SAE members coming to the U.S. For example, J. B. Niven was examined by the New York State Society (1904) but admitted under waiver to Illinois (1903), Ohio (1908), and New Jersey (1912). Fourteen of the 59 SAE emigrants joined the New York State Society, and 9 chose the Illinois equivalent (in all probability under the Illinois waiver clause in most cases because of SAE membership and previous practice experience).

The overall situation with state legislation in the early 1900s was one of differences rather than similarities. For example, states such as California, New York, Pennsylvania, and Washington did not permit reciprocity for certified public accountants from other states. Indeed, New York State Society membership was dependent on, first, passing examinations administered by New York University and, second, being a U.S. citizen (or intending to be so). This latter provision appears to have been deliberately aimed at U.K. chartered accountancy emigrants (Miranti, 1990, pp.56-62). In fact, 4 leading English chartered accountants (including A. L. Dickinson of Price Waterhouse & Co.) were denied membership of the New York

7Apart from rivalries between chartered and non-chartered accountancy bodies in Scotland, there was a persistent rivalry and hostility over professional standards between the SAE and its Glasgow counter-part, the IAAG (see Shackleton and Milner, 1995; and Lee, 1995).
State Society because they did not meet these standards.\(^8\) As a result, they joined the Illinois State Society which had more liberal waiver provisions. Miranti (1990, p.61) comments that, by 1903, nearly one-third of the 54 Illinois members were from Price Waterhouse & Co.

The need for uniformity among states eventually forced national public accountancy firms such as Price Waterhouse & Co. to take action to prevent federal legislation being introduced to bring uniform standards. In 1902, they helped form and fund the Federation of State Societies of Public Accountants in the United States (FSSPAUS) (Miranti, 1990, pp.62-8). The New York State Society initially joined FSSPAUS but left in 1903 because most FSSPAUS members were also AAPA members, thus emphasizing the continuing tension between chartered and other certified professional accountants in New York at that time. The AAPA was re-organized in 1916 as the Institute of Accountants in the United States of America (IAUSA), using the U.K. model of centralization, and with membership not based on state society affiliation (Miranti, 1990, pp.115-16).\(^9\) Indeed, 10 of the 35 initial IAUSA Council members had U.K. or Canadian origins (Miranti, 1990, p.116). The IAUSA was renamed the American Institute of Accountants (AIA) in 1917. Thirteen of the 59 SAE emigrants were founding Fellows of the IAUSA in 1916. The AIA eventually merged in 1936 with the American Society of Certified Public Accountants (ASCPA) to form the present-day American Institute of Certified Public Accountants (AICPA). The ASCPA was founded in 1921 in response to the lack of state society affiliation in the AIA membership rules - yet another example of the rivalries and associated tensions between different professional accountancy communities in the U.S. in the early twentieth century. No SAE member can be evidenced as a founding member of the ASCPA.

The above brief commentary describes the institutional and organizational framework of professional accountancy encountered by the 59 SAE emigrants entering the U.S. from 1883.

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\(^8\)It is not known whether any SAE members were similarly excluded.

\(^9\)One SAE emigrant (J. B. Niven) was heavily involved in the AAPA and had explicit reservations concerning the new structure not involving state society affiliation (Miranti, 1990, p.115). Niven had been a Vice-President of the AAPA and the New York State Society in 1915-16, and was President of the New Jersey State Society between 1915 and 1921. He was a member of 4 state societies. Thus, not all chartered accountants were wedded to the U.K. model. Niven became President of the AIA in 1924.
onwards. The next two sections explain more about where they entered the U.S., and how they influenced its professional accountancy history.

THE NEW EMIGRANTS

The 59 SAE emigrants arrived in the U.S. predominantly from Edinburgh. Forty-six appear to have travelled from that location, with a further 5 from other parts of the U.K. (including London), and the remaining 8 from various parts of the world (including Canada). Thus, 13 of the group had already moved from Edinburgh prior to relocating in the U.S. Their initial residence was typically New York. Thirty-two started work there, with a further 8 doing so in Chicago. The remaining 19 accountants started their residency at 12 different U.S. locations. In other words, most of the emigrants focused on the two U.S. cities with the largest populations of accountants (particularly of chartered accountants).

The majority of the new emigrants remained in the U.S. throughout their working lives. Twenty stayed at their original point of entry, and a further 26 relocated at least once in the U.S. during their careers. Eight returned to the U.K., and 5 moved eventually to other parts of the world (including Canada). The emigrant group worked in a total of 23 states, with a major focus on New York and Illinois (consistent with their initial residency). Forty of the 59 emigrants worked at some time in New York, 16 in Illinois, 7 in Missouri, and 6 in California.

Despite difficulties associated with a lack of reliable data sources, it is possible to describe the types of employment with which the 59 SAE emigrants were involved. Table 3 outlines the broad categories of occupation, and also provides information regarding professional affiliations.
Table 3 suggests that at least 37 (80%) of the SAE emigrants were involved at some time in U.S. public accountancy. This finding is unsurprising as every emigrant was trained and educated in Scotland as a chartered accountant. Thirty individuals remained in public accountancy, and 17 moved from the latter into occupations in industry, finance or government. Seven accountants were employed in either industry, education, finance or government without entering U.S. public accountancy.

The major focus of this emigrant group was therefore public accountancy. Twenty-five of the 47 individuals involved in the occupation were licensed as public accountants by state boards of accountancy (23 were also members of either the AAPA or AIA). One individual was a member of both the AAPA and AIA without becoming a state society member. Twenty-one of the 47 SAE members appear to have practiced as public accountants without membership of a U.S. professional accountancy body. All 47 SAE emigrants who practiced as public accountants in the U.S. remained as members of the SAE during their public accountancy tenure. This perhaps emphasizes the importance to them of chartered accountancy, and its acceptance in the U.S. Interestingly, however, for those SAE emi-

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10Eighty-two of 206 (40%) AAPA members between 1886 and 1905 were from the U.K. (Miranti, 1990, p.41).
grant for which there is an official record, none are found to be described as chartered accountants.

Of the 25 emigrants known to have been members of state societies in the U.S., 15 had a single membership, 9 dual membership, and 2 triple or quadruple membership. Fourteen of these individuals were members of the New York State Society and 9 of the Illinois body. Nine other societies had a total of 17 SAE members. Thus, as with their arrival and employment locations, the state-licensed SAE emigrants primarily focused on public accountancy in New York and Chicago.

The 47 SAE emigrants employed at some time in public accountancy were affiliated with a number of firms. Twenty-eight were associated with one firm, 17 with two, and 2 with three. Eighteen individuals worked with Price Waterhouse & Co., 9 with Marwick, Mitchell & Co., 5 with Touche, Niven & Co., and 4 with Arthur Young & Co. (all firms with strong Scottish connections). Nineteen individuals were employed by 11 other firms. Thirteen accountants were self-employed or partners in small firms. Of the 42 emigrants with national firms, at least 13 are known to have become partners. The latter group represents 28% of the public accountant group.

Table 4 below provides a review of the employment tenure of the 59 SAE emigrants. Thirty of these individuals had a single type of employment, and 24 changed the nature of their employment at least once. The employment details of 5 accountants could not be identified. Because of multiple employment, the figures in Table 4 exceed the total of 59.

<table>
<thead>
<tr>
<th>U.S. Employment Experience (years)</th>
<th>PA</th>
<th>IND</th>
<th>GOV</th>
<th>FIN</th>
<th>EDU</th>
<th>NI</th>
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<tr>
<td>0 - 5</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6 - 10</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>11 - 15</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>16 - 20</td>
<td>5</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>20 +</td>
<td>23</td>
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<td>17</td>
<td>5</td>
<td>4</td>
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</tr>
</tbody>
</table>

**PA** = public accountancy; **IND** = industry and commerce; **GOV** = government; **FIN** = finance; **EDU** = education; and **NI** = no information.
The above data show that, for public accountants, 28 had 16 or more years of experience. For those in industry, the majority of 9 had 10 or less years of experience. For those in finance or education, most of the SAE members had less than 10 years of experience. These results support earlier findings that, at least for the majority of SAE emigrants in public accountancy and several others in non-public accountancy occupations, U.S. employment experience was long-term and, in many cases, permanent until retirement. Thus, emigration for these individuals was a matter which determined the nature of their life-long employment. Because of this, it is not unreasonable to suggest it also affected the history of U.S. professional accountancy. This can be seen more clearly when individual experiences are examined in the next section.

THE HIGH ACHIEVERS

Several of the SAE emigrants had successful careers. This is not to suggest that others did not. It merely indicates that available information identifies those listed in Table 5 as the most prominent according to the data available.

**TABLE 5: SAE HIGH PROFESSIONAL ACHIEVERS IN THE U.S.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Highest Known Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bassin,</td>
<td>Comptroller, Nickel Processing Corporation</td>
</tr>
<tr>
<td>Brown,</td>
<td>Partner, Touche, Niven &amp; Co.</td>
</tr>
<tr>
<td>Caesar,</td>
<td>Founding partner, Jones, Caesar &amp; Co.; partner, Price Waterhouse &amp; Co.</td>
</tr>
<tr>
<td>Carruthers,</td>
<td>Partner, Price Waterhouse &amp; Co.</td>
</tr>
<tr>
<td>Charles,</td>
<td>Partner, Price Waterhouse &amp; Co.</td>
</tr>
<tr>
<td>Cuthbert,</td>
<td>President, Arizona State Society</td>
</tr>
<tr>
<td>Cuthbert,</td>
<td>Partner, Arthur Young &amp; Co. and Deloitte, Pledger, Griffiths &amp; Co.</td>
</tr>
<tr>
<td>Drever,</td>
<td>President, American Steel Foundries</td>
</tr>
<tr>
<td>Fraser,</td>
<td>President, Missouri State Society</td>
</tr>
<tr>
<td>Grey,</td>
<td>Partner, Price Waterhouse &amp; Co.</td>
</tr>
<tr>
<td>Lowson,</td>
<td>Vice-President, American Institute of Accountants</td>
</tr>
<tr>
<td>Mackenzie,</td>
<td>Partner, Arthur Young &amp; Co.</td>
</tr>
<tr>
<td>Mackenzie,</td>
<td>Partner, Barrow, Wade, Guthrie &amp; Co.</td>
</tr>
</tbody>
</table>

https://egrove.olemiss.edu/aah_journal/vol24/iss1/11
Ten of the SAE emigrants listed in Table 5 became partners in national public accountancy firms (2 as founders). One other SAE member listed with addresses in New York and Chicago (G. A. Touche) had a considerable impact on the U.S. accountancy profession because of the firm he helped to found (Touche, Niven & Co.). However, most of his fame was established in London. He never became a member of any U.S. national or state accountancy body, and left the detailed management of his U.S. operations to his partner, J. B. Niven. Touche, the son of a bank agent, was originally apprenticed in Edinburgh to Niven's father, A. T. Niven, a founding member of the SAE in 1854.

Of the 10 partners in Table 5, 5 were affiliated to Price Waterhouse & Co., thus emphasizing the important part that Scottish chartered accountants had in the formation and development of that firm in the U.S. The son of a Church of Scotland minister, W. J. Caesar was a founding partner in the firm of Jones, Caesar & Co. which acted as agent for Price Waterhouse & Co. in Chicago and New York from 1895 to 1900, and was involved in audits of breweries, railroads, and manufacturers such as the American Steel and Wire Company. Employees of Price Waterhouse & Co. visited the U.S. from 1873, and Jones, Caesar & Co. acted as individual agents for the firm between 1891 and 1895. The firm of Jones, Caesar & Co. eventually merged with Price Waterhouse & Co. in 1900 when Caesar left for Paris. He apparently was a difficult man who alienated clients, yet left a successful practice for Price Waterhouse & Co. (Jones died in 1898). Caesar was a member and trustee of the New York State Society, and a member of the Illinois Society. He was not a member of either the AAPA or AIA, and therefore apparently uncommitted to the U.K. centralist model of institutionalization adopted in the U.S. By contrast, J. C. Scobie, the son of a carpenter, and who emigrated in 1903 to work for Price

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MacEwan</td>
<td>M. C. Comptroller, Clark &amp; Co.</td>
<td></td>
</tr>
<tr>
<td>Niven</td>
<td>J. B. Founding partner, Touche, Niven &amp; Co.;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and President, American Institute of Accountants.</td>
<td></td>
</tr>
<tr>
<td>Salmond</td>
<td>C. W. President, Pittsburg School of Accountancy</td>
<td></td>
</tr>
<tr>
<td>Sangster</td>
<td>A. Director of Accounts, New York State</td>
<td></td>
</tr>
<tr>
<td>Scobie</td>
<td>J. C. Senior partner, Price Waterhouse &amp; Co.</td>
<td></td>
</tr>
</tbody>
</table>
Waterhouse & Co., was a member of the state societies of New York, Pennsylvania and Illinois, as well as the AAPA and AIA. He died in 1944 as senior partner of Price Waterhouse & Co. in New York. Scobie wrote a manual of audit procedures which became the basis for AIA publications on that subject. But he was best known for his careful and time-consuming recovery of the reputation of his firm following the 1939 Securities and Exchange Commission report on its client, McKesson & Robbins.

Of the other high achievers, 3 (H. T. Cuthbert, E. Fraser, and J. B. Niven) were heavily involved in the institutionalization process. Cuthbert was the son of a Clydeside ship-owner, and spent several years from 1906 in Chicago, then moved to Phoenix, Arizona where he formed a public accountancy firm of which he was senior partner. He joined the Arizona State Society in 1912, and was its President from 1919 to 1922. Fraser was the son of a schoolmaster, and also initially arrived in Chicago in 1903, stayed a short time (joining the Illinois State Society under the waiver clause), then moved to New York in 1905, working for the Audit Company of New York and Price Waterhouse & Co. In 1907, he worked in Chicago with Arthur Young & Co. Then he moved in 1909 to Kansas City, Missouri to found his own public accountancy firm, from which he retired in 1945. He was Treasurer of the Missouri State Society between 1919 and 1937, and its President between 1937 and 1942. He was chairman of the AIA Special Committee on Procedure in 1925, and was for several years a member of the Missouri State Board of Accountancy.

Niven is arguably the highest achiever of the SAE emigrant group. He was admitted to the SAE in 1893 and emigrated to Chicago in 1899.\textsuperscript{11} He worked as a staff member with Price Waterhouse & Co. until he formed Touche, Niven & Co. with G. A. Touche. The firm rapidly became a national organization, and Niven was a member by examination in New York (1901), and by waiver in 3 other state societies (Illinois, 1903; Ohio, 1908; and New Jersey, 1912). He was admitted to the AAPA in 1904, and became a Vice-President in 1915 (when he was also Vice-President of the New York State Society). Niven was a member of the AAPA's Committee on the Journal (1913-14 and

\textsuperscript{11}It is interesting that Niven went initially to Chicago. As previously mentioned, Illinois had a more liberal attitude to the licensing of professional accountants than did New York.
1915-16). He became President of the New Jersey State Society in 1915, and occupied that position until 1921 (also being on the New Jersey State Board of Accountancy for many years). By this time, he was heavily involved in the affairs of the AIA. He was a member of its Council from 1917 to 1926 (ex officio, 1926-49); Executive Committee, 1918-22, 1924-5 (as chairman), and 1925-7; Committee on Federal Regulation, 1917-19; Committee on Publications, 1916-35 (chairman, 1927-35); Board of Examiners, 1917-24 (chairman, 1919-29 and 1921-4); Vice-President, 1921-2; and President, 1924-5. In addition, he wrote the tax section of the *Journal of Accountancy* from 1913 to 1920. He represented the Scottish chartered accountancy bodies at the first World Congress of Accountants in St Louis in 1904. He is reported as taking a prominent part in accountancy education at New York University (the gateway to membership of the New York State Society). Thus, Niven not only built a successful public accountancy practice in the U.S. (which is now part of Deloitte & Touche), but was also heavily involved in the institutional process at state and federal levels. He dealt particularly with education and training matters, and was both a contributor and supporter of the professional literature. He appears to have been one of the first tax practitioners in public accountancy. His role in the development of U.S. professional accountancy has been largely ignored, and appears worthy of further research.

One other SAE emigrant deserves detailed mention, if only for the fact that, despite a relatively short U.S. career, R. L. Cuthbert generated obituaries in the *New York CPA*, the *Journal of Accountancy*, *Pace Student*, and *The Accountants' Magazine* following his death on July 6, 1915 at Flanders (aged 47 years). Cuthbert had the unfortunate distinction of being the only New York State Society member killed in the First World War. He was the son of a Greenock shipowner, brother of H. T. Cuthbert, educated in London, trained in Edinburgh, admitted to the SAE in 1891, worked with Deloitte, Plender, Griffiths & Co. in London until 1895, when he emigrated to the U.S. He was member #16 of the New York State Society in 1896, joined the AAPA in 1905, and was a founding AIA member in 1916. At first a sole practitioner in the U.S., he formed a partnership in 1898, went solo again in 1900, then became a Deloitte, Plender, Griffiths & Co. partner in New York between 1905 and 1911. In 1911, he assisted Arthur Young to found his firm and was his partner until 1914, when he volunteered to join the Second
King Edwards Horse as a trooper (despite his U.S. citizenship from 1894). He was killed in action at Flanders.

Other SAE emigrants who require further research include T. Drever (the son of a draper) who, following SAE admittance in 1905, emigrated to the U.S. and was, successively, Comptroller, Treasurer, President, and Chairman of American Steel Foundries based in Chicago. He joined the Ohio State Society (1908) and the Illinois State Society (1912), and the AAPA (1912) and AIA (1916). He earned an honorary doctor of letters degree. W. Charles (the son of a sugar merchant) also earned such a degree. Having joined the SAE in 1911, he emigrated to Canada in 1913 to work for Price Waterhouse & Co. He was with the firm successively in Chicago, Milwaukee, and St Louis, being a partner from 1935 to 1947. D. L. Grey (the son of an Edinburgh lawyer) was also a Price Waterhouse & Co. partner (1914-37), joining the SAE in 1899, emigrating to New York in 1902, and moving to Pittsburg and St. Louis with the same firm. He was a member of the Missouri State Board of Accountancy for several years. F. Lowson (the son of a Dundee linen manufacturer; and SAE member, 1903) spent his career in the U.S. in a partnership in a local New York firm (1905-24). He then joined the U.S. Treasury in Washington, DC (1924-46). In 1923-4, he was chairman of the AIA's Committee on Federal Legislation, a member of its Committee on Form and Administration of Income Tax Law, and a Vice-President. Finally, M. C. MacEwan (the son of a Presbyterian minister), who died of pneumonia in 1899 in Chicago, was a partner in an Edinburgh accountancy firm who went to the U.S. in 1896 to be the financial manager of a thread manufacturer later taken over by the Scottish firm of J. & P. Coats. MacEwan was a distinguished Scottish rugby internationalist who captained the national championship team of 1891.

OTHER EDINBURGH EMIGRANTS

It would be remiss to ignore non-SAE accountants who emigrated from Edinburgh to the U.S. in the late nineteenth and early twentieth centuries. They have been omitted from

12Webster (1954) reveals that, of 214 Fellows and 52 Associates of the AAPA between 1886 and 1904, 86 came from either England, Wales, Scotland or Ireland. Indeed, 67 came from England alone. Of the 86 U.K. emigrants, 19 were chartered accountants.
the formal analysis in this paper because of problems of identifying their presence as a group either in Edinburgh or in the U.S. subsequently. However, during research for this paper, several non-SAE accountants were discovered to have travelled from Edinburgh to the U.S. for employment purposes. They provide a flavour of the overall emigration to the U.S. of Edinburgh accountants.

For example, Webster (1954, appendix) lists three Edinburgh men working in U.S. accountancy at the end of the nineteenth century. Each was a member of the AAPA. E. M. Noble qualified as an SAE member in 1871 but resigned in 1875 when he emigrated to the U.S. He was a sole practitioner in Washington, DC for many years, and was Commissioner to the Court of Claims. The son of an Ayrshire minister, Noble joined the AAPA in 1888 and died in 1892.

D. Rollo is described by Webster as an Edinburgh chartered accountant although he was never an SAE member. Born in Perth in 1852, Rollo worked in various accountancy firms in Edinburgh from 1871 to 1890. One of these firms was a partnership with an SAE member, J. J. Stuart, and it was described as a firm of chartered accountants. Rollo emigrated to New York from Manchester in 1892, and worked inter alia with Barrow, Wade, Guthrie & Co. prior to a sole practice which ended in 1907. From that year until his death in 1914, Rollo was a corporate treasurer in Philadelphia. He became an AAPA member in 1893, a Trustee from 1896 to 1903, Vice-President in 1898, and President in 1899. He also became member #27 of the New York State Society in 1896.

Webster also provides a record of an Edinburgh emigrant who achieved success in the U.S. without a connection to the SAE or, indeed, to any other U.K. accountancy body. D. MacInnes emigrated to New York in 1880 at the age of 18 years. For the previous 6 years, he had been a ticket-seller with the North British Railway in Edinburgh and, from 1880 to 1897, he was timekeeper and accountant for railroads in the New York area. From 1897 to 1935, MacInnes was Deputy Comptroller of New York City. He became a Fellow of the AAPA in 1902, and was member #189 of the New York State Society in 1901. He was a member of the New York State Board of Accountancy from 1907 to 1909, and taught in Theodore Koehler's New York School of Accounts in 1905.
CONCLUDING THOUGHTS

This paper is not intended as a definitive study of the influence of Scottish chartered accountants in the U.S. Its scope is limited by a number of factors. Only emigrating SAE members have been researched at this point. Members of the IAAG, for example, have not been researched. These would have included James Marwick, co-founder of Marwick, Mitchell, & Co. later Peat, Marwick, Mitchell & Co. (see Wise, 1982). The period of analysis ends with SAE admissions in 1914, and it is possible that later SAE members may have influenced the U.S. accountancy profession. Records are exceedingly limited and dispersed, and further research is needed.

In the meantime, it is reasonable to suggest that this study provides sufficient evidence of an important influence in the development of U.S. professional accountancy. First, most of the 59 SAE emigrants remained in the U.S. throughout their working lives. Second, these working lives were predominantly in accountancy and, more specifically, public accountancy. Third, for those emigrants for whom information is available, most reached a senior position in their organizations. Fourth, despite their chartered accountancy qualification which enabled them to practice as public accountants, the majority of those men in public accountancy joined local and, less frequently, national accountancy bodies. Joining such bodies enabled a small minority of the SAE emigrants to become involved in their development and administration (achieving three state society Presidencies, three national Vice-Presidencies, and one national Presidency) (ignoring the national Presidency of a non-SAE accountant from Edinburgh). In addition to public accountancy, there are signs that a small number of individuals attained high office in industry and government organizations. In total, these individuals represent approximately 10% of the total group of 59 SAE emigrants.

The results of this study are also consistent with a theoretical perspective of emigration to the U.S. approximately a century ago. The SAE emigrants were highly skilled, arguably to a higher level than that associated with U.S. accountants of the period. This differential effect permitted the SAE emigrants not only access to an emerging U.S. professional practice, but also the opportunity to benefit economically and socially. Several of the subjects of this study are stated in their obituaries to be pillars of their communities, and to have followed gentlemanly
pursuits such as shooting and sailing. The emigrants also consistently followed well-defined emigration routes from Scotland to the U.S. and beyond. The predominance of New York and Chicago as employment and residential addresses is evidence of this point. Once located in the U.S., it is unsurprising that the skills and knowledge of the SAE emigrants was used successfully in forming and developing professional firms and institutional bodies. The training they received in Edinburgh may not have been put to use extensively in that locality. However, it is clear that it was of considerable use following emigration to the U.S.

Given the problems commonly associated with emigration (e.g., loss of family, friends, and cultural identity), and the immaturity of the U.S. accountancy profession at the time of emigration, the early SAE emigration record appears to be one of considerable achievement. The lack of information in this study undoubtedly errs on the side of understatement in this respect. Thus, it is reasonable to conclude that the Scottish influence on the U.S. accountancy profession went much further and deeper than the popular expositions of pioneers such as Marwick and Mitchell (Wise, 1982).

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ACCOUNTING HALL OF FAME
INDUCTION

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Chicago, Illinois

Citation and Response

CHARLES
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BOWSHER

Max M. Fisher College of Business
THE OHIO STATE UNIVERSITY

CITATION
written by
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The Ohio State University
read by
Arthur R. Wyatt, Professor
University of Illinois

Born an identical twin in Elkhart, Indiana, his father was from Chicago and his mother from Toronto, Canada. Following graduation from high school, he attended the University of Illinois where his interest in accounting was fostered by the excellent courses taught by Hall of Fame Member Robert K. Mautz, Arthur R. Wyatt, and other members of the Department of Accountancy. Upon completing his Bachelor of Science degree in accountancy, he served for two years in the U. S. Army, and upon discharge, enrolled at the University of Chicago where he earned an M.B.A. degree. He became a Certified Public Accountant and joined the firm of Arthur Andersen & Co. in 1956.

In 1967, he was appointed Assistant Secretary of the Navy for Financial Management, a post he held for four years. Re-
turning to Arthur Andersen & Co., he was instrumental in the firm's efforts to encourage public discussion on the need for sound financial reporting within the public sector. He headed a research project that reviewed financial reporting practices of the federal government and recommended preparation of consolidated financial statements. He also was responsible for engagements involving compliance with federal election laws and was the engagement partner when the firm was retained to assist the Treasury Department in dealing with New York City's financial crisis in the mid-1970s.

Appointed by President Reagan to a fifteen-year term as Comptroller General of the United States in 1981, he aggressively pursued the mandate of the General Accounting Office resulting in increased visibility and effectiveness for the agency. Under his leadership, the GAO became involved in major issues ranging from health care reform and the savings and loan crisis to the federal budget deficit and efforts to "reinvent government." In addition, as Comptroller General, he played a key role in helping to resolve the fiscal crises at Lockheed, Penn Central, the Chrysler Corporation, and Conrail. He was instrumental in Congress' passage of the Single Audit Act of 1984, requiring annual audits for state and local governments, and the Chief Financial Officers' Act of 1990, requiring federal department and agencies to prepare financial statements and to undergo annual financial audits. During his term, he testified before congressional committees over 200 times, and, under his direction, the GAO more than doubled the number of reports to Congress and greatly increased the frequency of congressional testimony by GAO officials.

Recently invited to be a trustee of the Financial Accounting Foundation, he has been an active contributor to many organizations, including the advisory councils of both the Financial Accounting Standards Board and the Governmental Accounting Standards Board. He chaired the Railroad Accounting Principles Board for three years and is one of the three principals of the Federal Accounting Standards Advisory Board. Under his chairmanship, the International Organization for Supreme Audit Institutions, an organization comprised of his counterparts from around the world, adopted international standards and guidelines for auditing, internal control, and accounting in governments. He holds five honorary doctorates and is the recipient of many other honors and awards.

His hobbies include reading and golf, and he resides with
his wife, the former Mary C. Mahoney of Chicago, in Bethesda, Maryland. They have two grown children, Kathryn and Stephen. He is the 57th member of the Accounting Hall of Fame, The Honorable Charles A. Bowsher.
I very much appreciate the honor of being elected to the Accounting Hall of Fame. When I read the names of outstanding individuals who have previously been elected, I feel very privileged to join such a famous group of leaders who have contributed so much to our nation and to the accounting profession.

Shortly after I began my freshman year in 1949 at the University of Illinois, I decided to major in accounting. One of the reasons that I and many others chose accounting as our major was the able and exciting trio of teaching assistants—Lou Matusiak, Jim Wade and Art Wyatt. Later, I was to have Professor Mautz and many other outstanding professors as teachers at the University of Illinois.

I also owe a big debt of gratitude to the University of Chicago Graduate School of Business where I received an M.B.A. in 1956 after completing my Army service.

I joined the Chicago office of Arthur Andersen and Co. 40 years ago, in the summer of 1956. It was the most exciting place that any young accountant could begin his career. Leonard Spacek was the leader and we worked very hard to successfully complete each audit and special assignment that was presented to us. After 2 years on the audit staff, I transferred to the systems staff. This was the unit that eventually became Andersen Consulting.

In 1967, I left the firm for a 4-year period to serve as Assistant Secretary of the Navy for Financial Management under Presidents Johnson and Nixon. Dr. Robert Anthony, a member of the Hall of Fame, was the Comptroller of the Defense Department when I first arrived at the Pentagon.

In 1971, I returned to Arthur Andersen and Co. and assumed the newly-created responsibility for the government services work on a firm-wide basis. In 1975, Harvey Kapnick, the managing partner of the firm, suggested we prepare a set of financial statements for the federal government as a research project. I headed this effort, and worked closely with the then Comptroller General, Elmer B. Staats, another member of the Hall of Fame.

Later in 1975, we were selected by the Secretary of the Treasury to represent him and the federal government in doing
a financial review of New York City. It was that work that disproved what many in government claimed—that government units were too big and unique to have annual financial audits.

It was also at that time that I became instrumental in Arthur Andersen's efforts to encourage public discussion on the need for sound financial reporting within the public sector. In a 1979 speech, I said that if we are to restore public confidence in the financial affairs of government, several things are necessary. First, we must have adequate accounting standards for the public sector; second, we need adequate financial management systems in the public sector; third, we need sound financial reporting; and finally, we need annual financial audits like those in the private sector.

In 1981, President Reagan selected me to be the sixth Comptroller General and the leader of the General Accounting Office. Improving the financial management of the government at all levels has been one of my priorities since taking office.

In the early 1980s, we did not make much progress at the federal level because of opposition from the Office of Management and Budget (OMB). We did make significant progress with state and local governments. Building on Elmer's earlier audit work, we were successful in having Congress pass the Single Audit Act of 1984, which mandated annual financial audits of all states and most cities of any size. GAO also played an important role in establishing the Governmental Accounting Standards Board (GASB) in 1984. Today, all major public entities at the state and local levels in the United States have an independent audit.

In 1990, the Congress passed the Chief Financial Officers Act. The Act established within the Office of Management and Budget a Chief Financial officer (CFO) for the federal government and created CFOs within major federal departments and agencies. The 24 largest federal agencies (comprising 95 percent of assets, revenues and costs) are required to have auditable financial statements for fiscal year 1996 and each year thereafter. A consolidated annual financial report will be audited and issued beginning with fiscal year 1997.

In 1933, Colonel Carter was able to persuade the Congress with one testimony to enact the basic legislation that required annual independent audits for all public corporations. It has taken me most of my 15-year term, many audits of the Internal Revenue Service, the Air Force, the Customs Service and other agencies, and well over 20 testimonies before Congressional
committees to achieve similar legislation for the public sector. I can only conclude that Colonel Carter was a more persuasive individual.

However, we now have a good legislative basis requiring annual audits at all levels of government in the United States. We still have much work to do to improve the systems, to make the annual financial reports more readable and useful, and to improve the standards. If we can make good progress in the United States in the next decade, I am confident we can have great impact throughout the rest of the world on improving financial reporting in the public sector.

In closing, I would like to pay tribute to my wonderful wife, the former Mary C. Mahoney, who was willing to marry me some 33 years ago. She has been very supportive of my career moves going back and forth between the private and public sectors, even though some of those moves meant a smaller paycheck. She has been a terrific mother to our two children, both M.B.A. graduates of Stanford University, which is most appropriate since my fellow inductee today is Professor William Beaver of Stanford University. I would like to add my congratulations to both Bill and Don Kirk who were also honored by their election to the Accounting Hall of Fame this year.

You have honored me with this election to the Accounting Hall of Fame. I am grateful and I thank you.
ACCOUNTING HALL OF FAME INDUCTION

October 19, 1996
Chicago, Illinois

Remarks, Citation, and Response

DONALD JAMES KIRK

Max M. Fisher College of Business
THE OHIO STATE UNIVERSITY

REMARKS

by
Paul Kolton
Stamford, Connecticut

It's a pleasure to celebrate one of those human curios who brings distinction to everything he does and in the case today, to the Hall of Fame itself. Don Kirk has had a number of careers—accounting professional, corporate director, (top) civic official, executive in residence at Columbia University, leader of important not-for-profit organizations—and for fourteen astonishing and tumultuous years, an FASB Board member and for nine of those years, Chairman of the Financial Accounting Standards Board.

It was during that period as head of the Board's Advisory Council that I learned a great deal about standard setting but I learned a great deal more about Don Kirk. In the perspective of time I have come to think of him as a kind of historical accident. He has the brains, the patience, the eloquence, the high standards—that combination that one person rarely possesses—and he was in the right place and it was the right time. For the Board and for the idea that private people can effec-
tively and independently set their own standards, the Kirk years will be a kind of watershed, a golden age.

Without a lot of high drama, without more emotion that he needs and without rhetoric he went about the business of orchestrating change with three strikingly necessary characteristics:

- an *inflexible fidelity* to independence and high standards that serve a public purpose;
- an *irresistible insistence* that things move forward, that they get done openly, and get done right; and,
- finally, he developed a *heat resistant* shield that NASA should explore.

The result, I think, is that it will still be years before we appreciate what the FASB has become and what Don and his associates constructed. He also, as we learned, opened a door that was often closed. It is called "communications" and he showed us about the meaning of messages and how to read them. It is a complicated, continuing process.

Jack Benny once complained to a reporter that although he and George Burns were very close and had been so for years, he (Benny) could never—but never—communicate well enough with Burns to make him laugh. "Once, though," he said, "I thought I had him. George called my hotel room from the lobby and said he was coming up. I got undressed, stood naked on a table, posing like a statue with a rose in my hand. I thought he'd come in the door; he'd have to laugh." "So . . . . What happened?" the reporter said. "He sent the maid in first," Benny replied.

And so the process goes on, but this special moment is for someone who by way of Ohio and Yale and Price Waterhouse came to the Board in its very early days under Marshall Armstrong, who over the years established the institution's independence so that it is curiously rock-hard and fragile at the same time, who reached the high places the hard way, who had a sense of what the Board ought to be and made it that way. You look back and realize, as someone once described it, that nobody captured his colors and nobody silenced his drums.
This newest member of the Accounting Hall of Fame was born to a father who emigrated from Scotland at the age of 18 to become a self-educated C.P.A. and a mother born in Cleveland of parents who emigrated from Latvia. He put most of his teen-age energies into athletics, culminating in being captain of his Shaker Heights (Ohio) High School football, basketball, and golf teams. Encouraged by his father to pursue a liberal arts education, he enrolled at Yale. During his freshman year, injuries, and what he describes as limited skills, quickly ended his collegiate athletic career. Youthful indecision about a course of study coupled with a desire for independence caused him to leave Yale for the Naval Aviation Cadet Program in 1953 at the end of his sophomore year. Eighteen months later, he received his wings and commission and was assigned to an aircraft-carrier-based squadron. During a long stint at sea, he restarted his education by taking a correspondence course in introductory accounting offered by the University of Maryland. He discovered that he preferred working accounting problems to playing gin rummy in the pilots' ready room.

In 1957, he returned to Yale determined to be a history major. He also decided to take the two accounting courses offered by the economics department. The first course was taught by a professor who was also a practicing C.P.A., for whom he worked several afternoon a week. The second was taught by a professor who was recognized as one of the leading accounting scholars of the time. The last two years at Yale were paid for with money from the G.I. Bill and part-time work and with money earned and rent saved by living on the third floor of a funeral home for which he answered night-time calls from distraught friends and relatives of the deceased or from pranksters. "I learned diplomacy from that job," he says, "and there was a bar just around the corner that did a booming business on the nights of Irish wakes; so I also learned to prefer Irish wakes over Italian ones." In 1959, he was graduated from Yale.
with a major in history, but he interviewed only public accounting firms.

He started his professional career with Price Waterhouse in 1959. In 1961, he completed an M.B.A. degree at New York University, and in 1963, he became a C.P.A. in the State of New York. After only eight years with Price Waterhouse, he was promoted to partner in 1967.

The Financial Accounting Foundation appointed him as one of the first seven members of the Financial Accounting Standards Board when it was formed in 1973. At the end of 1977, when the original Chairman of the Board retired, the Foundation named him Chairman. He served as Chairman for the next nine years, which together with his earlier service was as long as the bylaws allowed.

During his chairmanship, he guided the Board through the transition from the closed and confidential meetings, to which Board members had been accustomed, to open and public meetings. Observers of these meetings invariably remark at his impressive mastery of the issues under discussion, no matter how complex, and his consummate skill in keeping the conduct of a Board meeting under control, no matter how strongly Board members presented their conflicting views.

From the Board's earliest days, he was recognized as a leader in addressing complex accounting issues, not always winning agreement among his colleagues but always an intellectual force to be reckoned with. Further, the added responsibilities of Chairman did not diminish that leadership. His intellectual capability, personal integrity, poise and self-confidence, dedication to the Board and its mission, effectiveness as a spokesman, and remarkable capacity for work commanded the utmost respect of all who worked with him, even those who may have strongly disagreed with his positions or with the Board's decisions.

Despite the extraordinary demands of leading an organization that faced controversy and criticism at every turn, somehow he found the time and energy to serve his home town of Greenwich, Connecticut, for twelve years as an elected member of its Board of Estimate and Taxation. Strongly committed to public service, he continues to give time and energy to both professional and community organizations. In 1987, he became Professor of Accounting at Columbia University's School of Business, serving in that capacity until 1995 when he became Executive-in-Residence at the School. He is a member of the
Public Oversight Board, a governor of the National Association of Securities Dealers, chairman of the National Arts Stabilization Fund, and chairman-elect of the Greenwich Hospital Association. In addition, he serves as a director and audit committee chairman for several major corporations.

He has published forty articles in professional and academic journals and has served as a contributing editor for Accounting Horizons. In addition, he has frequently testified before Congress and government agencies on matters related to accounting reporting and regulation. His many honors and awards include the AICPA’s Gold Medal for Distinguished Service and an honorary doctorate form Lycoming College.

He resides in Greenwich, Connecticut, near his children and granddaughter, who are all very much part of his life. He is the 58th member of the Accounting Hall of Fame, Donald James Kirk.
RESPONSE
by
Donald James Kirk

I am joining an accomplished group of predecessors, 57 in number. Having worked with twenty of them and read the writings of many more, I have first-hand knowledge of their many accomplishments. Vanity tells me to accept my place among those giants of our profession as an equal. Well, why not—for at least a day? Reality will soon enough put me in my proper place.

It was forty years ago that a correspondence course in accounting set the direction of my life, first as a student, then as a practitioner, standard setter, teacher and now as an overseer. The seeds for my interest in accounting were the teachings of Professors Paul R. Berney and Ralph C. Jones at Yale and the textbooks of William A. Paton. Paton was among the first group inducted into the Hall of Fame when it was established in 1950.

Also among that first group was George O. May, long-time senior partner of Price Waterhouse. In a rather usual way, George O. May was an influential factor in my career choice. While at Yale—in a large lecture hall filled with awe-struck students of an applause-inspiring historian—the stature of George O. May was indelibly planted in my memory. In two successive lectures, John Morton Blum, one of those teachers you never forget, mentioned George O. May's role in improving financial reporting following the 1929 stock market crash. If the work of a CPA warranted mention by Professor Blum, it had to be a profession worth joining.

Thirteen years later another senior partner of Price Waterhouse, John C. Biegler, gave direction to my career when he suggested that I should consider leaving the firm. Fortunately, he accompanied that suggestion with the possibility of my taking a position at a new organization in the process of formation—the Financial Accounting Standards Board. Shortly after, when officially offered a board membership, I accepted without a question or hesitation. I was eager to take on the challenges of that new venture.

That was the start of a fourteen year stint at the FASB and close and rewarding associations with a talented, dedicated staff and over that period of time, with sixteen board members, all of whom were independent and strong-minded (even if at times a few were wrong-headed). Four of those board members
are also members of the Hall of Fame—Marshall A. Armstrong, John W. Queenan, Oscar S. Gellein and Robert T. (Bob) Sprouse.

For what I was able to contribute to that organization I owe particular thanks, first, to Bob Sprouse for a thirteen-year education in clear thinking and his support as vice-chairman; and, second, I owe thanks to two directors of research, Michael O. Alexander and James J. Leisenring and to the Chairman of the Advisory Council, Paul Kolton, for their wise counsel during my chairmanship.

I am a great believer in the importance of both accountabil­ity and independence in the role of standard setters and in the role of overseers in corporate governance. I commend the AICPA for its support of the recent changes in the governance structure of the Financial Accounting Foundation, the overseer of the FASB. Public trust in the FASB and its overseers depends in the long run on the integrity, objectivity and independence of the entire process. The change in governance to include more trustees not affiliated with the sponsoring organizations is a positive step in achieving that public trust.

The FASB seemed to be a perfect job for me and it offered me experiences that were unique. So unique in fact that one executive recruiter I consulted with when leaving the Board could not think of a single full-time business position I was qualified for! He proved to be correct. Fourteen years at the FASB was the longest I ever held a full-time job and lately all I can find is part-time work.

Fortunately, when I left the FASB John C. (Sandy) Burton, a frequent critic of the FASB and then Dean of the Graduate School of Business at Columbia University, came to my rescue. He offered me a teaching position and assured me I had a bright future by telling me that those that cannot do, teach, and those that cannot teach, dean. If you believe that adage, I must have been a good teacher for I never became a dean. The truth, however, is I learned more than I taught, gained great respect for my colleagues in academia and now continue to enjoy the fellowship of my Columbia associates and interaction with students while free of the need to prepare and grade examinations.

I have benefitted immensely from my various associations with the profession and the opportunities it has given me. I look forward to many more years of serving the profession to help ensure that we do not forget our special, public responsi-
bility and that we retain the public's confidence in our integrity, objectivity and independence.

I am indeed grateful for this recognition and am pleased that it is taking place at the annual meeting of the AICPA. Thank you Paul and thank you to the electors of the Accounting Hall of Fame.
ACCOUNTING HALL OF FAME
INDUCTION

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Citation and Response

WILLIAM
HENRY
BEAVER

Max M. Fisher College of Business
THE OHIO STATE UNIVERSITY

REMARKS
by
Charles T. Horngren, Professor
Stanford University
Hall of Fame Member

This occasion is a special honor and treat for me. I have known Bill Beaver since 1963, when he was a superlative doctoral student at the University of Chicago. The middle 1960s were heady years for the doctoral program there. Among its students in accounting and finance were many individuals who have made noteworthy contributions to the scholarly literature and practice. Consider such names as Beaver, Demski, Ball, Brown, Watts, Fama, Mike Jensen, Roll, and Scholes.

I have watched Bill grow from a bright, leading doctoral student to become the leading researcher in financial accounting in the entire world. Along the way, Bill and I and our wives have become close friends. Bill and his wife, Sue, have an exceedingly close marriage. Outside of school, you rarely see one without the other. Sue has been a fantastic supporter and partner.
Bill Beaver is a superb role model for academicians. For nearly thirty years, he has been on the forefront of research. He was a trailblazer in empirical research regarding relationships between accounting and security prices. His amazing productivity and sophistication continue to flourish.

Bill is not merely a researcher. He is an educator in the broadest sense. His teaching has been outstanding. For example, Stanford's MBA students have given him their annual award for distinguished teaching. Moreover, if there were a similar award for Ph.D. teaching and guidance, he would have gained that too. He has a long list of admiring doctoral students, including many Beaver co-authors. His monograph, *Financial Reporting: An Accounting Revolution*, is a splendid example of educational innovation.
Born in 1940 in Peoria, Illinois, he is the only child of a father who rose—through hard work and correspondence study—from coal miner to civil engineer and residential contractor and a mother who worked from an early age to support her four brothers and sisters. He spent his early childhood in Gary, Indiana, moving to Hammond at the age of 12. In high school he was student body president, valedictorian and a National Merit Scholar. As a member of a Catholic family, he applied to only one university—the University of Notre Dame. He was the first member of his family to attend college.

A member of the Notre Dame debate team, he studied business administration and graduated magna cum laude. He remembers one of his professors, “Paul Conway, who was an excellent teacher and who cared about his students,” as one of first to suggest that he enter academe and, later, as a role model for his thinking about an academic career. Having received a university fellowship and, being unable to decide which company to work for, he decided to enroll in the MBA program at The University of Chicago.

Two weeks after graduation from Notre Dame, he began evening courses at the downtown campus. This enabled him to work for a mortgage company during the day and help support his parents in their retirement. By the end of his first year, he transferred to the doctoral program with a Ford Foundation Fellowship. His dissertation was chaired by George Sorter. Hall of Fame member, Charles Horngren, was a member of the dissertation committee. His thinking about accounting education and research was strongly influenced by other Chicago faculty during this period, including Hall of Fame member, Sid Davidson, Nick Dopuch, and David Green, among others, and by his contemporaries in the accounting and finance doctoral programs. Completing the doctoral program three years after graduating from Notre Dame, he received both MBA and Ph.D. degrees at the same ceremony, separated by a thirty-minute
interval. When asked how long it took him to receive his Ph.D.,
he sometimes jokingly responds that it took thirty minutes.

After graduating, he remained at The University of Chicago
as an assistant professor for four years. During this time, his
early published papers were on accounting measures as finan­
cial predictors of failure. His security price research has opened
the door to empirical work for accounting researchers. In 1969,
he accepted an associate professor position in the Graduate
School of Business at Stanford University, where he remains
today as the Joan E. Horngren Professor of Accounting. He has
published over 60 papers and two editions of the widely read
thirty years, his insight, energy, and enthusiasm for accounting
research have been a powerful influence in both accounting
academe and practice.

A CPA, he is a an award-winning teacher whose service
contributions to his profession include consultant to the Finan­
cial Accounting Standards Board, SEC Advisory Committee,
trustee of the Financial Accounting Foundation, and extensive
service on editorial review boards. He has been president of the
American Accounting Association, three-time winner of the
AAA-AICPA Outstanding Contribution to Accounting Literature
Award, AAA's Distinguished International Visiting Lecturer, re­
cipient of the Outstanding Educator Award, and recipient of the
Seminal Contribution to Accounting Literature Award. He is
the only person to have received all five AAA honors.

A dedicated family man, he and his wife, Suzanne, who
have been married for over thirty years, have three children—
two daughters, Marie and Sarah, and one son, David. At age 56,
the fifty-sixth member of The Accounting Hall of Fame is Will­
iam Henry Beaver.
RESPONSE

by

William H. Beaver

I feel both happy and lucky to be here this morning. I spent my first thirty years in the Chicago area, and it is like returning home. I will briefly touch on three themes: learning versus teaching, looking forward vs. looking to the past, and my hall of fame.

Learning versus Teaching

With respect to learning versus teaching, one of the great attributes of being an educator is that you can actively pursue a process of lifelong learning. This is evident from the ability to conduct research, to learn from that research, and to inform others in the process. The learning process inherently involves learning from others. For me, these have included, most obviously, my teachers, but also my colleagues, my students, and, most of all, my family. Hence, these remarks are about other people.

Paul Conway at Notre Dame was the first to suggest that I consider an academic career. From Paul I learned what dedication to students means. At the time, I ignored Paul's advice and, upon graduation from Notre Dame, entered Chicago's MBA program without the slightest intention of pursuing an academic career.

Being at the University of Chicago in the mid-1960's was classic case of being "in the right place at the right time." From George Sorter, I learned an enthusiasm for trying to resolve challenging puzzles about the role of accounting. George is not only one of the most enthusiastic, but also one of the most creative teachers I have known. From others at Chicago, Sid Davidson, Nick Dopuch, and David Green, among others, I learned the value of rigorous, clear thinking in the development of one's ideas, the value of empirical research, and a no-compromise attitude in trying to make your research be absolutely first-rate. The energy level and commitment to intellectual issues were contagious. The Chicago accounting workshops generated considerable heat and often considerable light.

On the Chicago faculty, of course, was Chuck Horngren, who is also my colleague at Stanford. I have known Chuck for over thirty years. At each stage in my career, I have sought and
received valuable advice from Chuck. Among his many qualities, two of the strongest are his perspective and his fairness. In addition to Chuck's professional knowledge, the Horngren family has been a role model for the Beaver Family. It is with considerable pride that I hold the Joan E. Horngren Professorship in Accounting. It is a small measure of the debt I owe to Chuck that I asked him to present the citation.

The University of Chicago crowd also included an exceptional group of doctoral students. Besides the finance doctoral students, the accounting students included Ross Archibald, Ray Ball, Philip Brown, Mel Greenball, Jack Kennelly, Fred Neumann, Bill Voss, and Ross Watts, among others. Included in that talented group is Joel Demski, who also became my colleague at Stanford. Joel and I shared many learning experiences, including starting the doctoral seminar series, initiating the Stanford Summer Research (Camp) Series, and co-authoring research. Our respective analytical and empirical approaches to research were complementary. I learned an enormous amount from Joel and owe an enormous debt to him.

On a grim February day in 1969, when we hadn't seen the sun in Chicago for weeks, Sue and I were invited to visit Stanford. I joined the Stanford faculty in September and began a long association with another group from whom I have learned much—the Stanford doctoral students. These include: Mary Barth, Bob Bowen, Jerry Bowman, Michael van Breda, Andrew Christie, Michael Clement, Pete Dukes, Ellen Engel, George Foster, Peter Joos, Wayne Landsman, Larry Lookabill, Jim Manegold, Mary Lea McAnally, Dale Morse, Stephen Ryan, D. Shores, Terry Shevlin, Chris Stinson, and Gary Sundem, among others.

When I began my career, I also thought I would measure my accomplishments by my list of publications. I was wrong. I now realize the doctoral students with whom I have had the privilege of being associated are of far greater value. These former students over the years have established outstanding contributions to accounting education. Many have become my co-authors, my friends, my colleagues, and my teachers.

The set of rich resources at Stanford also include my colleagues on the faculty. Over the years, they have included, Joel Demski, Gerry Feltham, Paul Griffin, Chuck Horngren, Steve Huddart, Ron Kasznik, Mark Lang, Russ Lundholm, Maureen McNichols, Nahum Melumad, David Ng, Jim Patell, Rich Samuelson, Bob Sprouse, Bob Swieringa, Pete Wilson, Mark
Wolfson, and Bill Wright. A special group are Stanford graduates, who have returned as faculty: Mary Barth, Srikant Datar, George Foster, and Rick Lambert.

Looking Forward versus Looking to the Past

I now turn to the second theme: looking forward versus looking to the past. The past versus the future is a major theme in accounting. It is natural that you reflect on those who have enriched your life. However, it is important to maintain a proper balance between the past and the future. This is especially important to me since I receive this honor at what I consider to be the midpoint of my career.

Looking forward, I expect enjoyment and a sense of accomplishment to come from the continued achievements of my former students. For example, George Foster’s many accomplishments are an entire speech onto themselves. Later today, Wayne Landsman will be inducted as president of the Financial Reporting Section. On Saturday morning, Mary Barth, who earlier this year won the MBA Distinguished Teaching Award in her first year at Stanford, will receive the Wildman Award for her research and other outstanding contributions to accounting.

Moreover, this is just the beginning—not only for Mary and Wayne but for the rest of us as well. Now is an exciting time at Stanford. We now have the nucleus of a financial accounting research faculty that is unprecedented.

My Hall of Fame

I now turn to the third theme: my hall of fame, which is of course, my family. Most of all, I have learned from my family. The key event of my Notre Dame years was meeting Sue, who changed my life forever. I met Sue thirty-four years ago. We met at a dance, and shortly thereafter we went to dinner to celebrate my twenty-second birthday. Sue gave me a ceramic beaver. She won my heart, and I knew this was the woman for me. It was the start of our beaver collection, now numbering over two hundred, and much more. Last May we celebrated our thirty-first wedding anniversary in Spain. We have three children, Marie, Sarah, and David.

Sue is a graduate of the Holy Cross School of Nursing in South Bend. Father Hesberg would often tell stories of Notre Dame students that met their wives while at Notre Dame.
never imagined Sue and I would become one of those stories. After we were married, Sue also received her bachelor’s degree in English and her MBA from College of Notre Dame. Currently, Sue is the vice-president for research of the Museum of American Heritage in Palo Alto.

Marie, a creative writing major from Stanford, lives in Fairbanks, Alaska, and is a wilderness guide. Sarah, has a master’s in art history from the University of Chicago, worked at the Art Institute of Chicago before joining the American Institutes for Research in Menlo Park, California. David, is about to start his second year in the masters in jazz studies program at Indiana University and will begin teaching his first classes this September.

From Sue, I learned many things, but most of all about love, compassion, and understanding. From Marie, I learned you can live in the middle of the Alaska Bush for nine months and survive fifty below zero weather and bear attacks. From Sarah, I learned a love of art. Sarah’s paintings enrich our home and my office and are a daily source of joy. From David, I learned a love of music—particularly jazz. David has a great sense of humor and is a constant reminder that everything is not as serious as I sometimes think it is.

The family has always been a battery recharger. My family is my life. They have always been my “Hall of Fame” and they always will be.

According to legend, King Croesus is said to have arrayed all his wealth in one place, and asked Solon, a visiting statesman, who he thought was the happiest man in the world. Solon replied, “No living man can be called happy, but only lucky.” This morning surrounded by all my wealth, Solon’s admonition notwithstanding, I feel both happy and lucky. My family and I thank you for this honor.
ACCOUNTING HISTORY: THE CONTRIBUTION OF OSAMU KOJIMA

PREAMBLE

Rarely in life is one presented with such a luxurious gift. In 1996, the widow of the late Professor Emeritus Osamu Kojima distributed about 100 copies of Accounting History\(^1\) to accounting historians worldwide, and I was fortunate enough to be one of the recipients. According to Mrs Kohko Kojima's accompanying letter, about 1000 copies are planned to be published, with 400 being sent to libraries of universities, colleges and other institutions in foreign countries, and the remaining copies to various organizations in Japan. There is no indication that this superb book about the history of accounting will be available for general sale.

In 1987, Professor Kojima published his 16 chapter Japanese version of Introduction to Accounting History. His intention was to prepare an English translation, but he died on 21 February 1989 from cardiac infarction having reached the middle of the 13th chapter with an unfinished handwritten first draft. After this draft was subsequently typed, the unfinished portion of the English translation was completed by Mr E. Usami. Consultation with Professor B. S. Yamey resulted in the correction of errors by Professor Kojima's loyal colleagues, Professors Yoshihiro Hirabayashi (Osaka City University), Hiroyasu Okitsu (Kinki University) and Tsuneo Nakano (Kobe University). The translation was then improved further by Mrs N. Bascom.

The finished work is a delight to hold, read and ponder. Preceding the Contents proper are six plates, the first being a black and white photograph of Professor Osamu Kojima. The next three pages comprise seven colored photographs of Pro-

\(^1\)Moriyama Shoten (Moriyama Book Store), Tokyo, Japan, 1995, pp. 426, +11, +v.
Professor Basil Yamey, Professor and Mrs Onko ten Have, Professor Raymond de Roover, Professor Federigo Mellis, the 4th World Congress of Accounting Historians at Pisa in 1984, Osamu and Hohko Kojima, and Professor Edward Peragallo and Osamu Kojima. The final two pages of coloured plates contain Luca Pacioli's plaque, the first page of his *Summa*, and the title page of the second edition of *Summa*, (which coincidentally is the outside border used by *Asia-Pacific Journal of Accounting* for its front cover) showing the scenery of Tascolano, the location of Paganio de Paganini who published the first and second editions. There are also photographs of reproductions of works supervised by B. S. Yamey and Osamu Kojima: *Summa de Arithmetica* 1494, *Ympyn A Notable and very Excellente Woorke* 1547, and *The Pathe waye to perfectnes in th'accomptes of Debitour and Creditour*, 1569.

**ABOUT THE AUTHOR**

Professor Osamu Kojima, born May 1912, Osaka City, was married to Kohko. They had two daughters, Chie and Mariko, and a son Takao. Osamu entered Kwansei-Gakuin University's Faculty of Literature at age 18. After graduating in March 1934, he entered a Commerce course in the faculty of Economics at the same university and graduated four years later. After a few years as a commerce instructor he joined the Business Administration and Industrial Management departments of the Kwansei-Gakuin Special School. In 1948 he became an instructor in bookkeeping theory at Kwansei-Gakuin University, and in 1950 associate professor, followed three years later as professor.

The degree of Doctor of Business Administration was granted in December 1961 by Kobe University and Kobe University of Economics for the doctoral dissertation, *Studies on the Development of Double Entry Bookkeeping*. In 1965, he was awarded the Ohta Prize by the Japan Accounting Association for his *Studies in the History of Bookkeeping*. After a short stint as dean, and several part-time visiting lectureships, he was awarded a prize by the Academy of Accounting Historians in 1976 for the reproduction of Ympyn's *A Notable and very Excellent Woorke*, co-edited with Professor Yamey.

He resigned his 28 year professorship at Kwansei-Gakuin University in 1981 to found the Accounting History Association of Japan and become its first president. Two years later he
became professor at Kinki University's Faculty of Commerce and Economics, holding that appointment until March 1988 when he "retired". In the same year he was awarded a prize by the Japanese Institute of Certified Public Accountants for his book, *Introduction to Accounting History*, the Japanese forerunner to this English translation. In February 1989 he passed away at Osaka University Medical School Hospital at the age of 76.


**ACCOUNTING HISTORY**

England in the 17th Century, (15) Improvement of Accounting Textbooks in Scotland in the 18th Century, (16) Innovation of the Italian System of Bookkeeping in England in the Late 18th Century: Unity and Division, and (17) Evolution of Bookkeeping in America in the 18th and 19th Centuries. Because of the limited accessibility of the book, the contribution of Kojima will proceed by treating the chapters seriatim.

The first chapter title, Methodology of Accounting History, is actually a misnomer, for there is no methodology in the sense of paradigms. While the history of accounting may not be everyone's "cup of tea", the book commences with a rationale for the use of history as a means of bringing richness and explanation to our understanding of why accounting practice follows a certain logical structure:

"One cannot readily conceive of a painter or sculptor who would not have studied the history of art, or of a composer who would not have a knowledge of the history of music. This is an integral part of their studies and is included in their curricula. Such is not the case with accounting . . . While many sciences have their history, that of accounting remains to be written. It is strange that the accountant follows the guidelines without the desire to give credit or honor to those who developed them." (Sir Ernst Stevelinck, 2nd World Congress of Accounting Historians, 1976)

The possible origins of double entry bookkeeping are examined via the writings of accounting historians, first from Roman theory - day books, cash books, and accounting methods used by educated slaves and special city funds - and second from Italian theory, which explores the contributions of Genoa, Tuscany and Lombardy theories. While Pacioli is generally accorded the reputation of being the "father of double-entry bookkeeping", a study of the books of the treasury of Genoa commune of 1340, the account book kept at the fair of Champagne of Rinieri Fini and Brothers (1296-1300), the account books of the Del Maino Bank (1394-1400) and those of Collard de Marke and Guillaume Ruyelle (1366-1370), predate Pacioli's *Summa* by more than a century. Kojima concludes that it is almost impossible to find the birthplace or the birthday of double-entry bookkeeping in a definite place or date throughout the north Italian cities. Hence, it makes more sense to identify the development and characteristics of double-entry bookkeeping from a geographical perspective in Europe and elsewhere, and
its social function.

Over the remaining 15 chapters the author weaves a chronological network of the development and acceptance of bookkeeping from Italy to northern Europe, to Germany and France, to Spain, England and Holland, and finally to the United States. The root of this development stems from Italy and the characteristics of Italian trade and banking. The oldest fragments of an account book in Italy, dated 1211, of an unknown Florentine merchant banker, shows an advanced accounting of loans, with indications of the book dichotomised into accounts which begin with ‘dare’ (the debit pages) and with ‘avere’ (the credit pages). Several other strands of this division appeared in the form of contra payments of Christian churches to the Vatican via the business traffic of the guilds, and wool merchants exporting to the Orient. Loans given by merchant bankers appear in debit and credit folios (for example, the ledgers of the Fini Company at the beginning of the 13th century, and the Farolfi Company 1299-1300). In the 1400's, accounting methods progressed, parri passu, with the rapid development of business, the rise of merchants, and the enlargement of business and agents, namely the Bardi, the Peruzzi and the Acciaiouli, as well as many minor companies. These led to Partnership Statements, and by 1399, balance sheet and profit and loss statements of the Datini Company, showing control and management over a large number of branch offices abroad. Certainly there are gaps in the chronology, but the several strands all tend to indicate that, "with the economic development and expansion of business trade, the modern bilateral form of account was born proceeding from a memorandum of credit transactions and through various kinds of new devices and improvements over about two hundred years" (p.49).

Extant records of Venetian merchants became more accessible in the 1400's from the Venice State Archives, and allowed a detailed study of the account books of the Soranzo Brothers, Andrea Barbarigo and Jachomo Badoer. As a precursor to the study of these records, chapter four discusses the development of eastern trade routes - overland from Romania (Constantinople) through the Greek Peninsula and the Aegean Islands, and by sea to the Levant, and explains how Venice systematically, through wars with Genoa, use of great galleys, cogs and other small ships, developed trade supremacy, the formation of partnerships and joint ventures. The account books of these three merchants detail the trading activities of the times, and

https://egrove.olemiss.edu/aah_journal/vol24/iss1/11
the use of double entry bookkeeping; there is even a 1437 comp­ound journal entry recording the payment of wax.

"Accounting textbooks" first made an appearance in 1458, when Benedetto Cotrugli wrote Della mercatura et del mercante perfectto, a commercial text book written in common Italian (and not Latin), in which he discusses ledger, journal and memorandum books for merchants. In 1494, Luca Pacioli, who joined the Order of the Franciscans and who taught mathematics, published his Summa de Arithmetica Geometria Proportioni et Proportionalita. The Treatise of Bookkeeping, which is to be found in section 9, Treatise 11 comprises a narrative explana­tion without practical illustrations. The second edition was published in 1504 as De Scripturis when the Venetian copyright of Summa expired. In this, Pacioli considerably expanded the recording, reckoning and arrangement of the principles of bookkeeping, although historians claim that his contribution lay more in writing down what was already known than in “inventing” a system of double entry. Nevertheless, it is for this chronicle that he has been sometimes referred to as “the father of double entry bookkeeping”.

With the rise in commercial education in the 15th century came a number of textbooks devoted to bookkeeping. Giavanni Tagliente, in 1525, published The necessities of gentlemen and merchants and The necessities of the merchants with illustrations of practical accounting, and an explanation of 127 journal en­tries. This was followed by Bartolomeo Fontana’s 1551, New education of the ordinal and right bookkeeping in the manner of Venice and other cities in Italy. Domenico Manzoni, in 1534 published Double Entry Method which went through seven edi­tions. In this work, Manzoni showed the ledger closing proce­dures, but instructs that closing is only necessary at the end of ventures and after all goods are sold. In 1558 Alvise Casanova, an official Venetian accountant, published a manual of count­inghouse practice, illustrating a set of double entry books. Angelo Pietra, a monk, adopted double entry bookkeeping for the accounting of his monastery, and in 1586 published Indirizzo de gli economi of 67 chapters. He maintained that financial statements (profit and loss, capital account, and balance account) should be prepared once a year. He was the first author to explain such statements in an accounting textbook. Finally, Ludovico Flori, a Jesuit, in 1633 published Trattato del modo di tenere il libro doppio domestico col suo esemplare. He was the first to introduce pre and closing trial balances, and to
show the articulation between the expenditures-and-income balance, the balance of the capital account, and the balance sheet.

Chapter six sets the scene for the remaining parts of the book. The growth of commerce in northern Europe preceded the appearance of bookkeeping in Germany, Antwerp, France, Spain and England. The northern trade employed the Rhine and Danube Rivers to connect the north and south of Europe, namely, Germany and northern France (e.g., Champagne, where the great Fairs developed the credit trades and permanent shops). Bruges, located on the main commercial line between the Rhine and the Thames, became the hub of the Commercial Revolution, and the evolution of a settled base from which to conduct large-scale foreign trade. The account books of two contemporary money changers in Bruges, Collard de Marke and Guillaume Ruyelle both used the bilateral form of debit and credit, but whereas the former put debit on the left page, the latter put it on the right page with both concentrating on the debit and credit relations between customers and themselves.

Antwerp eventually overtook Bruges as a dominant trade center because of geographic, economic and political reasons. English woolen cloth, silver and copper of Southern Germany, spices from Portugal combined to produce 500 ships arriving or leaving daily and about 2500 going up or down the Schelde River. Against this formidable amount of commercial development, the influence of Italian double entry bookkeeping gradually spread among merchants in northern Germany. During the period when the four annual fairs were open, all accounts of debits and credits had to be cleared, with movement of capital being restricted to these four periods. This resulted in the need for a periodical accounting system, one where inventories had to be valued and the periodical accounting of profits and losses. Political changes in the Netherlands, together with a number of adverse economic changes impacting on Antwerp resulted in Amsterdam taking over as the international trade base.

This backdrop of commercial activity explains the appearance of bookkeeping in Germany, Antwerp, France, Spain and England. Kojima devotes a chapter to each of these countries, his task made easier by the availability of more extant records of the times from these parts of the world. What is particularly fascinating in the story-telling is the inextricable interweaving of commercial practice and the need for methodical record-keeping, with bookkeeping responding to the needs of mer-
chants for information. It is impossible to understand the evolution of double-entry bookkeeping without learning a good deal about the nature of commodities, trade routes (especially by waterways), and families of merchants.

With regard to Germany, there are account books from Hermann Wittenborg (1329-60), Vickos von Geldersen (1367-1411), Johann Tolner (1345-50), Matthaus Runtinger (1383-1407), Ulrich Starck (1426-35) and others. These show the development of double entry and the general inclusion of more detail next to each transaction, and are the forerunners to accounting textbooks in the 15th century, the bridge being made by Matthaus Schwarz who was the bookkeeper of Jacob Fugger’s trade house. After studying double entry bookkeeping in Venice, and working for the Fuggers, he wrote two manuscripts in 1516 and 1518 explaining bookkeeping, but these were never published for fears of disclosing the private affairs of the Fuggers. In 1521, Heinrich Schreiber wrote a book on commercial arithmetic, elementary mathematics and music, in which he instructs a bookkeeping method using journal, goods book and debts book. His methods recognized unsold goods and the periodic accounting of profits and losses.

In 1531 Johann Gottlieb, published the second German accounting textbook which used a journal (including many compound journalizations), a goods book and a debts book, combining them both into a monoledger system. His later 1546 book explains the procedure of closing accounts in the cases of accounting for personal transactions and agency accounting. Wolfgang Schweicker published another accounting text in 1549, and Kojima states that his work perfectly accomplished the transformation to the Italian (Venetian) system of double entry bookkeeping. In 1570, Sebastian Gamersfelder published in Danzig an excellent explanation of bookkeeping in Germany in the 16th century, entitled, Buchhalten durch zwey Bucher nach Italianischer Art und Weise.

The development of Antwerp 16th century bookkeeping can be attributed significantly (but not entirely) to three merchants: Christopher Plantin, Jan Ympyn Christoffels and John Weddington. The account books of the Plantin Printing and Publishing Co. comprise one of the first accounting materials which recorded industrial activities in a perfect double entry method. Ympyn, a clothier, published the first accounting textbook in Flemish in 1543, and in the same year his widow published the first accounting textbook in the French language.
Weddington, a London merchant resident in Antwerp, published in 1567 the first hint of general posting in the ledger in his textbook, *A Breffe Instruction, and manner, how to hepe, mercantes bokes, of accomptes*. This was written in English for the English merchants, who had previously had to labor through foreign language books and a lack of good teachers.

The Italian system of bookkeeping in France developed as a result of the trade fairs in Lyons at which accounts between merchants and brokers were settled. Exchange bills from all over Europe were discounted there, with many of the bankers being Italian. Pierre Savonne published in 1567 his accounting textbook, *Instruction et maniere de tenir livres de raison ov de comptes par parties doubles*. He traveled around Flanders, England and Spain and was employed to instruct and train accounting method to great merchants, commission merchants, agents and others. His accounting method was the Italian method of debit and credit, with daybook, journal and ledger, together with a separate opening inventory. Throughout the next 47 years he was to publish another four editions under differing titles. His textbooks were widespread and well received.

Spain in the 16th century was left behind in the march of world commercial progress, preferring to use its wealth on military pursuits. Accordingly, there was no similar accounting development to that of South Germany and the Netherlands. In 1522 Diego del Castillo published *Tratado de cuentas*, the oldest remaining textbook in Spain, but this was more concerned with the judicial aspects of accounting. Barcelona of Catalonia emerged as a leading commercial center and with it the application of Italian bookkeeping. Bartolome Salvador de Solorzano, in 1590, published the first accounting textbook in Spain in which double entry bookkeeping was employed in commercial trades. It appears he may have published this book from his own practical experiences from contacts with the merchants of Italy, Flanders and France.

Chapters 11 and 12 focus on accounting in England in the 15th and 16th centuries, and the appearance of accounting textbooks. Once again the influence of the Italian system can be seen in connection with the rise in (woolen) trade between England and Bruges in which Italian merchants were vigorous. The only surviving account book in England belonging to an Italian merchant - the London branch of Borromeo Co. (1436-39) - shows that Italian merchants had used double entry book-
keeping in London about 60 years before Pacioli's *Summa* was published. However, it seems unlikely from the oldest surviving account books of English merchants, often kept in single entry and without use of a trial balance, that the Italian system had spread to these merchants in the early part of the 16th century. It was not until the account books of Sir Thomas Gresham of 1546 to 1552 that some evidence came to light that the double entry system was understood and used. In the second half of the 16th century the double entry system became more widespread, as evidenced by the 1565-81 ledgers of Thomas Laurence, especially the second ledger where a profit and loss account was used to accumulate charges for merchandising activities, with the balance periodically transferred to the balance account. Through this second ledger it can be seen that a comprehensive and systematic accounting system was achieved through double entry bookkeeping.

Accounting textbooks in England are reputed to have first made their appearance circa 1543 by Hugh Oldcastle's *A profitable treatyce*, of which a copy has never been found, but nevertheless appears to have been based upon a foreign textbook. The first original work by an English author was published by James Peele in 1553. His second book of 426 pages, published in 1569, contained an advanced course of double entry bookkeeping. Kojima devotes 24 pages to a detailed description of Peele's methods, together with some journal entry illustrations and a comparison of the techniques used in the first and second books, and it seems obvious that a knowledge of bookkeeping had reached sophisticated levels with regard to the transferring of balances between voyage accounts (e.g., profit on sale of re-exported goods from the Antwerp voyage account to the Spanish voyage account, and the overall profit to the capital account).

Accounting textbooks in Amsterdam came into being in 1567 in response to the needs of merchants for more accounting knowledge, in turn resulting from Amsterdam's increasingly important position in world commercial trade in the second half of the 16th century. In 1590, Elcius Mellema published his accounting textbook, *Boeckhouder na de conste van italian, met twee partyen, als debiteur ende crediteur*, in which the greatest service he did for accounting instruction was to propose four debit and credit journal rules, which were used by many contemporary and later scholars. A few years later, in 1604, Simon Stevin published a bookkeeping treatise in the Dutch language:
Verrechtng van domeinen which in contrast to Mellema included a theoretical exposition of journal entries as well as excellent descriptions about commercial and public accounting. Kojima devotes 12 pages to detailing Stevin’s material. As a parenthetical aside, it was at this point in the translation of the book that Kojima’s health finally failed him and he passed away, for there are now noticeably more flaws in the English text, and even factual errors, eg., Stevin’s death recorded as 1604 instead of 1620.

Hedrick Waningen van Campen published his Treasure of the Italian Bookkeeping in about 1607. This was widely used in Holland. After his death, Johannes Buinga, his student and clerk-in-charge of bookkeeping at St. Jolis, published five more editions of Waningen’s slightly revised version, and in 1672 he published Waningen’s Right Use of Italian Bookkeeping as well as his own Right Foundation and Principal Contents of the Italian Bookkeeping. The remainder of the chapter is taken up with the details of Waningen’s 23 chapters and Buinga’s work which went through 18 reprints, although, apart from the enumeration of a series of journalizing rules, were not noted for any novel contribution, he being one of several teachers with experience in bookkeeping.

The chronology of bookkeeping texts in England and Scotland are taken up in the next two chapters. In 1622, Gerard Malynes, in his book The Ancient Law-Merchant included a chapter entitled “Merchants accounts kept by Debitor and Creditor, in which he cites typical transactions, but uses Spanish names. This was followed ten years later by John Carpenter’s A Most Excellent Instruction, and in 1635 by Richard Dafforne’s The Merchants Mirrour, the first being referred to as “sloppy and technically undeveloped”, and the latter as “a precise and solid book of bookkeeping”, which included 15 rules and 30 sets of journalizing rules “necessary for and helpful to continuous transactions which can be learnt without books”. The journal entries cover merchandise bought and sold, written promises of debts, customs duty, insurance and other charges for merchandise per voyage, sales by consignment, and treatment of profit or loss.

Later in the 1600’s, John Collins, a teacher of mathematics and accounting, published An introduction to Merchants Accountants. His second edition in 1674 was changed in title to The Perfect Method of Merchant-Accompts and included two appendices which for the first time provided guidance for the
bookkeeping of industrial activities, with the example of three dyers and Dye House accounts. He initiated the application of double-entry bookkeeping for external business transactions to the manufacturing process. In 1660, Abraham List published *The Accounts Closet* in which can be found embryos of modern elements. Kojima notes that separation between the manor real-estate administration section and the commercial management section had given birth to departmental accounts on the one hand, and world-wide expansion complexities of the trade to generalization of accounts, such as merchandise, voyage, and bills accounts, on the other.

With the emergence of a new merchant class which concentrated on the domestic as opposed to the overseas trade market, toward the end of the 17th century there were as many as two million tradesmen with needs for bookkeeping instruction of an elementary nature. This spawned books for small merchants, manufacturers, farmers, retailers and others. In 1675, Stephen Monteage published *Debtor and Creditor Made Easie: A Short Instruction for the Attaining the Right Use of Account*, focusing only on the daybook and journal, with use of examples, each revealing interesting insights of the times: capital as a young man includes cash, textbook, six pairs of doves and nine rabbits; capital as a gentleman includes the lease of a manor, wheat, barley and oats; capital as a tradesman includes tapestry, Turkish carpet and feather bed; capital as a merchant engaged in foreign trade included sugar, barrels of raisins, thin serge cloth, creditors and share of ship. Monteage was also the first English author who explicitly tried to persuade the contemporary womenfolk of the necessity of learning double entry bookkeeping. Later books for “common people” were published by Edward Hatton in 1695 with his, *The Merchant’s Magazine or Tradesman’s Treasury*, running to a ninth edition in 1734. Thomas King, in 1717, published *An Exact Guide to Bookkeeping in London*. Unfortunately, Kojima’s book suffers hereon-in, for the quality of the English translation deteriorates throughout this and following chapters, and the typographical errors become prolific (in some cases occurring every line).

Scotland has often been referred to as an historical repository of early accounting, at least with respect to professional accounting organizations. The first bookkeeping text, *Idea Rationalia*, was written by Robert Colinson, although no date of publication is mentioned. In 1718, Alexander MacGhie’s *The principles of Book-keeping, explained with the chief cases thereof*
and resolved, was published by his widow. One interesting inclusion is the use of the "Hazard Accompt" to indicate a contingent liability incurred by a wager. The illustrations also cover matters related to future sales transactions and contingencies of sea risks. Also in 1718, John Drummond published a booklet entitled, The Accomptant's Pocket-Companion, in which he deals with commercial transactions and with management and accounting of wheat, oats, barley, livestock, carts and rents. This, together with the use of a book called a "Scheme of Voyage" shows his practical instruction to be more advanced than books of bookkeeping prevalent at that time.

Scotland had three forerunners of modern bookkeeping: Alexander Malcolm with his 1730 A Treatise of Book-keeping, John Mair's Book-keeping Methodiz'd which ran to nine printings between 1736 and 1807, and Robert Hamilton's 1769 two volume 720 pages, An Introduction to Merchandise. Kojima gives the works of all three authors quite generous pagination in reviewing the detail of chapters and illustrations. The first two works sought to theorize debit and credit as the basic accounting terms with the intent of harmonizing theory and practice. Malcolm's use of the general account, multi-columns books and worksheet constitutes an embryo form of annual accounting and reflects the industrial education promoted by Scotland on the subjects of industrial sciences. Mair makes it clear that the closing of the ledger is done for the sake of calculating both the annual profit and loss and value, and that the two are closely connected. According to Kojima, modern periodic profit and loss calculation systems can be said to have been initiated by Mair. Hamilton's most notable contribution comes from the chapter on Manufacturer's Accounting in which he recommends an industrial accounting using auxiliary materials book, works book and wages book together with a predetermined product selling price (i.e., a socially admitted average price). Hamilton's experience of managing his father's paper mill may have stimulated his introduction of a managerial control function in the accounts. Probably the greatest single contribution of Scottish authors was their departure from bookkeeping instruction as "memorization and observation of the rules" to "instruction through understanding" via theoretical grounding, a matter particularly dear to the hearts of many contemporary accounting instructors.

In the late 18th century in England there was much innovation of the Italian system of bookkeeping, the topic of the
penultimate chapter. In 1789 Benjamin Booth published *A complete system of bookkeeping, by an improved mode of double-entry*, which contained much innovative improvement and was suitable for large-scale business management. *Inter alia*, he recommends that the books be closed twice a year to produce more timely information. In 1796, Edward T. Jones, an accountant, published *English System of Book-keeping, by Single or Double Entry* in an attempt at simplicity and accuracy. By-and-large, his contribution lay in the use of money amount multi-columns in the daybook and ledger, which has led to the wider use today of multi-columns and tables.

The final chapter of *Accounting History* deals with the evolution of bookkeeping in America in the 18th and 19th centuries. It is probable that English merchants in the Americas introduced double entry bookkeeping from England and developed it while being engaged in trade with their homeland. The 1685-89 journal of John Hull, a Boston merchant, and the 1731-32 journal and ledger of Peter Faneuil, an even larger Boston merchant, represent examples of account books from the colonial days. Account books from the early 19th century are examined of Nathan Trotter & Co., wholesale dealer (1803-6), Proprietors of Locks and Canals, engaged in machine sales (1826-32), and Bryant & Sturgis, foreign traders and financiers (1812-18; 1833).

The first American book dealing with bookkeeping was published in 1737 in the 5th edition of *The Secretary's Guide, or Young Man's Companion*, but the author's name is unknown, which may be just as well as the section on bookkeeping is said to have been borrowed from Mather's 14th edition of *The Young Man's Companion: Or, Arithmetic made Easie*, which in turn is an excerpt of George Fisher's, *The Instructor: or, Young Man's Best Companion*, published in London in 1734, a double plagiarism. The second book on bookkeeping published in America was that of Charles Hutton's, *A Course of Bookkeeping According to the Method of Single Entry* in 1788, repeatedly reprinted until 1871. William Mitchell believed that the Italian style bookkeeping was too cumbersome for large-scale businesses, and in response, in 1796 published, *A New and Complete System of Bookkeeping*, but the book was too advanced for contemporary business men and was not widely used. Almost 95% of the book is spent on entries for retailers and local stores and large scale merchants. In 1797 Chauncey Lee published *The American Accompant* and in 1801, William Jackkson, a Philadelphia ac-
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In 1804, Thomas Turner, a teacher of bookkeeping, recommended that a monthly trial balance be prepared from the account balances in his, *An Epitome of Book-keeping by Double Entry*. In 1817, Charles Gerisher, in his *Modern Book-keeping, By Double Entry Adapted to Commission Business*, recommended that a trial balance be prepared based on the ledger accounts and a profit and loss be prepared on a separate sheet of paper by transferring the balances of the profit and loss related items, with the balance showing the net profit. James Bennet, President of the New York Accountants Association, tried to simplify and popularize bookkeeping as a school teacher in his 1820, *The American System of Practical Book-keeping*, in which he demonstrates a new contrivance called a “Balance Chart”. Several others authors are cited, together with their contributions. Kojima concludes this section, and the book, by noting that a bookkeeping method had to be devised and developed to cope with American industrial progress, one which streamlined entries through use of specialized journals, multiple columns and work sheets.

LIMITATIONS AND RESEARCH POSSIBILITIES

It is easier to find fault with the works of others than to have done the initial ground-breaking work. Professor Kojima has done a superb amount of integrative scholarly historical investigation from primary and secondary sources to weave together this chronology of the development of bookkeeping, the forerunner to modern accounting as we know it today. While Professor Kojima’s personal efforts must necessarily end at this juncture, students of accounting history will find much in this book deserving of further exploration. However, before suggesting what additional work others might contemplate, there are a few negative matters which must be noted.

First, from a technical standpoint, it is a disgrace that so many typographical errors were allowed to remain in the publishing of this text. Any competent proofreader with English as a first language would have picked up most of the errors. Although I did not count the number of mistakes, they would quite easily run to many more than a thousand, increasing in frequency after the point reached by Professor Kojima at the
time of his death. Should the book ever reach a second printing, it is hoped that these unnecessary errors will be eradicated. Errors of fact would take more energy, but perhaps in time these too will be sorted out.

A second disquiet developed from a review of the book is the difficulty in determining exactly what parts of the text were the consequence of secondary sources and what parts were of primary research. To be fair to Kojima, good citation endnoting does appear in each chapter, and it is easy to identify sources used. However, that is not quite my point. Has Kojima added any fresh insights from his studies or has he merely paraphrased the original investigation of other historical researchers? It is not clear what parts might be due to the insightful integration of Kojima, and as a result the full contribution he has made is not easy to discern. I suspect he has understated his role in the investigations, implying the credit to others, but this is more a sensitivity developed from noting the depth and interpretations of books referenced in the chapters than from an ability to provide direct evidence.

The book could be strengthened (by a successive editor) if the chapters contained stronger introductions, conclusions and linkages. Many of the introductory sections to chapters comprise the historical development of trade in European countries, which while useful in providing a backdrop to the development of bookkeeping writings and instruction, would be even better still if the purpose of the chapter was clearly stated, together with the aims and purposes. Each chapter should contain a separate conclusion which summarizes the main points of the chapter and integrates the significant contributions from each of the main authors examined. The historical evolution of Italian bookkeeping into the rest of Europe and the Americas would be better understood and appreciated if this had been a part of the construction of the book.

The main disquiet developed, however, is the balance of the book, and its total silence with regard to "the rest of the world". The book's structure, size and emphasis is a function of the data available, i.e., the early accounting record and text books available to Kojima and other researchers. More acknowledgment should be given to the chronological and geographic gaps that exist, and it is here that interested researchers will find much to consider. There is no mention of the development of bookkeeping in what was the USSR, the communist bloc, Scandinavian countries, African Colonies, South America, and Asia,
not to mention Oceania. The fact that materials may not be easily obtained is no excuse for failing to acknowledge that "the rest of the world" may hold promise in better understanding the history of accounting. Be that as it may, Kojima has done a brilliant synthesis of a huge and diverse historical literature, and shone a torch on the key chronological and geographical developments of bookkeeping through more than 500 years. It reminds me somewhat of Durant's mammoth lifetime work, A History of Civilization.
BOOK REVIEWS


Reviewed by
Jeanette M. Sanfilippo
Maryville University

Dialogue—the exchange of ideas or opinions. In order to invoke critical dialogue among students, academician, and accounting historians, W. T. Baxter blends twelve thought-provoking accounting articles into a medley of theoretical prose. Readers should be advised that the title, *Accounting Theory*, is misleading. One should not expect a traditional “accounting theory” textbook proposing dogmatic views. Instead, the reader finds a collection of Baxter’s articles on various accounting theory topics including the meaning of wealth, asset and liability valuation, goodwill, depreciation, accounting research, and a particularly fascinating article on early accounting history, “The Tally and The Checker-Board” reprinted from Accounting History (Oxford: Clarendon Press, eds. R. H. Parker and B. S. Yamey, 1994). The author draws upon his past experiences and influences in selecting papers to be read in a “highly critical spirit” [p. xi].

The book’s incisive introduction implies that Baxter’s traditional accounting education hindered his critical examination of the underlying accounting principles during his early years in accounting practice. Baxter writes “the brainwashing was so thorough that I later was profoundly upset when university colleagues (economists) questioned me about accounting’s principles, and put forward objections that left me abashed and tongue-tied” [p. ix]. Through his revered association with colleagues Kenneth Boulding, Ronald Coase, Sir Ronald Edwards, and David Solomons from the London School of Economics, Baxter experienced an evolution in thinking about wealth and income. His book reflects the results of this evolution.

An interesting aspect of Baxter’s book is its chameleon appeal. As a textbook for undergraduate accounting students, *Accounting Theory* explores topics studied first in intermediate classes challenging the students to pursue a deeper understanding through critical dialogue. Baxter introduces students to his
theory of deprival value, a concept inspired by the writings of Professor James Bonright from Columbia University. Deprival value is a term used to describe the true value of the firm's assets including the value of outlay obviated by possession. Baxter presents this concept in a clear and understandable manner that appeals to students.

As a text for graduate studies, Accounting Theory serves as a research mechanism and a source for further studies into questionable areas of accounting practice and theory. Of particular interest to the graduate student, Baxter includes a section called Accounting Research—Academic Trends versus Practical Needs which examines, in part, the various aspects of the arguable nature of accounting research. As a recommended reference for accounting historians, Accounting Theory brings together various topics of interest and affords the reader an opportunity to discover, or rediscover, the controversial nature of accounting theory in general. After reading Accounting Theory, one single reader will experience moments of quiet pondering; whereas, two readers will surely engage in thought-provoking critical dialogue.


Reviewed by
Michael Gaffikin
University of Wollongong

On first learning of this book I was somewhat skeptical that such a volume could ever come close to doing justice to the history of accounting or even that an encyclopedia was an appropriate vehicle for serious accounting history. I also felt that as there were several authors it would be difficult to approach consistency in style let alone content. In fact, there is a very large number of contributors many of whom have no association with accounting history that I am aware of; actually there are some I know who would deny that accounting history serves any intellectual or other purpose and have never had any prior association with accounting history, so I find it surprising that they are prepared to be associated with such a deliberate accounting history work (and I doubt they would have "seen the
light"!)). On the other hand, there are some very notable accounting historians amongst the contributor list.

When I received the volume I was quite impressed with the presentation and with many of the entries I read. I have not read the entire work but have spent very many hours (days) poring over the entries, skipping from one to another as the mood took me. It is the intention that the work be used at all level of accounting scholarship and education. However, my skepticism was again aroused when I read in the Introduction that the work has works such as Chatfield's *A History of Accounting Thought* as one of its underpinnings as I have always found that to be a light work. However, the other works of the editors have also be drawn on and Vangermeersch's accounting history work has always impressed me.

Thus, many of the entries are by the editors but they have turned to the expertise of others for many of the entries they obviously felt was beyond their own areas. The work is truly encyclopedic in that it has entries for topics (subjects), definitions and biographies. The choice of those for whom there are biographies is surprising and there are many that I find hard to accept as having made other than a normal contribution to the discipline. I feel it is misplaced to have them alongside others who have made very significant contributions, some as early accounting writers, some as pioneers of theoretical and technical innovations. There seems to be undue deference to some who, in my opinion, have done very little to advance the discipline (quite the reverse, in fact). It was cozy to see that Ijiri wrote on Cooper and Cooper on Ijiri. However, there are some biographical entries which are informative and interesting and it would be difficult to find information on these people so the work serves a valuable service in this respect.

For the purist, encyclopedias present problems as no entry can ever "do justice" to a subject. For someone having devoted much of their work to defining and refining income measurement to find the whole subject summarized in two and a half pages (a large entry) would be disappointing. However, the encyclopedia never pretends to anything else. But should the entries have the obvious biases of the contributor? This is to be expected in cases where the contributor has written in the area so the reader will be directed to read that work, for example, Brownell's work on budgeting is slanted to performance evaluation. The entry for inflation accounting is not correct when it asserts that Chambers proposed a "black box"). Some topics have
been omitted. Thus, if the work is to be for non-accountants as well as accountants where would an introduction to the notion of an asset be found? There is an entry for liabilities. There seems little point to the illustrations of cost curves for the entry on microeconomics in Germany—they could be found in an introductory economics text.

There are very many positive attributes of the work. Despite a natural U.S. bias, the editors have made every effort to make the work truly international. Entries on accounting in many countries (perhaps they can be forgiven for omitting New Zealand?) and on significant accounting figures in those countries have been included making this the first work to attempt to do this. At the end of each entry is a brief bibliography enabling those who wish to pursue further study of the topic to do so. There is a high degree of uniformity in the style of the entries so the editors must have worked hard on this aspect.

It is difficult to review an encyclopedia. People have differing views on the merits of such works; some of these works have achieved great recognition others have done this cause a great disservice. With the increase in information resulting from the information technology age, such works are usually found through some on line service. However, the hard work of researching the subjects must have been done first. The editors of this volume have performed a great service for accounting by having the energy and skills to draw together such a useful data base of information on accounting. It is easy to pick fault with aspects of such a work. Whether one believes in the concept of encyclopedias or not, this work is well worth acquiring for the information in includes as well as the directions it provides. Despite my skepticism I certainly would have bought a copy of this book and I recommend it to all accounting scholars (and institutions) whether or not they have the perception to be interested in accounting history.
Edward N. Coffman and Daniel L. Jensen, Eds., *T. Coleman Andrews: A Collection of His Writings* (The Accounting Hall of Fame, Ohio State University, Columbus, OH 1966, 5443 pp., $40.)

Reviewed by
Robert Bloom
John Carroll University

Thomas Coleman Andrews (1899-1983) was inducted into the Accounting Hall of Fame at Ohio State University in 1953. A non-academic, he was a prolific writer. This very readable book synthesizes selected articles and speeches he prepared on accounting and auditing in the private-enterprise and governmental sectors.

Andrews’ manuscripts are provided in seven parts of this book: 1) accounting and auditing practice, 2) state and local government accounting reforms, 3) federal government accounting reforms in the General Accounting Office, 4) other federal government accounting reforms, 5) professional leadership, 6) administration of the Internal Revenue Service, and 7) political and personal philosophies.

Self-educated through correspondence courses, Andrews began his career in public accounting in 1918. He became a CPA, founded his own firm, and was active in the American Society of Certified Public Accountants, a predecessor of the American Institute. A native of Virginia, Andrews became its Auditor of Public Accounts and later Comptroller of the City of Richmond. He was subsequently appointed Director of the Corporation Audits Division of the General Accounting Office. Serving as President of the American Institute of Accountants in 1950-51, he bridged the gap between accounting in private enterprise and the government. From 1953 to 1955, he was the first CPA to be U.S. Commissioner of Internal Revenue. After serving in that capacity, Andrews argued publicly to eliminate the income tax.

His eloquent manuscripts from 1923 to 1963 cover a wide range of issues, including: the nature of a CPA, the role of an accountant in the firm, the need for broad-based accounting education, accounting for government, and taxation by government. Interesting observations emerge from his writings, as the following quotations reveal:

*The C.P.A. certificate was originally conceived as an attestation of fitness to engage in the public practice of accounting, and the reasons for this distinction are*
more compelling to-day than ever. Those accountants who do not choose to go into public practice do not need C.P.A. certificates, and it is a distortion of the purpose of the accounting laws to give them certificates. I know of no surer way to maker certain that the designation certified public accountant means what it clearly implies than to make the C.P.A. certificate available only to those who demonstrate that they intend to make their careers in public practice. [p. 37, italics in the original]

The foregoing comment is hypocritical since Andrews used the CPA to his great advantage in government.

Accounting, auditing and financial reporting are merely means to an end. The end in business is accurately informed management, owners and other interested parties. Only when management has accurate information is it in position to reach sound conclusions. In government, the end should be the same. The result undoubtedly would be a reduction of the burden of the cost of government upon the people. This end cannot be achieved unless and until the government uses accounting, auditing and financial reporting as tools of management. [p. 198]

Accounting as a discipline exists to provide information of a financial and managerial nature to be used in decision making.

There should be clear recognition of the distinction between accounting and independent auditing. Contrary to what many people think, the General Accounting Office is not the government's accounting office. It is primarily the independent auditing office...The Comptroller General's primary job is that of independent auditor of Congress. He is not the government's accounting officer, but he is, by law, injected into the archaic and confused accounting situation by being made to share with the administration the responsibility for important accounting determinations. Thus he is called up to review as auditor decisions that he makes as to accounting matters. This obviously is anomalous and improper. The General Accounting Office ought not to have anything at all to do with accounting, except to audit the books and report its findings, opinions and recommendations to the Congress. [p. 203]
Any individual or group who does accounting work should not be allowed to audit such accounting and vice versa. Otherwise, a conflict of interest results.

_We aren't living_ the gospel of democracy and free enterprise today. We are merely _preaching_ it. We have made only half of the combination work, and we've done that superlatively well. Free enterprise booms. But democracy staggers and reels under oppressive debts and inordinate operating costs—both the consequences of political failure, _our_ political failure, _yours_ and _mine_. [p. 450, italics in the original]

The last quote clearly captures Andrews’ political beliefs.

A conservative in politics, he desired to cut government spending and reduce the size of government. Andrews believed in self-reliance, common sense, and the work ethic. While he began his career as a Certified Public Accountant, he gravitated to government accounting, taxation, and public administration. A critic and reformer at heart, he emphasized the importance of government stewardship and the need for full and understandable disclosure to the public. Andrews argued that accounting should serve the public interest and that better accounting leads to better government. Those themes recur in his speeches and writings.


Reviewed by
Kathleen Cooper
University of Wollongong

The book comprises seven chapters on a number of accounting history issues from the fifteenth century to the present. The papers were selected from the programme of a one-day conference held in Edinburgh in 1994 for an invited audience of accounting practitioners and historians. The major theme of the conference was the history and influence on accounting of double-entry bookkeeping. The targeted audience of the papers included in this text is undergraduate and graduate accountancy students and teachers with an interest in the history of accounting in Britain and America.
Given its targeted audience, the text is well set out. While each of the papers stands alone, they are set out in a manner that tells a complete and integrated story starting with the publication of the first book dealing with double-entry bookkeeping and then tracing the development of financial accounting and reporting and cost and management accounting from the fifteenth century through to the present and the establishment of an institutionalized accountancy profession. The final chapter deals with the evolution of the information technologies and their impact on the accountancy profession.

There are a number of common themes throughout the papers that make it clear that accounting is not an isolated, technical process that can be studied without reference to its social and political environment. For example, the paper dealing with Pacioli and the emergence of double-entry bookkeeping traces the social factors that may have influenced the development of the technique and also explains why Pacioli may have included it in a mathematics text. In addition, the issue is raised as to who Pacioli was and how it happened that his particular treatise was chosen for the newly developed art of printing. The paper suggests that for Pacioli, it was perhaps a case of "not what you know but whom you know" [p. 10] as his friends and associates included Dukes, Popes, leading intellectuals and artists.

While personal associations and alliances may not have been as important in later accounting developments, the ability to play the political game is clearly evident in the papers dealing with professionalisation of accountancy and the setting of accounting standards. These activities are depicted as serving political purposes in terms of not only gaining prestige and status for accountants but also a monopoly over accounting practice and how it is determined. Ample evidence is provided to indicate that the accountancy profession has forsaken its stated objective of protecting the public interest in favour of its own self-interests.

The accountancy profession's penchant for self-interest is clearly evident in both papers dealing with financial accounting and reporting. The first deals with the historical development of financial reporting and illustrates an ever increasing tendency to conceal or distort information so as to present the company as profitable and well-managed when it was often on the verge of financial ruin [p. 47]. While accounting standards emerged to curb this trend, the political nature of accounting standard setting effectively ensured that flexibility was enshrined in the re-
suiting standards. The preparers of financial statements benefitted at the expense of the users.

The impact of economic and social factors is also apparent in the papers dealing with cost and management accounting and the impact of information technology on the accountancy profession. The papers dealing with cost and management accounting detail the influence of industrialization, two world wars and the concomitant need for information on management accounting. The second of these papers looks at specific developments including profit reporting and inventory valuation, budget planning, cost control and pricing policy. It also touches on the impact of information technology and signals a warning to accountancy that as many of the score-keeping activities are being automated and undertaken by non-accountants, their role must change. A more eclectic approach to management is required making use of organization theory, behavioral sciences and information theory.

This warning is seconded in the final paper dealing with information technology and the accountancy profession. As the paper notes, the accountancy profession had the opportunity to participate in the development of information technology and gain control over its application to the generation of accounting information. However, it allowed the opportunity to pass - initially. Information technology is not static and as ever more advances are made; as the use of information technology increases, the accountancy profession has a chance to participate in its development and application. The paper, however, concludes with a warning that producing ever more information may not be useful, particularly when it is essentially ignored by management. It is suggested that more concern be directed to the environment and an efficient use of resources than an ever increasing investment in technology.

In concluding, it must be said that for those seeking a definitive history of accountancy, in the Britain and America, this text will be a disappointment. This would be an impossible task for any text of this size. However, by combining what are essentially literature reviews with an overview of accountancy developments in the context of their social and political environments, this collection of readings should be of interest not only to students and teachers of accounting but also those looking for areas for further research. Many areas requiring further examination are identified. The notes at the end of most of the papers often clarify issues and, at the same time, point to avenues for
further research. The extensive bibliography is also most useful. Overall, this is a worthwhile text.


Reviewed by
Nola Buhr
Binghamton University

If you were to pick up this book and begin at the beginning, you might expect that *Accounting, a Multiparadigmatic Science* was going to describe accounting research from a broad social science perspective. You might also expect to find a discussion of the growth and struggle, over the last 25 years, of such emergent areas as: behavioral accounting; accounting history; social and environmental accounting; and critical perspective accounting. Such a misapprehension arises because the first chapter of the book provides a succinct description of Kuhn's view (1970) of paradigms, the Burrell and Morgan (1979) four paradigm framework and a Jungian typology (1971) of accounting researchers. Riahi-Belkaoui even discusses political economy accounting.

Unfortunately, what has the potential to be an interesting read turns into a very dry overview of 30 years of the findings of mainstream accounting. The author chooses to ignore the foundation laid in chapter one and instead develops a set of five paradigms based on the state of accounting in the mid 1970s. No explanation or justification for the delineation of the five accounting paradigms is offered, other than the comment that it follows suggestions made by Wells (1976) and the American Accounting Association (1977).

The five chosen paradigms are:

1. The Anthropological/Inductive Paradigm;
2. The True Income/Deductive Paradigm;
3. The Decision Usefulness/Decision Model Paradigm;
4. The Decision Usefulness/Decision Maker/Aggregate Market Behavior Paradigm; and
5. The Decision Usefulness/Decision Maker/Individual User Paradigm.

The remainder of the book consists of five chapters, each of which is devoted to one of the five paradigms. The Anthropological/Inductive Paradigm consists primarily of information eco-
nomics, agency theory and positive accounting theory. Given the nature of this research it is not surprising that there is nary a mention of qualitative research techniques, even though the paradigm is classified as being anthropological and inductive in nature. The chapter on the True Income/Deductive Paradigm covers all the combinations and permutations of current value accounting. The level of detail is excessive for overviewing the research stream but not sufficient for use as a teaching tool. The third paradigm deals with bankruptcy prediction models and the fourth paradigm deals with capital markets research. The Decision Usefulness/Decision Maker/Individual User Paradigm includes cognitive based behavioral research, international accounting and management accounting. This is the only chapter where the reader is exposed to anything other than financial accounting.

The book suffers from what is only a minimal effort at analysis and synthesis. Noticeably absent is a concluding chapter that might offer some general thoughts about where accounting research has been and where it is headed. Much of the accounting research which has developed in the last 25 years and is typified by new journals, new conferences and new sections of the American Accounting Association is largely ignored throughout the book. It is only in the concluding two sentences of the book that the author refers, very briefly, to the struggle of new accounting research streams to gain acceptance:

The paradigm has gained a good measure of legitimacy in accounting research as evidenced by the large number of studies examining behavioral implications in the accounting environment. A good grounding in the social sciences is necessary for the survival of this paradigm and its eventual acceptance by policy makers. [p. 174]

On a less important note, the book has an irritating number of typographical errors and repeated lines of text that cry out for a good copy editor.

According to the forward, Accounting, a Multiparadigmatic Science promises to serve two purposes: (1) act as a guide to the accounting literature and (2) serve as a textbook to be used in research methodology and accounting theory courses. Are these purposes met? To a certain extent, yes. The book does serve as a well-referenced bibliographic guide. It can be used as a solid starting point for someone intent on pursuing the dominant
paradigm(s) of mainstream financial accounting. However, if you are looking for a book which examines accounting from a broad social sciences perspective, one which covers the struggle of emergent streams in accounting and examines a full range of accounting areas and research methodologies, this is not the book for you.


Reviewed by
Robert Williams
University of Wollongong

The eighteenth century witnessed an increasing interest in double-entry book-keeping or the ‘Italian Method’ as it was often referred to. This book illustrates that interest by reproducing articles from encyclopedias published during that period. The book also assists accounting historians by providing access to important historical data which can be difficult to obtain.

The work consists of seven chapters. In Chapter 1 Sheldahl presents a detailed biographical and bibliographic introduction for each of the articles presented in later chapters. The author carefully describes the origin of each article, its author and the encyclopedia in which it was published. The chapter provides valuable background material for the later chapters and concludes with a comprehensive reference list.

 Chapters 2 to 7 reproduce, in facsimile form, the articles that are the subject of the book. Beginning with the earliest article Chapter 2 presents the entries on book-keeping from Ephraim Chambers’s Cyclopaedia, published in London in 1728, and from the 1738 edition. The later edition also included an
entry for 'books' and presents a more scholarly discussion of the topics, complete with examples of book-keeping procedures. As with a number of the articles published in Sheldahl's book, these ones draw heavily on the earlier work of the Savary brothers in France.

Chapter 3 reproduces four entries from Malachy Postlethwayt's *Universal Dictionary of Trade and Commerce*, published in London in 1751 and 1755. This text, too, draws upon the commercial dictionary compiled by Savary and Savary (1748). The author's supplemental notes at the beginning of the chapter indicate the changes that were made between successive editions of Postlethwayt's work. The entry from Richard Rolt's *A New Dictionary of Trade and Commerce* reproduced in Chapter 4 also draws on the work of the Savarys and provides an interesting comparison to Postlethwayt's articles.

The first edition of the *Encyclopaedia Britanica* carried an extensive article on book-keeping, which Sheldahl reproduces in Chapter 5. The article, contributed by John Mair, was in line with the aim of the editors to provide "useful information" and provides a very practical description of the function of book-keeping together with appropriate practical illustrations.

Chapters 6 and 7 provide two American examples. The first from Thomas Dobson's *Encyclopaedia*, published in Philadelphia in 1791, containing an article contributed by Robert Hamilton, whose own work *An Introduction Merchandise*, provided a comprehensive discussion of double-entry book-keeping. Chapter 7 provides an extract from the *Cyclopaedia* by Abraham Rees, published in Philadelphia in 1807. The entry on book-keeping is again quite lengthy and practical in nature.

Sheldahl's book is a very useful volume as it is another indication of the importance placed upon book-keeping at the time of the Industrial Revolution. While it is accepted that encyclopaedia entries necessarily follow practice this book is a useful tool for researchers investigating the accounting records of the period. The illustrations contained in the encyclopaedia articles provide some striking similarities to modern practice and indicate the practical nature of the articles by demonstrating the relationship of the various accounting records and the use of those records. Also, because the examples included in the book span some eighty years it is possible to make comparisons and observe the evolution of the practice of book-keeping over this period. Sheldahl has provided a valuable insight into the practice of accounting in the eighteenth century.
Announcement

The Journal of the Canadian Academic Accounting Association announces the

12th CAR Conference

November 1-2, 1997

Submissions are invited for the 12th annual CAR conference, to be held November 1-2, 1997, in any area of accounting, auditing, or tax research. The submission deadline is May 1, 1997. Papers received after that date will be treated as normal submissions to CAR. Selection of papers for the conference will be based on a review undertaken by members of the Editorial Board of Contemporary Accounting Research. Discussants for each paper will be selected on their expertise.

Submission of a manuscript to the conference also constitutes a submission to CAR. Therefore conference submissions should follow CAR’s editorial guidelines. These require submission in quadruplicate, with a cheque payable to CAR/CAAA in the amount of $50 for members of the CAAA ($100 for nonmembers), along with any relevant research materials. While acceptance of a paper for inclusion in the conference is generally followed by publication in CAR, the ultimate disposition of each manuscript depends on the normal review procedures employed by the journal. Authors will be notified of the decision regarding the conference agenda by September 1, 1997. Notwithstanding the decision on the conference, author(s) will be notified of the outcome of the editorial process for publication in CAR in normal course.

Submission should be directed to the CAR office located at 2-32B Business Building, University of Alberta, Edmonton, Alberta T6G 2R6, phone 403-492-7513, fax 403-492-3325. Inquiries may be directed to the editor or editorial assistant.
# Announcement

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