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Research on the Evolution of
Accounting Thought and
Accounting Practice

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THE ACCOUNTING HISTORIANS JOURNAL

Semiannual Publication of The Academy of Accounting Historians

Volume 13, No. 1 **Spring, 1986**

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KENNETH S. MOST, Manuscripts Editor

Guide for Submitting Manuscripts

Manuscripts must be in English and of acceptable style and organization for clarity of presentation. Submit three copies typewritten, double-spaced (except for indented quotations) on one side of 8½ x 11 inch (approx. 28.5 cm x 28.0 cm) white paper; paragraphs should be indented. An **abstract** of not more than 100 words should accompany the manuscript on a separate page. The manuscript should not exceed 7,000 words and margins should be wide enough to facilitate editing and duplication. All pages, including footnote and references pages, should be serially numbered.

The cover sheet should state the title of paper, name(s) of author(s), affiliation, and the appropriate address for further correspondence. The title, but not the name(s) of the author(s), should appear on the abstract page and on the first page of the body of the manuscript. Acknowledgments should appear at the bottom of the first page of the body of the manuscript and be excluded from the consecutively numbered footnotes.

Manuscripts currently under review by other publications should not be submitted.

Major headings within the manuscript should be centered, underscored, and unnumbered with the first letter of major words capitalized. Subheadings should be on a separate line beginning flush with the left margin, and underscored with the first letter of major words capitalized. Third-level headings should lead into the paragraph, be underscored, and followed by a period; text should immediately follow on the same line.

Tables, figures, and exhibits should be numbered (arabic), titled, and, when appropriate, referenced. Limited use of original documents, etc. can be accommodated in *The Journal* for authors providing glossy black and white prints. Important textual materials may be presented in both the original language and the English translation.

New Footnote Policy

Footnotes should not be used for literature references. The work cited should be referenced using the author's name and year of publication in the body of the text, inside square brackets, e.g. [Garbutt, Spring 1984, p. 84]; [Garner, 1954]. If the author's name is mentioned in the text, it need not be repeated in the reference, e.g. "Previts [Fall 1984] asserts. . ." If a reference has more than three authors, only the first name and *et al* should be used in the text citation. References to statutes, legal treatises or court cases should follow the accepted form of legal citation.

Textual footnotes may be used sparingly to expand and comment upon the text itself. These should be numbered consecutively throughout the manuscript, using superscript arabic numerals.

List of references. This should appear at the end of the manuscript and contain full reference to all sources actually cited and arranged in alphabetical order according to the surname of the first author. Information about books and journals should include the following: Books—name of author, title underscored, place of publication, name of publisher, date of publication; Journals—name of author, article title within quotation marks, journal title underscored; date of issue in parentheses, page numbers. Multiple works by an author should be listed in chronological order of publication, and when multiple works of an author appear in a single year, the suffix a, b, etc. should be used after the year. Illustrations of footnote and references entries are as follows:

FOOTNOTES

[1]Chatfield, p. 52.
[2]Previts (1982a), p. 8.
[3]Previts (1982b), pp. 19-20.

REFERENCES

Chatfield, Michael. *A History of Accounting Thought.* Hinsdale, Ill.: The Dryden Press, 1974.

Previts, Gary John. "Hazy History: Fact and Folklore in Accounting." *The Accounting Historians Journal,* Vol. 9, No. 2 (Fall 1982a), pp. 7-9.

————————. "Old Wine and . . . the New Harvard Bottle." *The Accounting Historians Journal,* Vol. 9, No. 2 (Fall 1982b), pp. 19-25.

As a helpful guide to questions of style not covered above, refer to *A Manual for Writers of Term Papers, Theses, and Dissertations* by Kate L. Turabian, published in paperback by The University of Chicago Press.

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The Accounting Historians Journal
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Guest Editorial

ON WRITING FOR THE JOURNAL

Reading and assessing a large number of manuscripts, essays, papers and dissertations over a considerable number of years, I have formed a few notions of what I regard as their desirable and undesirable features. These I offer here in the hope that they may help authors to attract the goodwill and gratitude of the editors to whom they submit their efforts.

Members of the Academy understand and appreciate the need to maintain a high standard for published articles. We do not want to have our products exhibited in a medium that does not command respect, and the way a journal commands respect is for its editor to require a consistently high standard in the papers that are published. I hope I speak for all of us when I say that I feel it is an honour to have an article published in *The Accounting Historians Journal.*

Even with the assistance of referees or the advice of an editoral board, an editor's job is difficult; authors have an opportunity to help by taking care with work that is submitted for consideration. This is a learned journal, and seeks to advance the level of scholarship in the field of accounting history. The field is interesting and it is worthy of good quality writing. If an author has something to say which (s)he considers to be of interest to others, it is surely worth taking pains to try to make it interesting to read.

The essential characteristic of an article submitted for publication here is not that it is an exercise in self-expression; it is an instrument of communication. As such, it should be viewed as a means of bringing together, in a partnership of understanding, the minds of writer and reader.

The writer is the initiator of a series of communicative statements, each of which carries a message, and the envisaged reader is the potential recipient of that message. It is part of the writer's task to make the transmitted message as clear as possible.

A lecture, a seminar, a symposium or other discussion group may also operate as an instrument of communication, but there is a very significant difference between these oral presentations and a written piece. In an oral presentation, the listener (the recipient of the message) may have the opportunity to ask the speaker (the sender of the message) to clarify or expand expressions which may not seem comprehensible or satisfying at the time. A written piece does not provide this facility. Hence, a writer should realize that, once having written, (s)he has little or no opportunity to clarify or otherwise respond. I suggest that the writer needs to be particularly careful to express thoughts with precision in order to convey what (s)he means.

We are fortunate in having the English language as our instrument of expression: it is rich, it is continually growing, and it is flexible. But, at the same time, it needs some care to use with precision.

Our language is not a static thing; if it were, this publication, to be philologically true to its name, should appear daily, since "journal" originated from the Latin for "day". Words are important; they are the toys we use to play our thought-games with. They can influence thought, and a change of meaning can often creep in unwittingly. However, this is no excuse for what I call "slapdashery" in the use of words. There is no objection to the introduction of new words and expressions which have real work to do, that is, work which cannot be done by existing words, but the misuse of words is another matter. Out of the vast number of instances available, consider just this one. How often does one come across the expression "constant change" or "constantly changing"? If we pause for a moment to ask: "How can something that is changing be constant?", we can immediately see the absurdity and the ambiguity. Is "constant" being used instead of "continuous" or is "change" being used instead of "rate of change"? One might as well talk of "extreme moderation" or "benign malevolence".

The grammar of English is simple, but its few rules should be observed and not abused. Spelling can, at times, be difficult, but it can usually be learned with a little perseverance, and there are always dictionaries that can be consulted to ensure accuracy. It might be helpful to recall that the spelling of a word is a product of its origin and history, an appropriate source for consideration by writers on historical topics.

If a writer has an ingrained inability to spell correctly, then (s)he should obtain the assistance of someone not so encumbered; however, a writer who can spell should be careful to check the output of the typewriter or word-processor to ensure that what has been provided as raw material is properly processed for the finished product. Quality control is as necessary in writing as in manufacturing.

One problem with our language is that, while it is a rich resource, it does have a great many words with multiple meanings; a considerable proportion of these, especially those at the higher levels of abstraction, are charged with emotions or personal reactions. The language of accounting is not completely free of such words; for instance, how often in teaching introductory accounting do we have to convince beginning students that the word "debit" in accounting does not always have connotations of disadvantage? This word, in fact, represents a relatively uncommon instance where a technical accounting word has gone into the general language and, over time, has developed a significance that takes it beyond its initial application. But most of the words used in accounting come from the general language and are simply applied with somewhat more specialized meanings for accountants. Often, unless the writer is careful to alert the reader, they may be interpreted in one or other of their more general meanings. Where words in common usage have multiple meanings, it is important to try to ensure that the meaning intended by the author can be clearly discerned by the reader, whether by definition of the term, or from the context in which it is used, or from the construction of the sentence or paragraph in which it appears.

Our language does have its oddities, too, one of which is that in some instances what we say or write does not make sense if interpreted literally. For example, if we think about it, the statement "Let us see what he has to say" can only make sense if "see" doesn't mean see or "say" doesn't mean say. Or again, "I'll get in touch with you by phone" is not possible if "touch" is to be taken literally. These sorts of usage add greatly to the richness of the language but they can also make it more difficult to handle with precision, and the author needs to be continually on guard against using words and expressions which do not convey the exact meaning — and shade of meaning — that is intended.

The order of words in a sentence can sometimes be crucial to conveying meaning. For instance, although the words in the following two statements are the same, the meaning of "This plant badly needs pruning" is different from that in "This plant needs pruning badly." The writer needs to take care to get words in the best order to convey the intended meaning.

If a writer is writing for a technical audience, it is reasonable to use the technical jargon which will be understandable to the presumably qualified reader; but, if the audience is not specialized in the particular field, the writer may face a dilemma. If (s)he uses the technical language, there is a strong chance that it will not be properly understood; if (s)he uses non-technical language, there is a strong chance that some of it at least will be imprecise, and liable to be taken to have some other meaning than the one intended. In either case, the message may fail. Although there is no ideal solution, it seems desirable to avoid technical jargon if at all possible, and, where not possible, to define or explicate the terms that are being used, even at the expense of appearing to labour what may seem to be obvious to the writer but is, in fact, far from obvious to the non-specialized members of the audience. An author should presume that the audience does not know what (s)he has to say, and therefore clarify and bring into the open any pertinent assumptions that are being made in providing the evidence and arguments that are presented. Judicious use of footnotes can often be helpful in this respect.

If another author is quoted, fairness and respect demand that either the words be given precisely as they appeared in the source, or any variation be clearly indicated. It is extraordinary how often inaccurate quotation occurs, giving rise, rightly or wrongly, to the impression of carelessness and/or disrespect. It is also, of course, easy for errors in quotations to arise in the course of copying, typing, retyping, and printing a piece, and it is wise to check all quotations at each stage, if possible, but at the galley or page-proof stage for sure. Responsibility for accuracy of quoted passages or expressions lies with the author.

It is also necessary for references to be strictly accurate. A reader may well wish to find a passage cited or quoted in order to know, for instance, what went before or after the material referred to, or whether the cited author had something to say about another topic which the reader is interested in; in such circumstances an incorrect or inadequate reference can be very frustrating.

On many occasions I have found it useful — and salutary — to read aloud passages I have written, for the ear can often pick out a fault in grammar, or construction, or even meaning, which may have escaped the eye alone, and I suggest that such reading aloud should be slow and deliberate rather than quick and superficial.

I do believe that an author should have available (a) a good, authoritative dictionary, (b) a copy of *Roget's Thesaurus* or its equivalent, and (c) a standard grammar of the English language.

To sum up, the continued production of a learned journal is a cooperative task in which authors and editor play the most significant parts. An editor has a great responsibility, and there is little doubt that editors treat it seriously and with the utmost conscientiousness. An author also has some basic responsibilities and it may be helpful to list them.

1. An author must have something to say which (s)he honestly thinks is worth saying.

2. An author should take pains to formulate what (s)he is saying as clearly as possible; it should not be presumed that an editor will do this for the author.

3. An author should refer to recent issues of the targeted publication, and format the article accordingly.

4. An author should check a finished piece thoroughly before sending it in for publication; many errors of spelling, construction and the like are readily discernible on a reasonably careful reading.

Many years ago I came across the following "Advice to Any Aspiring Public Speaker". I cannot now recall the source, but it caught my fancy at the time. I think much of it can also be applied to Any Aspiring Writer, and I proffer it as a finale to these few remarks.

"In promulgating your cogitations or articulating your superficial sentimentalities, or amicable, philosophical or psychological observations, beware of platitudinous ponderosity. Let your conversational communications possess a clarified conciseness, a compacted comprehensiveness, a coalescent consistency, and a concentrated cogency. Eschew all conglomerations of flatulent garrulity and asinine affectation, employ extemporaneous unpremeditated and veracious vivacity, avoid all pompous prolixity, ventriloquial verbosity and pestiferous profanity, and above all say what you have to say in as few words as possible."

Louis Goldberg
Professor Emeritus
University of Melbourne
Member, Editorial Board

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THE EVOLUTION OF FINANCIAL STATEMENT INDEXATION IN BRAZIL

Abstract: Accounting for inflation is one of the more controversial topics in financial reporting. This paper traces the evolution of the system of inflation accounting used in one of the most highly inflationary economies in the world—Brazil. The history of inflation accounting in Brazil (known as monetary correction) is divided into three time periods: pre-1964, 1964 to 1976, and 1976 to the present. The events pertinent to the system of monetary correction in each of these periods are first discussed and then evaluated. It is shown that the system of monetary correction has been subject to massive political pressures since its inception, but gradual improvements have taken place over the years.

INTRODUCTION

Few countries have mandated procedures for the adjustment of historical cost financial statements for the effects of changing prices, and in those that have, inflation-adjusted data are typically required only as supplements to historical cost data[1, 2]. Brazil has experimented with inflation accounting since 1951. Inflation-adjusted financial statements have served as the primary statements in annual reports, and inflation-adjusted income has served as the basis for corporate taxation, since 1964. The objective of this paper is to trace the evolution of inflation accounting in Brazil.

This study divides the evolution of inflation accounting in Brazil (known as "monetary correction") into three time periods: prior to 1964, 1964 to 1976, and since 1976. Prior to 1964, inflation adjustments were made informally, but since 1964 all companies have been required to prepare inflation-adjusted financial statements annually, with a major revision in the system in 1976. The evolution of the system of monetary correction will be traced through each of these time periods, and the events of each period evaluated from conceptual and practical viewpoints.

Acknowledgment: The author wishes to thank Professor Eliseu Martins of the University of São Paulo for his help in this study and the Arthur Andersen & Co. Foundation for providing financial assistance,

The accounting literature in Brazil reveals a paucity of scholarly material on monetary correction. Only two works could be found that address the theoretical and political aspects of the system's evolution.[3] They provide important information for tracing and understanding the evolution of inflation accounting in Brazil, but this study is based primarily upon the laws passed in Brazil requiring the system of monetary correction, and personal interviews with practitioners and academicians conducted in Brazil.

Two types of law are cited throughout this study: Laws *(Leis)* and Decree-Laws *(Decreto-Leis).* Decree-Laws have been used only since the revolutionary government took control in 1964. Decree-Laws are not passed by Congress, but simply ordered by the President of the Republic. All Decree-Laws cited in the study are tax laws, whereas the Laws cited are of a broader nature. For example, Law No. 6.404, passed December 15, 1976, is the most recent corporations law [*Lei das Sociedades por Ações*], and is similar to the West German *Handelsgesetz.*

To illustrate the effects of changes in the system of monetary correction over the years, illustrative skeleton financial statements for the years 1952, 1965, 1975, and 1985 appear as Exhibits 1-4 at the end of the paper.

EVOLUTION OF THE SYSTEM

Prior To 1964

Indexation of historical costs of fixed assets was introduced into Brazilian accounting practice in 1951. Law No. 1.474 of November 26, 1951 authorized the revaluation of fixed assets according to index coefficients fixed by that law, until December 31, 1952, but only for fixed assets acquired prior to December 31, 1946. No adjustment was permitted for assets acquired during the period 1947 to 1952. The objective of this legislation was to provide a more realistic basis for the excess profits tax. Excess profits were defined as the amount of profit exceeding some percentage of owners' equity (the percentage changed from time to time) and were subject to a surtax based upon a series of progressive rates. Because of relatively high inflation throughout the 1940's, owners' equity was relatively low for many Brazilian companies. Law No. 1.474 was passed to facilitate a restatement of owners' equity. Depreciation was not allowed on the restated fixed asset amounts, however, so there was no impact on either income reported in financial statements or on taxable income, as illustrated in Exhibit 1. Only the calculation of excess profits was affected.

The revaluation amount was subject to a tax of ten percent, but revaluation was voluntary rather than mandatory. Since the restated fixed asset amounts were not allowed as the basis for depreciation, the only benefit to be derived from revaluation was the increase in the basis upon which excess profits were calculated. The decision whether to revalue became an element of tax planning, minimizing either the sum of the normal income and excess profits taxes without revaluation, or the sum of these two plus the revaluation tax if the firm chose to revalue.

Because of continued high inflation during the early 1950's, a second restatement of fixed assets was legislated in 1956 (Law No. 2.862 of September 4, 1956). Restatement once again was allowed only of those assets purchased more than six years earlier, and the revaluation amount was once again subject to a ten percent tax.

Automatic regular restatement of fixed assets was introduced in 1958 through Law No. 3.470. For the first time, "revaluation of fixed assets" was replaced by "monetary correction" *(correção monetária).* As with previous legislation, however, the law of 1958 did not allow the monetarily corrected fixed asset amounts to be used as the basis for depreciation. Chacel, Simonsen, and Wald suggest that this prohibition was "due to the immediate needs of the National Treasury" in that depreciation based on corrected amounts would reduce income tax receipts.[a] The law provided that index coefficients be determined biannually by the National Economic Council for each of the previous two years. Because of this, monetary correction procedures could be applied only at the end of every two years. In 1963, legislation was passed providing for the annual calculation of indices (Law No. 4.242 of December 26, 1963). The procedures established by the laws of 1958 and 1963 remained in force until 1964 when a new revolutionary government created significant changes in the system.

Evaluation of the Period Prior to 1964

The most obvious feature of Brazilian inflation accounting prior to 1964 was its fiscal aspect. The major reason given for the restatement of fixed assets was to provide firms with a more realistic basis for the calculation of an excess profits tax. The true objective is somewhat ambiguous, however, given that the restatement

[a]1970, p. 69, translated from the Portuguese by the author.

amount was itself subject to a tax. The legislature, although realizing that a surtax levied against inflation-induced profits was damaging, was unwilling to reduce an important source of revenues. One student of the system goes even further, claiming that "in fact, the principal objective (of inflation accounting prior to 1964) was to gather a large amount of resources for the federal coffers."[b] Whatever the true objective, most observers believe that there were actually very few companies applying monetary correction procedures prior to 1964.

1964 To 1976

High rates of inflation persisted throughout the 1950's and early 1960's. At the time of the military takeover in April 1964, inflation was running at an annualized rate of 144 percent. The major effects of inflation visible in 1964 were the virtual disappearance of long-term finance (both for business investment and the housing market), the inability of government to finance itself, the deterioration and lack of public utility services, and extensive fictitious profits recorded by companies and taxed by government.[4]

The Brazilian military hierarchy had stepped in to take control of government several times prior to 1964, but had always returned it to civilians after a short transition period. The new revolutionary government that took control in 1964 placed achievement of developed status for Brazil as a prerequisite for return to civilian control [Ness, 1974, p. 453]. For the first time in Brazilian history, the military decided to stay in power for an extended period of time in order to implement and carry out programs it felt necessary to allow the nation to develop in a secure and stable way. However, ministries and other government institutions were put in the hands of well-trained civilians who came to be known as technocrats. It was hoped that these individuals would be able to carry out policies without being subject to political pressures.

The major economic goals of the new government were to reduce existing economic distortions so that the price system could once again act as an efficient mechanism for the allocation of resources, and to reduce the inflation rate without causing a severe depression normally associated with a "shock treatment" approach [Baer, 1979, p. 169]. Thus, it became necessary for the country to put up with continued inflation. To mitigate some of the distortions caused by inflation during this period, the government devised the most extensive system of indexation in the world, extending the concept

[b]Fama, 1980, p. 67, translated by the author.

to the areas of public finance, long-term credit, wages, savings accounts, housing finance, and corporate income taxation. Basically indexation attempts to ensure a certain *real* rate of interest to creditors, and a certain *real* wage to workers.

In the case of loans, the face value of government and corporate bond indentures, real property mortgages, and amounts deposited in savings accounts are revalued using an inflation index, and interest payments are based upon the revalued amounts. For example, 1,000 cruzeiros (CR$) deposited in a 5% passbook savings account would grow to CR$1,205 with interest at the end of a month in which the rate of inflation was 20%: a CR$200 increase for revaluation of face amount and a CR$5 increase for interest [CR$1,200 × .05 × 1/12 = CR$5]. Although the depositor has CR$205 more in the savings account, the cruzeiros are worth 20% less.

The first law institutionalizing the system of indexation was dated July 17, 1964, just three-and-one-half months after the military takeover. With the intention of generating cash for the National Treasury, Law No. 4.357 created indexed treasury bonds [*Obrigação Reajustável do Tesouro Nacional* (ORTN)] and made mandatory the monetary correction of fixed assets by business enterprises for the very first time. Monetary correction of fixed assets helped fill government coffers through the tax imposed on the revaluation amount. Law 4.357 reduced this tax to five percent and offered companies a means to escape direct taxation by allowing them to purchase the newly created indexed treasury bonds in an amount equal to twice what the tax would have been. In this way the new law forced business to finance a portion of the public debt, either through payment of taxes or obligatory loans. The tax on the monetary correction amount was eventually eliminated in 1967.

Law 4.357 allowed depreciation on a portion of the monetarily corrected historical cost of fixed assets for the first time. For the year 1965, depreciation could be calculated on 50 percent of the corrected amount, and in 1966 on 70 percent. Beginning in 1967 depreciation was allowed on the full corrected amount of fixed assets. Chacel, Simonsen, and Wald herald this provision of the new law as the first time the Brazilian government explicitly recognized the existence of fictitious profits. With law 4.357

> it became consecrated in Brazilian legislation that inflation is the source of fictitious profits which should not be subject to any fiscal charge.[c]

[c]1970, p. 102, translated by the author.

In assessing the new legislation, Fama concluded that:

> Notwithstanding that this new law was interested in making financial statements more in conformity with reality . . . it still had a very pronounced preoccupation with taxation.[d]

This conclusion can be drawn from two aspects of the law. First, although the tax on the monetary correction amount was reduced to five percent, all companies were now required to use monetary correction. Secondly, although the government explicitly recognized that fictitious profits should not be subject to income taxation, at least a portion of these profits continued to be taxed for the years 1965 and 1966 in order to help finance the federal deficit.

Maintenance of Working Capital

In addition to the innovations of making monetary correction mandatory and allowing depreciation to be based on the corrected fixed asset amounts, Law 4.357 created the concept of "maintenance of working capital" *(manutenção de capital de giro proprio).* An amount needed to "maintain working capital" was allowed as a deduction in arriving at profit subject to the excess profits tax, but not as a deduction in calculating profit subject to the normal income tax.

The law specifically defined "working capital" as current assets plus long-term receivables less liabilities (both short- and long-term). The amount needed to maintain working capital was calculated by applying the index coefficients of the National Economic Council to the beginning working capital amount. The maintenance amount was used solely in the calculation of excess profits and therefore did not appear in published financial statements. [This point is illustrated in Exhibit 2.]

Calculation of the amount needed to maintain working capital appears to have been a first attempt to measure the fictitious profits resulting from the valuation of inventory at historical cost and the purchasing power gains and losses which arise from holding monetary items during a period of inflation. Inventory was the only nonmonetary balance sheet item included in the definition of "working capital".

One imperfection associated with the maintenance of working capital was the stipulation that index coefficients be applied to the *beginning* net working capital position. This had the effect of

[d]1980, p. 68, translated by the author.

ignoring any changes in working capital which might have occurred during the year, thereby potentially misstating the purchasing power gain/loss associated with a change in net monetary position. The provision for the maintenance of working capital lost its fiscal utility in 1967 when the excess profits tax was eliminated.

The set of inflation adjustments included in the law of 1964 was not the original set considered by the government for possible adoption. José Luiz Bulhões Pedreira, a tax attorney, was appointed by the new minister of finance in 1964 to head a project to draft a new tax law[5]. An expert in the legal aspects of taxation, Bulhões was assisted in the technical aspects of financial accounting by Manoel Ribeiro da Cruz Filho, a partner with Price Waterhouse in Rio de Janeiro. The original draft of the new tax law drawn up under the leadership of Bulhões in 1964 included a comprehensive plan to index the fixed assets and owners' equity accounts of business enterprises in determining taxable income. This plan would have incorporated adjustments to depreciation expense and cost-of-goods-sold as well as purchasing power gains/losses in the calculation of normal taxable income, thereby providing firms with virtually total protection from paying taxes on fictitious profits[6]. The proposal was not accepted.

One explanation for the rejection of this proposal is that the government was reluctant to implement a system that completely eliminated fictitious profits because taxation of these represented a significant source of government revenues. One of the most important problems faced by the new military government was the national deficit. Financing the national deficit had higher national priority than protecting business firms from decapitalization through taxation of fictitious profits. This conclusion is supported by the facts that depreciation of the corrected fixed asset amounts was implemented on a gradual basis and that the provision for the maintenance of working capital was not allowed as a deduction from normal taxable income.

The procedures suggested by Bulhões and Cruz in 1964 were once again brought forth for consideration in 1966, this time being approved and incorporated in Decree-Law No. 62. This law, however, was subject to the stipulation that it would not go into effect until *regulamentado,* that is, not until a bulletin was issued by the Finance Ministry declaring that the law was in force. Due to pressures exerted by the Department of Income Taxation, the bulletin was never published. Studies made by that department advised against the new system, claiming that it was operationally complicated and fearing that it would reduce tax revenues too greatly [Chacel, Simonsen, and Wald, p. 105]. As a result, the procedures required by the law of 1964 continued in force. The procedures proposed by Bulhões and Cruz were finally put into practice in 1976.

As mentioned earlier, the excess profits tax was eliminated in 1967. In 1968, Decree-Law No. 401 required firms to deduct a provision for the "maintenance of working capital" from *normal* taxable income. This amount was also deducted from income for financial statement purposes with an equal amount set up as a reserve in the owners' equity section of the balance sheet.

The apparent improvement in the calculation of financial statement and taxable income resulting from Decree-Law No. 401 was severely curtailed in 1969 when Decree-Law No. 433 declared that the provision for the maintenance of working capital could not exceed twenty percent of the current year's income. That law further provided that at any time that the National Monetary Council should feel it necessary to increase tax receipts, the Ministry of Finance could eliminate the use of the maintenance of working capital provision. The government's preoccupation with financing the national debt at the expense of protecting firms from paying taxes on fictitious profits was once again evident with Decree-Law 433. Decree-Law No. 1.302 raised the limit of the provision to 100 percent of net income in 1973. Any excess, however, could not be carried forward to offset income of future periods.

Previous laws had been silent as to the use of a provision for the maintenance of working capital should this amount turn out to be a gain (credit arising from a negative working capital position). In practice, gains from a negative working capital position were not included in income prior to 1974, whereas losses were. This assymetry was corrected by Decree-Law No. 1.338 in 1974 which required gains of this nature to be taken to income in the current period. This was a significant change in Brazilian law, for the first time recognizing that inflation could be the cause of gains as well as losses.

The monetary correction procedures as altered by Decree-Law 1.338 were used through 1976. The impact which these procedures had on published financial statements is illustrated in Exhibit 3 in the appendix. The new corporation law of 1976 and the tax law of 1977 substantially changed the system then in existence.

Evaluation of the Period 1964 to 1976

The major conceptual improvements during the period 1964 to 1976 were the depreciation of the full adjusted historical cost of fixed assets, and the provision for the maintenance of working capital, which provided a measure of purchasing power gains and losses and removed the fictitious component of gross profit. In addition, gains arising from the maintenance of working capital came to be recognized as a source of income and were required to be added in the calculation of taxable income. Due to the close relationship between financial reporting and tax accounting during this period, with financial statements generally conforming to the tax laws (Decree-Laws) in force, these adjustments were also reflected in the published financial statements of business enterprises. Thus, by the year 1975, the Brazilian system of monetary correction had evolved to the point where inflation-adjusted amounts for depreciation expense and cost-of-goods-sold, as well as purchasing power gains and losses, were incorporated in the calculation of both accounting and taxable income.

A conceptual difficulty of the system was the use of the beginning working capital for the calculation of the adjustment. A practical limitation concerned a time lag in recording monetary correction. Indices used for the correction of fixed assets were published on an *ex post* annual basis, that is, after the end of the year and only for the whole year in question rather than on a monthly basis. Fixed assets could not be adjusted from the date of purchase to the end of the year because monthly index coefficients were not available, and monetary correction could not be incorporated into the current year's financial statements because indices were not divulged until well after the close of the year. The net effect was that fixed assets did not appear in financial statements at an adjusted amount until from one to two years after their purchase.

As of 1976, while Brazilian companies were required to incorporate inflation adjustments in primary financial statements and in the calculation of taxable income, U.S. companies were not required to make any adjustments for inflation, either in published financial statements or in the calculation of taxable income. On the other hand, since 1976, some U.S. companies have been required to disclose certain replacement cost data.

THE CURRENT SYSTEM OF MONETARY CORRECTION

The Brazilian business environment historically has been dominated by closely held "family" companies and by foreign multinational corporations. Neither of these groups has made significant use of the Brazilian equity securities market to raise investment capital. The establishment of an effective, broadly-based securities market has been determined by Brazilian policymakers to be a necessary prerequisite for further economic development. A variety of incentives exist for companies to go "open," that is, allow their equity shares to be traded on an organized stock exchange, and a number of incentives exist for individuals to invest in equity. For example, one of the largest components of the securities market is the so-called "157 Funds." These are special mutual funds administered by investment banks to which individuals may apply a portion of their income tax payable rather than paying the tax to the government.

A new corporation law *(Lei das Sociedades por Ações)* was passed in 1976, replacing the previous one which had been in effect since 1940. The new corporation law, Law No. 6.404, has the objective "to create the legal structure necessary to strengthen the risk capital market" in Brazil.[e] To achieve this objective, the law emphasizes the protection of minority shareholders. The most important provision of the new law with respect to the rights of minority shareholders has been the obligatory distribution of dividends. Brazilian companies are required to pay dividends each period in an amount laid down in the corporate statute, or — if no provision for dividends in the corporate statute exists — one half of net profit after reduction of amounts appropriated to legal reserves.

The new corporation law also prescribes new procedures for the monetary correction of financial statements. Because the law *forces* firms to pay dividends, the law was obliged to define income in such a way that firms did not run the risk of decapitalization. Hence, the current procedures were established.[7] The creation of an obligatory dividend has made the elimination of the fictitious component of profit all the more necessary as the business enterprise now becomes subject to the double jeopardy of income taxation and obligatory dividend distribution.

The general criteria of the current system of monetary correction are stated in the new corporation law; the methodology of implementation is specified in the tax law of 1977, Decree-Law No. 1.598. The corporation law requires the monetary correction of fixed assets and owners' equity accounts. The law further requires that

[e]*Lei das Sociedades por Ações,* 1980, p. 16, translated by the author.

correction of these items be made at year-end, with the counterparts of these corrections accumulated in a "monetary correction account" taken to income. The tax law requires the use of the index used to adjust treasury bonds (the ORTN index) for monetary correction purposes. Bulhões and Cruz were responsible for writing the general criteria into the new corporation law and the operational procedures into the tax law of 1977. This is essentially the same set of procedures proposed by them in 1964, twelve years earlier.

Exhibit 4 in the appendix illustrates the impact which these procedures have on contemporary Brazilian financial statements. Depreciation based upon the full revalued fixed asset amount and the monetary correction amount both enter into the calculation of income before income taxes (and taxable income). The monetary correction amount taken to income is basically the same as the "provision for the maintenance of working capital" calculated prior to 1976. Rather than basing the adjustment on "working capital" (monetary) items, the calculation of the monetary correction amount is based upon adjustments of "non-working capital" (nonmonetary) items, i.e. fixed assets and owners' equity.

The current monetary correction procedures eliminate the major technical problems of the previous system by requiring that the relevant items be corrected at year-end and by requiring the use of an index published monthly (the ORTN index). Although the use of a monthly index solves the time-lag problem discussed above, the most serious practical limitation in the current system stems from the use of the ORTN index. That index is not only used for monetary correction of financial statements, but also for the indexation of treasury bonds and other government financial contracts. The indexation of financial instruments in Brazil has itself been accused of contributing to further inflation through a so-called "inflation feedback" mechanism.[8] To try to mitigate the feedback that indexation has on the rate of inflation, the government has deliberately suppressed the ORTN index, so that the index has reflected as little as 45 percent of the actual rate of inflation in recent years. For example, in 1981 the general price index increased 110 percent, but the ORTN index increased by only 50 percent. As a result, fixed assets and owners' equity are greatly understated in corporate balance sheets, and firms have not been allowed to eliminate inflation-induced fictitious profits fully from both financial statements and taxable income.

SUMMARY AND CONCLUSIONS

This study has traced the evolution of financial statement indexation in Brazil from its inception in the early 1950's to the present. The primary sources of information were Brazilian laws, writings of Brazilian scholars, and interviews with Brazilian accounting practitioners and academicians.

The Brazilians have experimented with a system of inflation accounting since 1951. Until 1976, the monetary correction of balance sheet items was regulated by tax legislation and was perceived by both national policymakers and businessmen almost exclusively as a component of taxation. Since 1976, monetary correction has taken on the added job of ensuring that firms do not pay obligatory dividends out of capital. There is still very little concern in Brazil with the possible usefulness that monetary correction data might have as information for investors, creditors, and other users of financial statements. This can be contrasted with the situation in the United States, where the information content of inflation accounting is greatly debated, but the tax ramifications have been virtually ignored.

One of the interesting aspects of the development of the system of monetary correction is that the national policymakers chose to improve accounts gradually rather than implement an integrated and more theoretically sound set of procedures as early as 1964. Manipulation of the monetary correction procedures took place prior to 1976 in order to continue generating revenues from the taxation of fictitious profits. Even after the 1976-1977 laws, the government has manipulated taxable income, perhaps inadvertently, through suppression of the ORTN index.

The Brazilian system of monetary correction has developed without any significant influence from the outside world. The procedures that have been used and are currently being used are unlike any proposed in the more developed countries. While the latter have been shifting support from general price-level adjustments to current value accounting, the Brazilians have steadfastly clung to a system of general price-level accounting. There is relatively little discussion in Brazil about the possibility of using current value systems of accounting. Inflation is the immediate problem in Brazil, and policymakers have chosen to continue with adjustments that deal with inflation alone.

To this researcher's knowledge, Brazil is the only country where corporate income taxation is based upon inflation-adjusted income figures and inflation-adjusted financial statements serve as the only statements found in corporate annual reports. Since the introduction of indexation in 1951, inflation has averaged 38 percent per year, and over the most recent five-year period, inflation has averaged around 85 percent. In a country with such high rates of inflation, protecting business enterprises from decapitalization becomes much more urgent than in countries with inflation rates hovering around ten percent or less. A second reason for the early and continued use of inflation accounting in Brazil is the authoritarian form of government found since 1964. In this instance, dictatorships are more efficient than democracies. Legisation can be passed in a dictatorship that would either never make it out of a congressional or parliamentary committee, or would be researched and debated for many years before any legislative bill was introduced. A third reason is the preeminence which the military government has placed on big business for the economic development of the country. Although unable to control inflation, the government has gone to great lengths to try to create an environment where the adverse effects of inflation on business enterprises are minimized. This includes protecting firms from decapitalization through income taxation.

However, other countries have experienced continued "high inflation," a dictatorial government, and reliance on big business. The question, why Brazil alone pioneered inflation accounting, remains unanswered.

FOOTNOTES

[1]Hauworth [1980] discusses inflation accounting efforts in twelve countries. Choi and Mueller [1984] list eleven countries that either require or encourage the publication of inflation adjusted amounts in corporate financial statements [pp. 176-189].

[2]Only Argentina, Brazil, and France require adjusted amounts to appear in primary financial statements [Choi and Mueller, 1984, pp. 176-189].

[3]They are: *A Correção Monetária* by Chacel, Simonsen, and Wald, which traces the overall system of indexation (including indexation of treasury bonds, savings accounts, mortgages, wages, and financial statements) through the 1960's; and *Retorno Sobre o Investimento . . .*, a master's thesis written by Rubens Fama at the University of Sao Paulo in 1980, which includes a chapter on the evolution of inflation accounting in Brazil.

[4]See Baer [1979, pp. 165-168] for a summary of the economic problems caused by inflation existing in Brazil when the military took control in 1964.

[5]Information concerning the political process involved with the tax laws of 1964 and 1966 comes from personal interviews with Sr. Manoel Ribeiro da Cruz Filho conducted in his office in Rio de Janeiro.

[6]Models of GPL adjusted historical cost accounting concentrate on adjustments to depreciation expense and cost-of-goods-sold and the calculation of purchasing

power gains and losses. The constant dollar provisions of FASB Statement No. 33, for example, specifically require adjustments to depreciation expense and cost-of-goods-sold in the calculation of constant dollar income from continuing operations, with purchasing power gains and losses shown as a separate item [1979, para. 39-50].

[7]This rationale was presented by Alvaro Ayres Couto in a personal interview. Sr. Couto is chief accountant for the *Commisão de Valores Mobiliários,* the Brazilian securities commission.

[8]See Beckerman [1978] for a discussion of this phenomenon.

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EXHIBIT 1

BRAZILIAN FINANCIAL STATEMENTS IN 1952

Balance Sheet

Current assets	Current liabilities
Long-term receivables	Long-term liabilities
Fixed assets (carried at revalued amounts)	Owners' equity
Total assets	(includes a reserve for the revaluation of fixed assets)
	Total equities

Income Statement

Sales
— Cost of goods sold
= Gross profit
— Selling and administrative expenses
— Depreciation expense (based upon the historical cost of fixed assets)
— Other expenses
= Income before income taxes (i.e., normal taxable income)
— Income taxes
= Net income

Note: excess profits were calculated as the amount of net income exceeding a specified percentage of owners' equity and were subject to a surtax.

EXHIBIT 2

BRAZILIAN FINANCIAL STATEMENTS IN 1965

Balance Sheet

Current assets	Current liabilities
Long-term receivables	Long-term liabilities
Fixed assets (carried at revalued amounts)	Owners' equity
Total assets	(includes a reserve for the revaluation of fixed assets)
	Total equities

Income Statement

Sales
− Cost of goods sold
= Gross profit
− Selling and administrative expenses
− Depreciation expense (based upon historical cost plus 50% of the revaluation amount)
− Other expenses
= Income before income taxes (i.e., normal taxable income)
− Income taxes
= Net income

Note: a provision for the maintenance of working capital was deducted from net income in the calculation of excess profits upon which a surtax was levied, but was not reflected in the calculation of income before income taxes (or taxable income). As compared with the situation in 1952, the depreciation expense is now based upon the revalued fixed asset amounts, albeit only 50% of the revaluation amount.

EXHIBIT 3

BRAZILIAN FINANCIAL STATEMENTS IN 1975

Balance Sheet

Current assets	Current liabilities
Long-term receivables	Long-term liabilities
Fixed assets (carried at revalued amounts)	Owners' equity
Total assets	(includes reserves for the revaluation of fixed assets and for the maintenance of working capital)
	Total equities

Income Statement

Sales
− Cost of goods sold
= Gross profit
− Selling and administrative expenses
− Depreciation expense (based upon 100% of the revalued amount)
− Other expenses
= Operating profit
± Provision for the maintenance of working capital
= Income before income taxes (i.e., taxable income)
− Income taxes
= Net income

Note: as compared with the situation in 1965, the provision for the maintenance of working capital now appears in published financial statements and is deducted in arriving at taxable income. The provision results in an increase in income when total liabilities exceeds current assets plus long-term receivables and, conversely, a decrease in income when these assets exceed total liabilities. The provision is closed to a reserve for the maintenance of working capital which appears in the owners' equity section of the balance sheet.

EXHIBIT 4

BRAZILIAN FINANCIAL STATEMENTS IN 1985

Balance Sheet

Current assets	Current liabilities
Long-term receivables	Long-term liabilities
Fixed assets (carried at revalued amounts)	Owners' equity (carried at revalued amounts)
Total assets	Total equities

Income Statement

Sales
− Cost of goods sold
= Gross profit
− Selling and administrative expenses
− Depreciation expense (based upon the revalued fixed asset amounts)
− Other expenses
= Operating profit
± Monetary correction (calculated as the counterpart to the current year's revaluation of fixed assets and owners' equity)
= Income before income taxes (i.e., taxable income)
− Income taxes
= Net income

Note: the monetary correction amount results in a decrease in income before income taxes (and taxable income) when owners' equity exceeds fixed assets and an increase in income when fixed assets exceed owners' equity.

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FINANCIAL REPORTING IN THE EARLY YEARS OF THE EAST INDIA COMPANY

Abstract: The first archival period (1600-1663) of the (English) East India Company is marked by an absence of accounting materials. A small number of financial statements have escaped peril, however, and found their way to the India Office Library and Records in London. Of these, two are of singular interest. Along with related Company minutes, these statements are analyzed and interpreted in this paper. They shed some light on the reporting practices and concepts of the early years of the incorporated joint-stock company.

INTRODUCTION

The history of modern English corporate accounting and reporting begins with the incorporated joint-stock company. Although this form of business organization emerged in England in the second half of the 16th century, it was not until the foundation of the East India Company in 1600 that it acquired distinctive characteristics.

For the first two centuries, the incorporated joint-stock company developed rather slowly. In the case of the East India Company, for example, permanent capital, a characteristic of this form of enterprise, did not exist until some sixty years after the formation of the Company [Scott, 1968, Vol. 2, pp. 122-3, 128]. From 1600 to 1657, the Company operated with terminable stocks, issued for a single or a series of voyages. At various points in the life of a particular stock or venture, available proceeds were divided pro rata and distributed to the adventurers (shareholders). The distribution of proceeds was actually liquidation of invested capital as well as distribution of profits. For this reason, it is appropriate to refer to these distributions as "divisions" [Scott, 1968, Vol. 1, pp. 153, 159-60].

This study was made possible by a grant from the American Philosophical Society. Two transcripts of Crown-copyright records in the India Office Records appear in this paper by permission of the Controller of Her Majesty's Stationery Office.

From very early on, the East India Company attracted a wide circle of investors—dukes, judges, knights, clergymen, and merchants [Cooke, 1951, pp. 57-8; Chaudhuri, 1965, p. 33]. Their number, around two hundred and twenty in 1600, rose swiftly to nearly one thousand by January 1617, when the subscription books for the Second Joint-Stock were closed [Birdwood, 1965, pp. 164-6; Scott, 1968, Vol. 2, p. 104]. With a fast-growing number of shareholders, how responsibly did the Court of Committees (Board of Directors) carry out its financial reporting obligations? On what conceptual basis were the Company's financial statements prepared?

FINANCIAL REPORTING

Article 306 of the East India Company's bylaws, published in 1621, states that "They [Accountants General] shall yearely deliver up unto the Court [of Committees] at the *Fine* of June, a perfect Ballance of all Accompts in their charge" [Lawes, 1621, p. 68]. To ensure the reliability of the annual report, the Auditors General of the Company were instructed to "have care of the general accompts, to see that all the other accompts and parcels be fairely and truly entered into them by the Bookekeepers" [Lawes, 1621, p. 70]. The Auditors General were also to see to it that the Accountants General "deliver[ed] up a perfect Ballance of all the said accompts unto the Company, by the last day of June yearely" [Lawes, 1621, p. 70].

Despite management efforts to meet the financial reporting requirements, delays in preparing the yearly balance of accounts were not uncommon. There is ample evidence in Company minutes to indicate that delays in producing the yearly financial report resulted from four distinct factors. First, there was the problem arising from the long communication lines between the home office and the East Indies. Second, the bookkeepers of warehouses and other operations were more often than not both late and deficient in providing the Accountants General with the requisite data [Sainsbury, 1862-92, 156, July 1, 1625]. Third, there was a certain amount of confusion in the accounts resulting from incomplete voyages, each with its separate "remains" and differing lists of shareholders [Scott, 1968, Vol. 2, p. 111]. Fourth, a most serious problem for accounting arose from the simultaneous running of various voyages which made it difficult for the Accountants General to keep the activities of the various trading ventures distinct and separate from each other [Scott, 1968, Vol. 2, p. 109].

Delays in presenting the yearly balance of accounts to the shareholders gave rise to suspicions concerning the reliability of accounting figures in general. Many of the shareholders maintained that management were their delegates and should, therefore, keep them abreast of the Company's state of affairs. They also demanded that all matters of importance be referred to them for decision. It was not uncommon for shareholders to take the liberty "to come into the Accountants' and Auditors' offices to peruse the Company's letters and accounts" [Sainsbury, 1862-92, 633, December 24, 1634].

Suspicion regarding the reliability of accounting information rose to a high point in 1634 when, at a shareholders' meeting, it was proposed that a special committee of twelve shareholders be appointed to examine the Company's accounts. This idea was rejected with contempt by management [Sainsbury, 1862-92, 622, November 21, 1634]. The continual delays in reporting, coupled with the absence of independent "investigation" or audit, were reasons enough to shed serious doubts on the validity of the financial statements. Today, the historian is also aware of a management decision (1635) to conceal the Company's indebtedness from the shareholders [Scott, 1968, Vol. 2, pp. 111-2]. Whether the management had fraudulent intent or not, such concealment cannot be regarded in the shareholders' interests.

TWO EXTANT FINANCIAL STATEMENTS

Although the East India Company's first archival period (1600-1663) is marked by an absence of accounting materials such as journals, ledgers, etc., a small number of statements have escaped destruction and found their way to the India Office Library and Records in London. Of these, two are of singular interest. The first is an *account of profit and loss* of the Second Joint-Stock (1617-1632) prepared some nine years after the termination of the venture (Exhibit A). The second is a *balance of accounts* of the Third Joint-Stock (1632-1642) dated April 30, 1641; it was prepared two months ahead of the annual closing date, June 30, unless by this time the earlier closing date was moved two months forward (Exhibit B). These financial statements are unedited copies of the original documents.

Profit and Loss Statement of the Second Joint-Stock

This joint-stock, which began operation in 1617 and lasted for fifteen years, turned out to be a near disaster. The records show that nine hundred and fifty-four persons had subscribed to this stock a total amount of £1,629,040. This capital was to be paid over a period of eight years, that is, in eight equal installments of 12½% or £203,630 each year [Scott, 1968, Vol. 2, p. 104; Chaudhuri, 1965, p. 209]. Because of Anglo-Dutch hostilities during the early years of this stock, the English East India Company suffered great losses. As a result of these losses, the Company found it necessary to call up two installments in 1619 [Chaudhuri, 1965, p. 219]. Despite efforts to ameliorate the financial situation of this joint-stock, matters became worse with time. The acute problems of maintaining liquidity forced the Company to borrow heavily, since the shareholders became increasingly reluctant to make their regular payments. According to Company investigation, the causes of failure were four [Chaudhuri, 1965, p. 218]:

> First, the injurious proceedings of the Dutch; secondly, the extraordinary charge of shipping for defence of the trade; thirdly, the great interest that hath lain upon the Stock from the beginning; and fourthly, the loss of ships at sea.

The account of profit and loss prepared for the Second Joint-Stock several years after its termination highlights some of the causes of this failure. Prepared around 1640 and paradoxically entitled "The Success of the Second Joynt Stocke breifly valued," this statement appears to have been produced in response to a motion passed at a meeting of the Board of Directors, held on November 9, 1640. In part, the minutes read [IOR: B19, pp. 337-8]:[1]

> . . . a mocon was made to keepe an accompt of proffitt and losse (as p[ar]ticular men doe) whereby it may appeare to any [that] doubts thereof what the true reason was why the said stock did not prove so profitable as was expected . . .

From these minutes it is quite clear that the main purpose of this financial statement was to help vindicate the Board of Directors from any imputation of bad management. The users of this report were likely to be members of Parliament as well as present and prospective investors.

The 1621 bylaws of the Company contain no requirement to prepare a profit and loss statement. The only reference to profit and loss is in connection with an account by that name kept in the "Accompt proper" ledger. This ledger account was thought of as a

EXHIBIT A

THE SUCCESS OF THE SECOND JOYNT STOCKE
BREIFLY VALUED

The Adventurers of the Second Joint Stocke subscribed and paid the some of	1502756 8 5	There was devided and paid unto the Adventurers in the Second Joint Stocke for theire principall and proffitt the some of	1690597 3 5
		There was loss by shipwrake in 8 shipps namely the Whale, Lyon, Sunn, Moone, Hope, Tryall, Unicorne, and Maurie as by the p'ticulars may appeare	384000 0 0
		There was lost in the Argier action	10000 0 0
		There was lost by p'tnershipp with the Muscovia Companye	25877 0 0
		There was expended in the Treaty with the Dutch in Anno 1632	14370 0 0
		The Company paid 22000 l. for assisting the Persians to take Ormus	22000 0 0
			2146844 3 5
		More the losses and damages done the Company by the Dutch as by the p'ticulars exhibited to the Lords Comissioners of the Treaty in Anno 1622 the sume of 1116000 l. whereof onely 80000 l. was restored by the Dutch, because of the Treaty of Anno 1619 they were onely bound to pay that which they did really possess and not that which they had suncke, burned or otherwise damnified whereby the Company did loosse all theire damages which were	1036000 0 0
		More since the said Treaty of Anno 1622 the lossess and Damages which the East India Company have susteyned by the Dutch are £891996. 0. 0 as by the p'ticulars delivered to Mr. Secreatary Windibancke the 15 March 1638 to bee sent to Sr. William Boswell his Ma'tie Embassador with the Lords the States Gannerall of the United provinces	891996 0 0
			4074840 3 5
			1502756 8 5
			2572083 15 0

The whole summ which the Company have devided and paid unto the Adventurers togeather with the losses and damages susteyned doe amount in all Fower millions seaventy fower thousand eight hundred and forty pounds besides our p'tes of the Mace Nuttmeggs and Cloves uppon the Iselands of the Molucoes Banda and Amboina which the Dutch have wrongfully keapt from us many yeares; which may bee valluad at a greate summ of mony; And other losses alsoe by bad deabts and the like both in England and in the Indies, which are not here specified.

Source: IOR: Home Miscellaneous Series, vol. 39, p. 159.

clearing account and accordingly, the accountants were instructed to "cleare no Accompt or Voyage, till the same be fully accompted for, and shall also in this Accompt passe unto every man his profit or losse, as the Stocke generally shall produce" [Lawes, 1621, p. 76]. In light of this evidence, it can be said that the preparation of the statement, "The Success of the Second Joint Stocke breifly valued," was in all likelihood an exception rather than a regular practice of the Company during this period.

Now, although this statement appears to be in T-account form, in fact it is not. It has no balancing entry and, therefore, no debit and credit totals of equal amounts. In essence, this statement is in report form. The information contained on the right-hand side, except for a missing caption, is complete. The missing caption is "The Adventurers of the Second Joint Stocke subscribed and paid the some of" to appear against the amount of £1,502,756 8s. 5d., second figure from the bottom. This figure is also highlighted on the left side of the statement.

Immediately above this figure is a total amount of £4,074,840 3s. 5d. which according to the footnote represents (1) the amount "devided and paid unto the Adventurers;" and (2) "the losses and damages susteyned" by the Joint-Stock. The amount distributed to the shareholders, £1,690,597 3s 5d., is made up, as it is to be expected, of the original investment, £1,502,756 8s. 5d., and the profit earned, £187,840 15s. 0d. This profit—a return of 12½% over a period of fifteen years or slightly over eight-tenths of 1% per year—was not actually distributed. The shareholders were promised a division of 12½% out of the profits of the Third Joint-Stock in return for the transfer of their remaining stock in the Indies to the latter [Chaudhuri, 1965, p. 218]. The rest of the items which add up to £2,384,243 represent losses, damages, and military and diplomatic expenditures incurred by this joint-stock. A figure of £2,146,844 3s. 5d. appearing after the sixth item from the top is a sub-total, perhaps inserted there to facilitate the addition of the subsequent amounts.

What does the last figure on the statement, £2,572,083 15s. 0d., represent? Since it is the difference between the original investment and the amount to which the original investment could have grown, that is, £4,074,840 3s. 5d., it can be designated as revenue. When the total amount of losses, damages, and military and diplomatic expenditures, £2,384,243, is subtracted from the revenue figure of £2,572,083 15s. 0d., the profit figure of £187,840 15s. 0d. is obtained.

Finally, the latter part of the footnote indicates that other items relevant to the Second Joint-Stock such as "mace, nuttmeggs and cloves . . . which the Dutch have wrongfully keapt" and losses from bad debts, both in England and in the Indies, have been left out of consideration in the preparation of this financial statement. It is not known why the management of the East India Company chose to exclude the bad debts from the body of the statement.

Balance of the Estate of the Third Joint-Stock

After the heavy losses suffered by the Second Joint-Stock, there was clearly a lack of confidence on the part of the small investors in conducting trade under this form of business organization, the incorporated joint-stock company. Many adventurers wanted to adopt the practice of the regulated companies. In a regulated company, each adventurer retained his personal independence by trading on his own account, that is, making his own investment decisions [Cawston and Keane, 1968, pp. 10-2; Davis, 1961, Vol. 2, pp. 66-113]. But the principal merchants were unwilling to abandon the joint-stock arrangement. As a compromise, the Company reverted to the system of *ad hoc* expeditions. Under this system, stock was issued for single voyages as opposed to a series of voyages which are referred to as "joint-stock." There were three *ad hoc* voyages before the Company convinced the adventurers of the wisdom of operating on a joint-stock.

In 1632, the Third Joint-Stock was established. In order to avoid confusion in accounting for the various stocks running simultaneously (three single and one joint-stock), a matter which had been a source of embarrassment to the Company in earlier years, it was decided to combine the undistributed assets of the three voyages, known as the Persian Voyages, with the Third Joint-Stock in 1634 [Scott, 1968, Vol. 2, p. 126; Chaudhuri, 1965, p. 221]. This Joint-Stock (1632-1642) operated on a capital of £420,700. When the account books of the Third Joint-Stock were finally closed, the total division came up to 135%, that is, a profit of 35% over a period of ten years or 3.5% per year [Scott, 1968, Vol. 2, p. 127; Chaudhuri, 1965, p. 209].

During its meeting of November 9, 1640 when the Board of Directors passed a motion "to keepe an accompt of proffitt and losse" for the Second Joint-Stock, it was also decided that [IOR: B19, pp. 337-8][2]

> a colleccon [be] made of all the losses that have been advised out of the Indies to have befalled the third stock soe

> [that] reason may be given why [this] stock also hath not hither to be produced such proffitt as otherwise it might have done . . . .

The purpose of this motion was similar to that made for the Second Joint-Stock and, therefore, one would expect to find a similar statement of profit and loss prepared for the Third Joint-Stock. Investigation of the archives of the East India Company has not turned up such a statement. Instead, there is a statement known as "balance of accounts," the predecessor of the present day balance sheet. This balance of accounts is entitled, "Ballance of the Estate of the 3d Joint Stock taken to the fine of April 1641 continewed and encludinge the Crispiana."

As indicated in Article 306 of the Company's bylaws, the Accountants General were expected to prepare a balance of accounts as of June 30 of each year. This particular statement, prepared in July 1641, represents the financial status of the Third Joint-Stock as of April 30, two months ahead of the specified closing date. The early closing may have been the result of a special request made by the shareholders or a revision in the closing date.

As one would expect, the statement is in T-account form. However, it may be surprising to see the left side of the statement representing the Company's liabilities and the right side, the assets. This reversal of positions may be explained by the meaning of two critical terms: "debitor" and "creditor." "Debitor" is derived from the Latin *debitor* and Middle French *debiteur;* its modern equivalent in English is "debtor." Accordingly, the heading of the left side reads: "The Estate of the third Joint Stock is debit[or]," meaning "debtor" or "one who owes a debt." Under such a heading, one would expect to find a listing of the entity's debts. "Creditor" is derived from the Latin *creditor* and Middle French *crediteur.* "Creditor" is also in use today with its meaning unchanged, that is, one who gives credit in business matters and, therefore, one to whom money is due. It is opposed to "debtor." Accordingly, the right side reads: "The Estate of the third Joint Stocke is Creditor," meaning "one to whom money or other asset is due." Under this heading, one would expect to find a listing of the entity's assets. The linguistic explanation offered here must necessarily be taken as tentative.[3] Aside from this major division, the statement reflects no other classification.

The assets of the Third Joint-Stock are composed of bills, bonds, and other receivables, £260,624; cash and merchandise inventory,

EXHIBIT B

Ballance of the Estate of the 3d Joint Stock taken to the fine of Aprill 1641
continewed and encl udinge the Crispiana

The Estate of the third Joint Stocke is Debit[or]

Ffor the principall debt oweinge att Interest the fine of Aprill 1641	267152	0	0
Ffor Interest of 267000 for 6 mos att 7 per cent	9345	0	0
Ffor Somuch remaneth to make good 75 per cent to the Adventurers	56565	0	0
Ffor subsidue Impost fraight and provisions	20998	0	0
Ffor somuch is oweinge to the Adventurers in the Second Joint Stock and vyadges	4606	0	0
Ffor the discompts in May and June estimated	1000	0	0
Ffor the wages of the Crispina	2000	0	0
Ffor the subsidue and Impost	10000	0	0
Ffor Charges in unladeing	200	0	0
Ffor somuch paid William Hurt in May	600	0	0
Ffor gratuetyes	1500	0	0
Ffor sallaryes	350	0	0
Ffor 14 mos discompt of 120000 l. att 8 per cent	12200	0	0
Rest att present towards a fourth devision	72185	13	4
Some amounts	458701	13	4

The Estate of the third Joint Stocke is Creditor

By somuch is oweing by bills bonds etc.				260624	0	0
Per remaine in Cash	3718	0	0			
Per remaine of Callicoes 84940 peeces	40196	0	0			
Per remaine in John Blount as Cloves	10745	0	0			
in the Exchange Cellar	2830	0	0			
in Saltpeeter etc.	4040	0	0			
in Blackwall	9041	0	0	70570	0	0
Per the Carga of the Crispina as foll[oweth]						
Silke 68378 lb. att 16 s.	54702	08	0			
Indicoe Lahor 110000 lb. att 6 s. 8 d.	36666	13	4			
Cirques 8400 lb. att 5 s.	2100	0	0			
Callicoes 50000 peeces	25000	0	0			
Pepp[er] 120000 lb. att 16 d.	8000	0	0			
Alloes Cicatrina 1100 lb. att 4 s.	220	0	0			
Olibanum 640 lb. att 18 d.	48	0	0			
Mirh 1216 lb. att 2 s.	121	12	0			
Quiltes 41 att 40 s.	84	0	0			
Cotton yarne 2400 lb. att 2 s.	240	0	0			
Gumlack 65 Co. att 5 l.	325	0	0	127507	13	4
Some amounts to				458701	13	4
Some per Contra				72185	13	4
In Venice etc more than is allowed above				9000	0	0
				81185	13	4

Source: IOR: Home Miscellaneous Series, vol. 39, pp. 161-162.

£70,570; the cargo of the *Crispiana,* £127,507 13s. 4d., total assets, £458,701 13s. 4d. The liabilities include: money borrowed at interest, £267,152; six months' interest on £267,000[4] at 7%, £9,345; "division" payable to shareholders, £56,565; subsidy, impost, freight, and provisions payable, £20,998; due to the adventurers in the Second Joint-Stock and voyages, £4,606;[5] other liabilities (item 6 "for the discompts in May and June estimated" through item 13 "for 14 mos discompt of 120000 l. att 8 per cent"), £27,850. Total liabilities, not shown on the statement, amount to £386,516. The last item represents the net assets, or what is available for distribution to the shareholders "towards a fourth devision," namely, £72,185 13s. 4d. A footnote on the right side discloses the existence of additional assets in Venice amounting to £9,000, which added to the balance of this statement brings the net assets to £81,185 13s. 4d. There is no reason given why assets worth £9,000 are excluded from the body of the statement.

EVALUATION

From the study of the financial statements and related Company minutes, conclusions can be drawn in two areas of interest: (1) reliability of the Company's statements; and (2) conceptual framework underlying the financial statements.

With regard to the reliability of the Company's statements, one cannot but conclude that there existed sufficient evidence to question the validity of information presented in the financial statements. The continual delays in reporting; management's refusal of an independent audit; and management's decision to conceal the Company's indebtedness from the shareholders are surely reasons enough to shed serious doubts as to the reliability of the financial statements produced during this period.

Analysis of "The Success of the Second Joint Stocke" clearly demonstrates the absence of a framework such as that of a profit and loss statement. To produce a profit and loss statement, figures for total revenues, total expenses/losses, and the resulting profit or loss must be presented in a recognizable manner. These pieces of information are absent from this document, and the statement must be reworked in order to determine them. In this context, the term "profit and loss" is a misnomer. Other than providing discrete information on a variety of items such as invested capital, losses, damages, military and diplomatic expenditures, the statement as a whole seems to be the product of an uncertain conceptual framework.

The balance of accounts was the forerunner of the modern balance sheet or statement of financial position, or condition. Then as now, the heading of the statement consisted of three principal parts: name of the enterprise (Third Joint Stock); title of the statement (Balance of the Estate); and the date of the information shown (End of April 1641). As might be expected, the statement appears to assume the T-account form, but a close look at the headings of each side helps us realize that this statement does not follow the T-account rule, debits on the left and credits on the right. Instead, the left side is used to show to whom "the Estate of the third Joint Stocke is Debit [or]," and the right side, the things over which the entity had claims or rights, "the Estate of the third Joint Stocke is Creditor." This form is still used in Britain on those occasions when a balance sheet is presented in account form. It may be noted that the shareholders' equity does not constitute a separate category on the balance of accounts. However, it can be distinguished from other liabilities because it is not preceded by the preposition "for" and is also referred to as "balance," namely, the difference between what is owned by the Company over what it owes to outside creditors.

Joint-stock companies found it necessary to produce financial statements. Known as "balance of accounts," these statements were prepared periodically for the benefit of shareholders who had no direct access to the companies' books. The two financial statements analyzed in this paper attest to the early efforts of the East India Company to meet this demand. If the conceptual basis of the first of these statements is unclear, the second can be viewed as a prototype of the present day statement of financial position.

FOOTNOTES

[1]Sally Hofmann to author, June 16, 1982.

[2]*Ibid.*

[3]For another view on this issue, see Yamey.

[4]The actual figure of £267,152 is rounded here to the nearest thousand pounds sterling.

[5]Some nine years after the termination of the Second Joint-Stock, this amount was still unpaid.

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A CHRONOLOGY OF THE DEVELOPMENT OF CORPORATE FINANCIAL REPORTING IN CANADA: 1850 TO 1983

Abstract: A chronology of significant events in the development of corporate financial reporting standards and practices is presented. The introductory comments to the various sections direct attention to some of the main patterns and trends in that development and provide the framework in which the listing of events is to be interpreted. The particularly significant domestic sources of influence are the legislative and professional activities in Ontario and, in more recent times, the activities of the Canadian Institute of Chartered Accountants. External influences have been—not unexpectedly—the traditions of English Company law and the close professional, institutional and economic relationships with the United States. Some internationally significant developments unique to Canada are indicated.

INTRODUCTION

A few introductory comments to the chronology are useful in suggesting some of the broad themes that characterize the whole of the evolution of corporate financial reporting in Canada and in providing a background or setting to aid interpretation. The chronology itself has four divisions each of which in turn are preceded by interpretive comments.

The evolution of financial reporting in Canada has developed within the framework of both British and American influence. The traditions of English law and, more particularly, the model of using the Companies Acts to improve financial statement reporting practices have provided an ever-present guideline. Prior to the turn of the century, actual legislated reporting requirements followed the English statutes quite closely; since that time, the Canadian requirements have generally been well in advance of those of

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England. Since the 1920s and 1930s, Canadian reporting practices and standards have been much more significantly influenced by the United States. That influence has been felt through the importance, proximity and articulateness of the American accounting profession, the edicts of the Securities and Exchange Commission (SEC), the American parent-Canadian subsidiary relationships of many corporations, and the close ties amongst international public accounting firms.

Though Britain and the United States have been very important in this evolution, Canada has not been dominated by their influence. Indeed the virtually unrestricted government delegation of standard setting authority to the profession (i.e. to the Canadian Institute of Chartered Accountants (CICA)) sets Canada apart and speaks to the uniqueness and significance of the Canadian development. Of major importance in the tradition of this development was the early organization and leadership of the Institute of Chartered Accountants of Ontario (ICAO), the vigor and interest of the Office of the Provincial Secretary of Ontario, the untarnished prominence and strength of the CICA and the Canadian good fortune in having few corporate scandals—relative to the United States and Britain—that redounded to any enduring discredit of the accounting profession. Indeed, in light of this background this unrequested delegation of authority to the profession was not unpredictable.

As the chronology demonstrates, a great deal of required disclosure existed in the last third of the nineteenth century for such "regulated" enterprises as banks, insurance and savings companies, and railway and municipal corporations. Generally, however, it was not until the turn of the century that the various incorporating jurisdictions began to place exacting reporting demands on commercial, industrial and mining corporations. Most of these latter companies have sought federal rather than provincial incorporation from the earliest decades of the century and have therefore been subject to that jurisdiction's reporting requirements. In significant ways, however, for much of this century, and by virtue of the concentration of financial and industrial power in Ontario, and the leadership of the ICAO, Ontario has been in the vanguard of financial reporting improvements in matters relating to corporate legislation. For example, the financial statement disclosure requirements of the federal legislation of 1917 and 1964/65 were, respectively, virtual copies of the 1907 and 1953 Ontario Statutes. In turn, the Ontario legislation had followed directly from ICAO recommendations. The 1907 Ontario legislation is significant in the evolution of corporate disclosure because it is one of the earliest statutes in the English-speaking world to make detailed financial statements mandatory for commercial and manufacturing companies, and also because it is one of the earliest occasions in which an accounting organization has demonstrated its influence on disclosure legislation. Though, at the provincial level, the Association of Accountants in Montreal was the first accounting association organized in Canada or the United States, much of its energy in early times was devoted towards sorting out severe anglophone-francophone and Montreal-nonMontreal differences, rather than making improvements in financial reporting.

The overriding criteria for inclusion of events in the chronology is whether such events form part of (and support) the three major themes running through the evolution of Canadian financial reporting: firstly, the tradition over the whole period, of working for change within the framework of provincial and federal corporation laws; secondly, the recognition of the dominant influence of the ICAO and more recently the CICA in setting directly or indirectly the standards for corporate reporting practices; and thirdly, the acknowledgement, largely owing to public awareness, of serious concerns in the 1960s, that uniformity and consistency in reporting practices would be aided by the delegation of standard setting to the CICA. An integral part of the chronicle includes concern for the institutions around and within which corporate financial reporting has developed and the professional and academic writing which has influenced that development. Each of the CICA accounting and auditing Recommendations commencing in 1946 is listed in order to provide the record of standards that have been promulgated over the years and to provide a basis for international comparison. Those CICA Research Studies that have been most frequently cited or that have been the basis for standards are also included.

The chronology is usefully divided into the following periods and is preceded by interpretive comments:

Early public accountability and organization	1850 - 1885
Professional emergence	1885 - 1920
Consolidation of characteristic features	1920 - 1960
Delegation of standard setting	1960 - 1983

Early Public Accountability and Organization: 1850 - 1885

This period is distinguished by the emerging tradition for the widespread disclosure of the financial affairs of such "regulated" industries as banks, insurance and savings companies, railways and municipal corporations, and undoubtedly, this strong tradition provided an influencing background for the legislated disclosure requirements for general commercial and industrial companies that later took place in the early decades of the twentieth century. The stock exchanges and accounting associations which would later be so influential were formed during this period.

1850 The first general Companies Act permitted incorporation by registration with a County Registrar and the Provincial Secretary. The liability of shareholders was "joint and several" until total authorized capital had been paid in (altered in 1864) [Consolidated Statutes, Ch. 28, Sec. 11]. Manufacturing, mining, mechanical and chemical companies required to publish in newspapers a report stating "the amount of stock of the company, the proportion thereof then actually paid in, together with the amount of the existing debt of the company" [Consolidated Statutes, Ch. 28, Sec. 13].

Banks required to forward to the Inspector General "a full and clear statement of assets and liabilities," such statement to be published by the Inspector General "in such a manner as he thinks most conducive to the public good" [Consolidated Statutes, Ch. 21, Sec. 30].

1851 Railway companies required to file with the three branches of the Legislature "a detailed and particular account . . . of the moneys received and expended by the company" [Canada, Statutes, Sec. 22].

1855 An Act relating to the auditing of the public accounts required establishment of a Board of Audit composed of the Deputy Inspector General, the Commissioner of Customs and an appointed auditor to report on all government departments, banks and institutions funded by public moneys [Canada, Statutes, Secs. 1-6]. Municipalities with loans outstanding to send annually "a true account of all debts and liabilities" to the Board.

1864 General incorporation by letters-patent introduced with liability limited to amount payable on shares [Canada, Statutes, Secs. 1, 27 & 28].

1866 Municipal institutions of Upper Canada (later Ontario) required to appoint two independent auditors, and to prepare an abstract of receipts, expenditures, assets and liabilities to be filed with the Municipal Clerk. Abstract to be open for inspection and published as Municipal Council directs. Municipal clerk to file detailed statement of transactions with Provincial Secretary [Province of Canada, Statutes, Secs., 156, 157 & 169].

1868 Life, Fire and Guaranty Insurance companies required to forward annual statement listing assets, liabilities, revenues and expenditures to Minister of Finance. Such statement to be published in the Canada Gazette and to be laid before Parliament. Exemptions provided for certain insurance companies established in the United Kingdom and which were not bound by the laws in force there to furnish or publish statements of its affairs [Canada, Statutes, Secs. 14 & 15].

1874 Montreal Stock Exchange incorporated [Quebec, Statutes].

1876 Ontario Building Societies Act required appointment of auditors and the forwarding annually of a "full and clear statement of assets and liabilities" to the Provincial Treasurer—the latter to publish "in such a manner as he thinks most conducive to the common good" [Ontario, Statutes, Secs. 18 & 19].

1877/ 1902 Canada Joint Stock Companies Act required "directors of every company to lay before its shareholders a full and clear printed statement of the affairs and financial position of the company at or before each general meeting" [Canada, Statutes, Sec. 87]. 1902 legislation required general meetings to be held annually [Canada, Statutes, Sec. 88].

1878 Toronto Stock Exchange incorporated [Ontario, Statutes]. Legislation established Office of the Auditor General of Canada [Canada, Statutes, Secs. 11-24].

1879/80 Organizing meeting of the Association of Accountants in Montreal held 11 June 1879 [Mann, p. 24]. Association incorporated 24 July 1880—the first formal organization of accountants in Canada and the United States [Quebec, Statutes, Ch. 88]. The Association later renamed the Institute of Chartered Accountants of Quebec in 1927 and since 1978, l' Ordre des comptables agréés du Québec [Collard, p. 71].

1879/83 Organizing meeting of the Institute of Accountants and Adjusters—later renamed the Institute of Chartered Accountants of Ontario (ICAO)—held November 11, 1879 [ICAO Minutes]. Institute incorporated in 1883. The incorporating statute specified the Institute as "an intellectual and education movement to raise the standard of accountancy" and empowered the Institute to "establish classes, lectures and examinations." This legislated mandate was very likely the stimulus for the subsequent energy and prominence of the ICAO [Ontario, Statutes].

1881 The leading financial journal, *The Monetary Times,* commenced tradition of reporting at length (often verbatim) on such ICAO activities as proceedings of annual meetings, questions and answers to exams, and papers delivered at regular meetings [ICAO Minutes: March 22, 1881; November 4, 1885; November 25, 1886; April 19, 1888].

Professional Emergence: 1885 - 1920

The activities and competence of the ICAO and its membership became very visible during this period through educational programs and examinations, lobbying activities, text book writing and prominence as auditors of most major corporations. Honorary Fellowships in the Institute were awarded to the Provincial Secretary, the Assistant Provincial Secretary, the editor of the *Monetary Times* and to a prominent member of the Ontario legislature later to become the Lieutenant-Governor of the Province. The Office of the Ontario Provincial Secretary, which was in charge of corporate affairs, deferred to the Institute with regard to the pace-setting financial statement disclosure requirements of the provincial corporate legislation of 1907. The most influential personalities in this legislation, George Edwards, an ICAO President and Thomas Mulvey the Assistant Provincial Secretary, later installed equivalent disclosure requirements at the federal level in 1917.

Though there was some concern for financial statement disclosure in such regulated areas as insurance and banking (see 1907 and 1913), the general corporation disclosure requirements at the provincial Ontario level in 1907 and at the federal level in 1917 were more likely prompted by abuse in stock promotion rather than by concern over disclosure deficiencies. Influential in the tradition for high levels of disclosure were the Toronto Stock Exchange, which encouraged the publishing of annual compilations of all listed corporate financial statements, and the financial press itself.

This period also saw the establishment of the prominence of the ICAO and of the use of the vehicle of the Companies Act to improve corporate reporting practices.

1886 Incorporation of the Institute of Chartered Accountants of Manitoba [Manitoba, Statutes]. (Other provincial Institutes of Chartered Accountants organized and incorporated in early part of twentieth century).

1888/ 90/1902 ICAO commenced tradition of submitting briefs and making representations to legislative bodies—in 1888 to the Provincial Secretary relating to municipal accounting [ICAO Minutes, April 19]; in 1890 to the federal Finance Minister relating to the duties and qualifications of bank auditors [ICAO Minutes, March 21]; and in 1902 to the Secretary of State relating to the Dominion Companies Act [Ontario Archives, RG8 1-1-D File 3240].

1892 Ontario Insurance Act required appointment of auditors to furnish statements of assets, liabilities, income and expenditures to members and to Provincial Registrar [Ontario, Statutes, Sec. 29].

1892/ 1907 Publication of several widely-used Canadian accounting texts, some through several editions: *Expert Book-keeping,* C. A. Fleming [1892]; *Manual for Accountants,* W. C. Eddis [1899]; *Canadian Accountant,* S. C. Beatty and J .W. Johnson [1908]; *Canadian Standard Book-keeping,* J. W. Westervelt, and *Municipal Accounting,* F. H. Macpherson; [as indicated in ICAO Yearbook 1898, p. 20]; *Bookkeeping For Joint Stock Companies,* D. Hoskins [1901]; *Joint Stock Company Accounts,* D. Hoskins [1907].

1893 ICAO sought out and accredited various colleges and schools in Ontario to provide introductory level of public accounting competency. Ontario Business College, Belleville; Kingston Business College, Kingston; Northern Business College, Owen Sound; St. Thomas Business College, St. Thomas; Pickering College, Pickering; Upper Canada College, Toronto; and British

American Business College, Toronto [ICAO Minutes and ICAO Yearbook, 1989, p. 33].

1894 Senate Debates emphasized the importance of the public's right to have greater information about the financial affairs of the large commercial and manufacturing firms [Canada, Senate Debates, June 13, pp. 523-524].

1894/ 1907 J. D. Warde an employee of (and with the support of) the Ontario Provincial Secretary's Office authored through seven editions *The Shareholders' and Directors' Manual* which recommended full disclosure in financial statement presentation and put forward as a model the balance sheet format prescribed by Table A of the 1862 U.K. Companies Act [Warde].

1897 Fellows of the ICAO recognized in provincial legislation as being suitable for municipal audit work [Ontario, Statutes, Ch. 48, Sec. 1].

Companies Act of Province of Ontario required directors to present to annual general meeting a statement of income and expenditure. Inspection provisions on shareholders' request and with approval of courts instituted [Ontario, Statutes, Ch. 28, Sec. 75]. Provisions in draft bill of 1896 relating to mandatory audit and revenue and expenditure statement and balance sheet in form prescribed by Table A of 1862 English Companies Act dropped in 1897 legislation [Ontario, Bills, Sec. 89], because such provisions would be too onerous for smaller firms [Ontario Archives, RG8 1-1-D].

1900/ 02/07 ICAO standards recommended by the *Monetary Times* for all public accountants [*Monetary Times,* Sept. 14, 1900, p. 841]. ICAO Presidents proclaimed the Institute to be the "leading and recognized head of the accounting profession on the continent" [ICAO Minutes, July 18, 1902] and after returning from meetings of the American Association of Public Accountants, that the "Ontario Institute is certainly far in advance of any of the State Associations" [ICAO Minutes, July 1907].

1900-40 Publication of annual anthology—*The Annual Financial Review, Canadian*—of financial statements of corporations listed on the Toronto Stock Exchange by the long-time Assistant-Secretary of the Exchange, W. R. Houston [1901-1941]. This anthology provided widespread publicity of corporate financial statements. Though the Exchange likely encouraged such publication, its listing provisions as late as 1970 required only that annual corporate financial statements be disclosed "in customary form" [Toronto Stock Exchange, 1960, By-law 63].

1902 Incorporation of the Dominion Association of Chartered Accountants (DACA) [Canada, Statutes, Ch. 58]—later renamed the Canadian Institute of Chartered Accountants (CICA).

1904/10 Companies Act of the province of British Columbia 1904, required annual audit and submission to shareholders' meeting of detailed income and expenditure statement and balance sheet. The form and contents for income and balance sheet disclosure identical to the optional clauses of Table A of the 1862 U.K. Companies Act [British Columbia, Statutes]. This detailed financial statement disclosure reduced in the 1910 Act to conform to the 1907 U.K. Act requirement of "a summary of capital, liabilities and assets giving such particulars as will disclose the general nature of those liabilities and assets and how the values of the fixed assets have been arrived at" [British Columbia, Statutes].

1904 Appointment of T. Mulvey as Assistant Provincial Secretary in Ontario. Held position until 1909 when he became the Under Secretary of State in the federal government. Influential in promoting the 1907 Ontario and 1917 Canadian Companies Acts and the financial statement disclosure requirements therein.

1905 Election of Premier J. P. Whitney's Conservative but "progressive" and reform-minded government in Ontario heralded significant changes in legislation relating to health and education, workmen's compensation, hydroelectric utilities, and mining, commercial and manufacturing companies [Humphries, 1966].

1905/12 Toronto Stock Exchange Regulations called for "a full statement of the affairs of the company" upon listing application [Toronto Stock Exchange By-laws, 1905, 1912, Rule 26].

1906/07 ICAO under the leadership of George Edwards made recommendations with respect to financial statement disclosure to the Provincial Secretary [ICAO Minutes, February 8, 1906]. Provincial Secretary and Assistant Provincial Secretary of Ontario Government attend Institute meeting to solicit and receive comments on draft companies act legislation [ICAO Minutes, January 18, 1907].

1906/11 Rash of seven bank failures provokes concern for independent compulsory audits [Bank Audit . . . , 1911, p. 24]. *Journal of Accountancy* acknowledges competence and ability of Canadian profession to undertake such audits [Bank Examinations . . . , 1909, pp. 41-42]. (In the United States in 1902, the Report of the Industrial Commission had indicated "that no independent group of technically qualified professionals was available to perform the necessary audits (of large corporations) [Previts, p. 135].)

1907 Royal Commission on Insurance alerted financial community to abuses in accounting practices of Insurance companies [Canada, Royal Commission on Life Insurance]. However, more generally, the *Financial Post* praised Canadian corporate disclosure—"nearly all the most important companies have adopted a straight forward policy of publicity of earnings and condition" [Financial Post, February 16, p. 1].

Ontario legislation levied 3% tax on mining company income in excess of $10,000 [Ontario, Statutes, Ch. 9, Sec. 6(1)].

Companies Act of the Province of Ontario required, for presentation to shareholders at annual general meeting, a revenue and expenditure statement and balance sheet—the latter required the distinguishing of various asset, liability and equity accounts. Mandatory balance sheet (not income statement!) audit and prospectus provisions also legislated. Financial statement disclosure provisions were direct copies of ICAO recommendations and were well in advance of comparable statutes in Britain and the United States. This legislation reflected one of the earliest occasions in which an accounting association was so directly influential [Ontario, Statutes, Ch. 34, Secs. 36, 97, & 123].

1908/10 Wave of industrial mergers took place forming the basis of many of the existing large Canadian corporations [Skelton, pp. 259-261].

1908/13/21 The Certified General Accountants' Association founded in Montreal in 1908 and chapter formed in Toronto in 1921; federally incorporated in 1913 [CGA—Quebec, p. 50].

1909/10 Jurisdictional disagreements resolved between provincial institutes of Chartered Accountants and Dominion Association of Chartered Accountants with membership in DACA now automatic for, and restricted to, members of provincial institutes [Creighton, pp. 62-65].

1911 *The Canadian Chartered Accountant* first published. Name later changed to *CA Magazine* in 1973.

1913 Following a series of bank failures, the Bank Act prescribed mandatory balance sheet and income statement audits [Canada, Statutes, Sec. 56].

1914/17 Agreement reached that graduates of École des Hautes Études Commerciales de Montréal who had passed a special Licentiate examination would be admitted to membership in the Association of Accountants in Montreal. In 1917, the Association made arrangements to have their students taught in evening courses at McGill University [Collard, pp. 109, 116].

1916/17 Canadian legislation initiated taxes on income and business profits [Canada, Statutes, 1916 and 1917]. Depreciation based on historical cost accepted for tax purposes [Breadner, p. 108]. This practice tended to officially recognize what had become accepted accounting practice.

1917 The Federal Reserve Board's "Uniform Accounting" was reprinted in *The Canadian Chartered Accountant* and recommended as a guide for Canadian usage [*Uniform Accounting,* July 1917, p. 49].

Model set of financial statements with comments proposed by leading ICAO member, George Edwards, in *Dominion Company Law* by Thomas Mulvey [pp. 54-56], with elaborate emphasis on income statement components of sales, cost of sales, interest, taxes, depreciation and management, selling and general expenses.

1917/20 Canadian Companies Act required prospectus, financial statement and auditor provisions similar to those of the 1907 Ontario legislation [Canada, Statutes, 1917, Sec. 105]. Identical financial statement and auditor provisions introduced in Quebec legislation of 1920 [Quebec, Statutes, Secs. 6024-6024a].

Consolidation of Characteristic Features: 1920 - 1960

The inter-war and post-war years saw the resolution of problems in corporate reporting handled through the now-established traditions of Companies Act legislation and ICAO/CICA leadership. Relatively modest changes in financial statement disclosure requirements accompanied provisions circumscribing the indigenous corporate stock promotion and capitalization abuses of the late 1920s in the Companies Acts legislation of 1934 and 1935. Similarly, growing concerns in the immediate post-war years for improved disclosure led to the introduction of the first CICA standards. The important Ontario disclosure legislation of 1953 was not prompted by any corporate scandals or widespread discontent but simply reflected a raising of former legislated minimums (of 1907) to the new CICA promulgated standards. The 1964-65 federal Companies Act was almost a direct copy of this provincial legislation.

It was during this period that American influence on the setting of Canadian practices began to assume important proportions.[1]

1920 Queen's University offered program of courses for the ICAO and began long-standing relationship in supplying academic support to the educational goals of the Ontario Institute and the CICA—most notable of which was the Queen's correspondence and lecture note program which many students across Canada used for over four decades [Creighton, pp. 101-112].

The Canadian Society of Cost Accountants (later the Society of Management Accountants) incorporated by representatives of provincial Institutes of Chartered Accountants [Special Issue, p. 20].

1926 Canadian Society of Cost Accountants began monthly journal *Cost and Management.*

1926/33 Publication of widely used and long-lived Canadian texts: *Accounting Principles and Practice* by R. G. H. Smails and C. E. Walker [1926]; and *Auditing* by R. G. H. Smails [1933].

1928/29 Concern raised that amendments to the Companies Act should correct "illegitimate promotions, flagrant stock watering, over-capitalization and misrepresentation" that attend the speculative boom [Mackintosh, p. 407].

1929 The Federal Reserve Board's "Verification of Financial Statements" was reprinted in *The Canadian Chartered Accountant* and recommended as a standard for good reporting [Clapperton p. 10].

1929/30 The Royal Mail Steam Packet Case in Britain which was concerned with the undisclosed use of secret reserves to bolster current profits was followed avidly in professional and financial journals in Canada. Canadian legislation of 1934 was said to have contemplated the prevention of such an occurrence [Smails, Students' Department, 1934, p. 283].

1931/33 Professor R. G. H. Smails [1931, pp. 101-103] and a study group of Queen's University professors called for improved financial statement disclosure relating particularly to the need for greater detail in the income statement and the need to provide the basis of asset valuations. [Members of Department . . . Queens, pp. 274-77].

1931/34 CICA commenced tradition of submitting briefs and making representations to legislating bodies—in 1931 a proposal for uniform legislation relating to financial statements [Editorial Comment 1934, p. 73] and in 1934 and 1935, briefs respecting the anticipated Companies Act revisions [General Notes, 1934, p. 327; Dominion Year Book, 1935-36, p. 234]. CICA claimed to be influential in securing increased financial statement disclosure requirements in Statutes of the provinces of Saskatchewan in 1933 and Manitoba in 1932 [Dominion Year Book, 1934-35, p. 222].

1932/34 Conference of Commissioners on Uniformity of Legislation recommended increased and uniform financial statement disclosure amongst all incorporating jurisdictions. The draft legislation of the Commissioners provided the immediate stimulus for the 1934 Companies Act legislation [Canada, Senate Debates, 1934, p. 452].

1933 The financial press regularly listed shortcomings in disclosure in financial statements [*Financial Post,* January 21, p. 11; June 24, p. 12; December 16, p. 11; May 6, p. 11].

Members of the Department of Political and Economic Science at Queen's University concerned with abuses in corporate promotion and capitalization relating to the failure of prospectus provisions, allocation of proceeds of no par value shares, transfers of capital surplus to distributable surplus and lack of information regarding the proceeds from an underwriter [Members of Department . . . , pp. 274-277]. The financial press also raises similar issues [*Financial Post,* December 16, p. 11; June 24, p. 12; June 10, p. 11; and June 17, p. 3].

1934 House of Commons Debates [May 29, pp. 3454-58; and Ralston, p. 87] emphasized the importance of discouraging the abuses of stock promotion and capitalization in the 1934 legislation.

1934/35 Federal Companies Act legislation specified much increased disclosure in financial statements particularly with regard to greater detail in the income statement and the basis of valuation for inventories and fixed assets as well as the requirement to disclose a reconciliation of surplus accounts items. Consolidated financial statements, a long-standing practice, now permitted in the legislation. Auditors required to certify financial statements in prospectuses. This legislation was inspired by concerns and factors in Canada comparable to those that motivated the American Securities legislation of 1933-34 [Canada, Statutes, 1934 & 1935]. The legislation was well ahead of earlier counterpart legislation in Britain [Great Britain, Statutes, 1928, Secs. 39-40], but much less demanding than SEC Accounting Series Release No. 7 [Securities Exchange Commission].

1938 CICA's first publication: *Accounting Terminology for Canadian Practice.*

The Royal Commission on the Textile Industry (The Turgeon Report) noted inadequacies in the financial statement disclosure provisions of the 1934 Companies Act [Canada, Royal Commission, p. 127].

1939 Gap between the 1934 Companies Act disclosure requirements and the standards necessary for good reporting emerged [Capon, pp. 380-381]. Undertakings made by CICA with Queen's University to develop a series of research studies [General Notes, 1939, p. 288] aborted by war.

1943 Accounting Research Committee of CICA provided recommendations relating to the refundable portion of Excess Profits Tax [Refundable Portion, p. 140].

1946 Province of Quebec restricted the practice of "public accounting" to chartered accountants [Quebec, Statutes].

Initiation of CICA recommendations *on authority of the Accounting and Auditing Research Committee.* Bulletin #1 concerned with standards of disclosure for mercantile and manufacturing companies. Authorship attributed to the Committee on Accounting and Auditing of the ICAO [Wilson]. (Recommendations become enforceable when provincial Institutes require adherence in their rules of professional conduct—required first in 1973 in Ontario).

1947 CICA issued Bulletin #2 on the minimum standards of audit and disclosure in respect of prospectuses.

1948 CICA issued Bulletin #3 on the accounting treatment of the loss "carry-forward" and "carry-back" provisions, the tax liability of prior years and refundable taxes.

1948/62/80 Chapters of the American based Financial Executive Institute formed in 1948; received federal incorporation in 1962 and single district Canadian status in 1980. Institute interested in the quality of corporate reporting through briefs to, and representations on, various influential organizations and committees.[2]

1949/54 Depreciation provisions of the 1949 Income Tax Act radically altered to promote government fiscal policy and to simplify calculation. Generous diminishing-balance rates of depreciation applied to asset pools introduced [Canada, Statutes, Secs. 7 & 8]. Requirement that depreciation taken for tax purposes ("capital cost allowance") must not exceed the amount recorded on the taxpayers' books rescinded, after much protest, in 1954 [Comment and Opinion, pp. 1-2].

1950 CICA issued Bulletins: #4 relating to accounting for bad debt losses; and #5 on inventory costs.

1951 The *Financial Post* initiated the sponsorship of annual awards for accounting content and design of financial statements.

CICA issued Bulletins: #6 relating to the standard form of auditor's report; and #7 relating to auditor's responsibility for validity of the inventory figure.

1952 CICA issued Bulletin #8 on depreciation for deferred tax purposes, emphasizing the distinction between the determination of income for tax purposes and for financial statement presentation purposes.

1953 Ontario Companies Act required income statement audit and increased disclosure in income statements, balance sheets and footnotes [Ontario, Statutes, Secs. 82-93]. Disclosure requirements based on the 1946 CICA Bulletin #1. The income statement audit had become a commonly accepted practice in the preceding decade.

Initiation of CICA's biannual compendium of the accounting practices of approximately 300 corporations, *Financial Reporting in Canada.*

CICA issued Bulletin #9 on the use of the term "Reserve" and accounting for reserves.

1954 CICA issued Bulletin #10 recommending the "deferred credit" basis of tax allocation but permitting the "taxes payable" or "flow through" method for the tax treatment of differences arising from depreciation for tax purposes (capital cost allowance) and depreciation for accounting purposes. 1954 marked the beginning of the increasing and sizeable appearances of deferred taxes accounts on Canadian corporate balance sheets. The CICA also issued Supplement to Bulletin #6 to reflect the change in Ontario legislation requiring the opinion section of the Auditor's report to use "presents fairly" rather than gives a "true and correct view."

1955 CICA issued Bulletin #11 on definition and appropriate use of the term "surplus."

1956 CICA issued Bulletin #12 on loss carry-over tax credits (superseding Bulletin #3).

1957 *The Royal Commission on Canada's Economic Prospects —Final Report* (The Gordon Report) indicated that very little is known about the financial activity of a significant portion of the economy owing to the financial statement disclosure exemptions for private corporations [Canada, Governor-General, p. 393].

CICA Issued Bulletins: #13 on unaudited financial statements; and #14 on standards of disclosure in financial statements (revising Bulletin #1).

1958 CICA issued Bulletin #15 on confirmation of accounts receivable.

1959 CICA issued Bulletins: #16 on auditor's responsibility for the validity of the inventory figure (superseding Bulletin #7); and #17 on the auditor's standard report (superseding Bulletin #6 and its Supplement).

Delegation of Standard Setting: 1960 - 1983

The 1960 period reflected a significant measure of dissatisfaction with corporate reporting practices. Much of the controversy, reflected in the financial press and in variously appointed committees of inquiry, was centered on the wide diversity in accounting principles. A rash of bankruptcies and corporate failures, highlighted by the collapse of the Atlantic Acceptance Corporation, aggravated the situation [Murphy, pp. 18-20]. Additional disclosure requirements were added in provincial and federal legislation throughout the period. However, the concerns for requiring minimum disclosure and uniformity in accounting principles through amendments to companies acts were largely set aside by the momentous and unrequested—but not unexpected—designation of the *CICA Handbook* recommendations as mandatory standards by the Canadian Securities Administrators in 1972, the Canada Business Corporations Act in 1975 and the Ontario Securities Act in 1978. The 1981 recommendations of Dickerson, Howard & Getz [pp. 108-109] that minimum required contents of financial statements be dealt with by Regulation rather than by statutory provisions and the subsequent initiatives of the Department of Consumer and Corporate Affairs to have these Regulations defer to the *CICA Handbook* were formative in this regard.

Of great significance was the designation in 1966 of the Ontario Securities Commission (OSC) by the Ontario Securities Act to oversee the Toronto Stock Exchange with powers not unlike those of the SEC [Ontario Statutes, 1966, Ch. 142, Sec. 139]. This Act took much of its inspiration from the SEC legislation and though the Commission has not set up extensive review procedures for annual reporting, it has—and increasingly so—added an American-style dimension to the standard setting process in its prodding of the CICA to direct its attention to particular areas of concern. No instances exist of the OSC countermanding standards set by the CICA.

1960 CICA issued Bulletin #18 on qualifications in the auditor's report.

1961 CICA initiated its series of Research Studies as preparatory background for the eventual issuance of Bulletins [Thomas, p. 93].

CICA issued Bulletin #19 on financial statements of unincorporated businesses.

1962 The Corporations and Labour Unions Returns Act (CALURA) required of unions and public and private companies (annual sales of more than $500,000 or assets of more than $250,000) the annual filing with the Minister of Industry, Trade and Commerce, of annual financial statements and returns detailing management, share structure, ownership and foreign control [Canada, Statutes].

ICAO merged with Certified Public Accountants Association of Ontario [Creighton, pp. 235-246].

Governmental regulation of public accounting in Ontario restricted the practice of "public accounting" essentially to chartered accountants [Ontario, Statutes, 1961-62].

1963 Publication of CICA Study *Accounting for Costs of Pension Plans* by W. B. Coutts and R. B. Dale-Harris.

CICA issued Supplement to Bulletin #17 requiring use of standard auditor's report for prospectuses.

1964 *Report of the Royal Commission on Banking and Finance* (The Porter Report) noted that corporate disclosure standards in federal corporations acts are inadequate [Canada, Royal Commission, pp. 350, 560-561].

CICA issued Bulletin #20 on standards of disclosure in financial statements (superseding Bulletin #14).

1964/65 Canadian Companies Act legislation required financial statement disclosure provisions similar to 1953 Ontario Act [Canada, Statutes]; roughly the same lag in time as the 1907 Ontario and the 1917 Federal legisation!

1965 *Report of the Attorney General's Committee on Securities Legislation in Ontario* (the Kimber Report) recommended improved financial statement disclosure [Ontario, Attorney General, p. 29].

A financial scandal of international dimensions, the failure of Atlantic Acceptance Corporation, provoked broad interest in narrowing the range of acceptable accounting practices; in defining more closely the extent to which a parent-company auditor may rely on the work of the subsidiary-company auditor; and in promoting interest in the requirement of audit committees of boards of directors [Ontario, Royal Commission . . . Atlantic Acceptance . . .].

CICA issued Bulletins: #21 on accounting for pension plan costs; and #22 on reliance on other auditors in reporting on consolidated financial statements.

1966 Ontario Securities Act required that the auditor's report shall not contain any qualification where it is reasonably practicable to revise the financial statement presentation with respect to the matter that would otherwise be the subject of a qualification [Ontario, Statutes, Ch. 142, Sec. 46(4)].

Following the Kimber Report of 1965, which found much of its inspiration in the model of the American SEC, the Ontario Securities Act gave on-going surveillance of Canada's chief exchange, the Toronto Stock Exchange, to the Ontario Securities Commission (OSC) [Ontario, Statutes, Ch. 142]. The OSC has much the same powers as the SEC, but has not set up intensive procedures to review annual financial statements.

Ontario Companies Act Amendments required increased disclosure relating, *inter alia,* to funds statements, the provision of comparative figures and gross revenues [Ontario, Statutes, Ch. 28].

Publication of CICA Study *Accountants and the Law of Negligence* by R. W. V. Dickerson.

CICA issued Bulletin #23 on standards of financial reporting applicable to prospectuses (superseding Bulletin #2).

1966/69 Publication by Howard Ross, one of the most prominent of Canada's practitioners and educators, of two influential books advocating adoption of current valuations methods: *The Elusive Art of Accounting,* 1966 and *Financial Statements—A Crusade for Current Values,* 1969 [*Ross*].

1967 CICA issued Bulletins: #24 on accounting for government grants for fixed assets; #25 on the auditor's standard report (replacing Bulletin #17 and its Supplement); and #26 delineating the usage of "deferred" and "accrual" methods of tax allocation (superseding Bulletins #10 and #12).

1967/ 70/75 *Interim Report of the Select Committee on Company Law* (The Lawrence Report) indicated that "no need for amendments of major significance to the financial disclosure provisions of the Ontario Act" appear to exist [Ontario, Interim Report . . . , par. 10.1.4]. The Committee did recommend establishment of audit committees and these were first reflected in Ontario in 1970 [Ontario, Statutes, Secs. 171, 182] and later in federal legislation in 1975 [Canada, Statutes, Sec. 165].

1967/76 Organizational meeting and first annual conference held of the Canadian Regional Group of the American Accounting Association. Successor organization, the Canadian Academic Accounting Association, formed in 1976 [News, 1977, p. 15].

1968 Introduction of *CICA Handbook,* replacing the Bulletins on Accounting and Auditing Practices published since 1946. Dissents of Committee members no longer to be published. Loose-leaf handbook format is subject-indexed and cross-referenced and permits greater flexibilit in revision and updating of Recommendations. Accounting Research Committee called for disclosure of departures from its Recommendations.

Watkins Report on *Foreign Ownership and the Structure of Canadian Industry* detailed *inter alia* extent to which there is a lack of public disclosure of financial affairs of private Canadian companies [Canada, Privy Council, p. 214].

CICA Handbook Recommendations relating to: disclosure of departure from Recommendations in notes to financial statements and auditor's report; and amendments to extraordinary items, prior period adjustments, capital transactions and unaudited statements.

1969 Unprecedented issuance of an accounting policy statement on the handling of profits for land development companies by the Ontario Securities Commission [Ontario Securities Commission]. Issuance prompted CICA to set up a liaison committee with securities commissions and stock exchanges [News and Events, 1970, p. 8].

Toronto Stock Exchange required quarterly financial statements of listed companies [By-law 208, Sec. 1908].

CICA Handbook Recommendations relating to: standards of financial reporting applicable to prospectuses; and the classification of current assets and liabilities.

1970 Federal Companies Act legislation adopted additional disclosure requirements of Ontario Companies Act amendments of 1966 and abolished the financial statement disclosure exemptions for private companies [Canada, Statutes, 1969-70].

Publication of CICA study in cooperation with the University of Western Ontaria on *Business Combinations in the '60s: A Canadian Profile* by S. Martin.

CICA Handbook Recommendations relating to: the reporting and calculation of earnings per share; and the auditor's report.

1971 Publication of *Proposals for a New Business Corporations Law for Canada* with recommendations that minimum required contents of financial statements be dealt with by regulation rather than by statutory provisions [Dickerson, pp. 108-109].

CICA Handbook Recommendations relating to: the financial reporting of diversified operations; interim financial reporting; amendments respecting extraordinary items, prior period adjustments, capital transactions and share capital; and unaudited financial statements.

1972 Publication of CICA studies on *Accounting Principles: A Canadian Viewpoint* by R. M. Skinner and *Current Value Accounting and Price-Level Restatements* by L. S. Rosen.

CICA Handbook Recommendations relating to long-term corporate investments.

National Policy Statement No. 27 of the Canadian Securities Administrators required financial statements to be drawn up to conform to the GAAP as reflected in the CICA Handbook [Canadian Securities Commission pp. 54-864]. This Statement, though not having the force of law, was the harbinger of the federally legislated delegation of standard setting authority to the CICA in 1975.

1972/73 CICA Accounting and Auditing Research Committee divided into two groups—the Accounting Research

Committee (ARC) and the Auditing Standards Committee (ASC). Membership in the ARC to be broadened by representation from other occupational and institutional backgrounds; but no fewer than two-thirds of twenty-two ARC committee members to be CA's. All sixteen members of ASC to be CA's. Research staff of CICA expanded and a separate research studies section established [Mulcahy, pp. 69-70].

1973 ICAO required members to qualify audit reports in respect to financial statements not drawn up in accordance with the *CICA Handbook* [ICAO Rules].

Formation of International Accounting Standards Committee (IASC) of which Canada was a founding member [News and Events, p. 9].

CICA Handbook Recommendations relating to: refundable taxes, earned depletion allowance and tax rate reductions; expansion of treatment of tax losses and carry-overs; and to business combinations.

1973/74 Publication of CICA Studies: *Financial Reporting for Life Insurance Companies and Financial Reporting for Property and Casualty Insurers.*

Province of Quebec legislated Quebec "Professional Code" which established the Office des professions du Québec whose mandate was to supervise and control the operations of the various professions within the Province. The membership of the Office was to be determined by the Government and the independent Conseil Interprofessional du Québec. The office to have representation on the governing bodies of each of the professions [Quebec, Statutes].

1974 Initiation of CICA procedure to have ARC and ASC periodically publish "Guidelines" as "interim-positions," or as clarifications of Handbook Recommendations. Guidelines do not have authority of Recommendations. Guideline issued on "Accounting for the Effects of Changes in the Purchasing Power of Money."

CICA Handbook recommendations relating to: the statement of changes in financial position (funds statements); and the disclosure of accounting policies.

1975 The recommendations of *The Report of the Independent Review Committee on the Office of the Auditor General of Canada* (the Wilson Report) on government accounts related to the "value for money" concept, the reporting of changes in financial position statement, and independence of the Auditor General [Auditor General].

Canada Business Corporations Act abolished par value shares, expanded directors' liability, transferred financial statement content requirements to the (more easily altered) Regulations Section and modified auditor and established audit committee provisions. Most significantly, the Act required financial statements be drawn up to conform to the GAAP and generally accepted auditing standards (GAAS) as reflected in the *CICA Handbook* [Canada . . . Regulations, p. 189]. This requirement gave virtual unrestricted delegation of accounting authority in Canada to the CICA.

CICA Handbook Recommendations relating to: consolidated financial statements and the equity method of accounting; accounting for government assistance grants; generally accepted auditing standards; and conformity with or deviations from International Accounting Standards (IASC).

1973/76 Accounting Research Committee of the CICA issued Exposure Draft cn "Accounting for Changes in the Purchasing Power of Money." Withdrawn in 1976 as considerations of current value accounting assumed importance.

1976 Accounting Research Committee of the CICA published Discussion Paper on "Current Value Accounting."

CICA Accounting and Auditing Guidelines issued relating to recent "Federal Anti-Inflation Legislation."

CICA Handbook Recommendations relating to: unaudited financial statements; and the auditor's standard report, wherein the financial statements are viewed to "present fairly" by virtue of their conformity with GAAP.

1977 International Federation of Accountants (IFAC) formed with the Certified General Accountants' Association of Canada, the Society of Management Accountants and the Canadian Institute of Chartered Accountants as charter members [IFAC, p. 13].

Federal government creation of a Comptroller General of Canada to be the chief financial administrator of the federal Public Service [Ottawa Report, p. 18].

Province of Ontario commissioned *Report of the Ontario*

Committee on Inflation Accounting recommended inclusion of effect of inflation in financial statements [News, September, p. 8].

CICA Guidelines issued relating to: federal budget 3% inventory allowance; and term-preferred shares.

CICA Handbook Recommendations relating to: internal control; investment in joint ventures; and audit evidence.

1978 Ontario Securities Act required financial statements be drawn up to conform to the GAAP as reflected in the *CICA Handbook* [Ontario Gazette].

Ontario Securities Commission proposed regulation requiring public companies in Ontario to file information which is otherwise requested from other jursdictions—effective as of 1979. The general intention of the regulation is to secure any required filings for the SEC which are not otherwise required by the Commission [Information Begins . . . , p. 12].

Issuance of CICA *Report of the Special Committee to Examine the Role of the Auditor* (the Adams Report). Recommendations extended to the auditor's role, enterprises subject to audit, the detection of fraud, illegal acts, the standard report, independence, regulation of the profession and education [The Adams Report].

CICA Guidelines issued relating to: audit of candidates under Election Acts; frontier exploration allowance; and financial reporting by Property and Casualty Insurance companies.

CICA Handbook Recommendations relating to communication with law firms regarding claims and possible claims; foreign currency translation; research and development costs; contingencies; subsequent events; long-term investments; unaudited interim financial information; and leases.

1979 Publication of CICA Exposure Draft on "Current Cost Accounting."

Public companies subject to the Ontario Securities Act are required to prepare quarterly financial statements for shareholders and Ontario Securities Commission [Quarterly Reporting, pp. 20-21].

The (Staff) Report of the Professional Organizations Committee, *Professional Regulation,* commissioned by the Ontario Government recommended establishment of a new Public Accounting Licensing Admissions Board and the rescinding of the limiting of the practice of public accounting to chartered accountants.

CICA Handbook's 1978 Recommendations on foreign currency translation suspended pending further study. (Reissued in 1983.)

CICA Handbook Recommendations relating to: segmented information; disclosure considerations—related party transactions; auditing aspects of knowledge of the client's business, documentation, planning and supervision and special reports; and revisions of former Recommendation on subsequent events.

1980 Publication of CICA Study *Corporate Reporting: Its Future Evolution* by Prof. Edward Stamp.

Formation of Canadian Comprehensive Auditing Foundation to increase accountability in public sector [Canadian Comprehensive Auditing, pp. 14-15].

Office des professions du Québec recommended that practice of auditing no longer be exclusive responsibility of chartered accountants [Quebec May Open . . . p. 16].

Proposed Accounting Guideline on presentation and disclosure of forecast data in prospectuses and auditor's involvement therein issued by CICA. (Issued in final form in 1983.)

Publication by Canadian Academic Accounting Association of *University Accounting Programs in Canada: Inventory and Analysis* by Tom Beechy; and by CICA of *Accounting for Pension Costs and Liabilities* by Ross Archibald.

CICA Handbook Recommendations relating to: reservations in auditor's reports and the reporting of inconsistencies; accounting changes and prior period adjustments; and international auditing guidelines.

1981 Proposal by the Certified General Accountants Association of Canada to establish the Accounting Standards Authority of Canada. The Authority would promulgate GAAP thereby hoping to replace the CICA's Accounting Research Committee which authors the statutorily recognized *CICA Handbook.* (It has not succeeded in doing so as of 1983.) Member composition of Authority to have broader representation than the ARC [Accounting Standards Authority of Canada].

CICA Report of the Special Committee on Standard Setting (SCOSS) recommends *inter alia* that the *CICA Handbook* should be written in terms of general principles rather than detailed rules, that the number of persons on ARC should be reduced, and that the percentage of non-CICA nominees be doubled. (ARC composition unaltered as of 1983) [Scoss Highlights].

Formation of a new CICA committee, the Public Sector Accounting and Auditing Committee (PSAAC), to offer guidance and establish accounting and auditing standards for national and provincial levels of government.

Publication of a joint study of the CICA and the Financial Executive Institute, *The Management Report in the Annual Report,* suggesting inclusion of a management accountability report in corporate annual reports.

Corporations and Labour Union Returns Act (CALURA) amended raising reporting thresholds of the private companies to $10 million in assets and $15 million in gross revenues—effective as of 1983 [Canada Statutes, 1981].

CICA Guideline issued on auditing in an EDP environment.

CICA Handbook Recommendations relating to: reliance on other auditors; audit of financial statements; fraud and error; auditor's report on non-consolidated financial statements in specified circumstances; and using the work of a specialist.

1982 *CICA Handbook* called for "supplementary information" disclosure of the effects of changing prices in annual reports of larger public corporations. Information to consist of income and balance sheet items related to inventories, fixed assets and monetary gains or losses.

CICA Guidelines issued: Canada-United States Reporting Conflict with Respect to Contingencies and Going-Concern Considerations; extension of GAAP to financial reporting by Property and Casualty Insurance Companies; and Accounting for the Petroleum Incentives Program and Petroleum Gas Revenue Tax. This latter Guideline conflicted with the accounting treatment federal government desired, occasioning the first notable tension between the CICA standard setting body and the government. The Ontario Securities Commission supported the CICA Guideline by requiring companies with reservations in their audit reports to appear before the Commission [Crandall, p. 59].

1983 Establishment of a Canadian accounting journal, *Contemporary Accounting Research* by the Canadian Academic Accounting Association with publication to commence in 1984.

CICA Guidelines issued relating to the presentation and disclosure of financial forecasts.

CICA Handbook Recommendations relating to: foreign currency translation; and disclosure of variations in the effective income tax rate.

FOOTNOTES

[1]See reasons therefor previously indicated in the second paragraph of the introduction.

[2]From discussion with Mr. K. Smith former President and Mr. D. Simpson current Executive Director of the Financial Executive Institute of Canada.

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THE USE OF INTEREST AS AN ELEMENT OF COST IN GERMANY IN THE 16TH AND 17TH CENTURIES

Abstract: Debate still continues in the United States of America over the inclusion of interest as an element of cost. The practice was accepted as early as 1558 in Germany, and has been integrated into accounting theory by Schmalenbach in this century.

Over the last decade, at least one authority[1] has strongly advocated the recognition of interest on equity as a cost. The proposal has received mixed responses from other scholars, among them a reminder [Previts, 1974] of the equity interest controversy in the early 1910's.[2] This issue has a history, not only in the United States, but also in other countries. This note describes the history of the equity interest concept in Germany, mainly based on a doctoral dissertation by Juerg Schueppenhauer[3] completed in 1971. Schueppenhauer's quotations from original sources are presented here in the same format, preceded by short summaries.

One of the key economic issues of the Middle Ages was the determination of a fair price *(justum pretium)* which is related to the usury dogma of the Christian Church and to the prohibition of interest by Canonic Law. One way of securing fair prices was to set tariff rates on essential consumer goods. For other goods and services, prices could be negotiated by the contracting parties within the limits of the natural price *(pretium naturale).* Natural prices consisted of three components; purchase cost and labor being the two basic ones. The third element represented an exception from the interest prohibition. Application of a certain percentage on purchasing and labor costs as "interest" was allowed to protect against damage or loss *(damnum emergens)* and foregone profit *(lucrum cessans)* for term sales. Although this latter part of the interest allowed essentially corresponds to regular interest on credit sales, its interpretation as "foregone profit" already points to the origin of the opportunity cost concept. The first known document that includes such an interest calculation dates back to Meder in 1558.[4] In a total cost calculation for oil to be purchased in Lisbon, and to be sold in Antwerp, interest is calculated in two parts: first as interest *(ziza)* on purchase cost, secondly as an insurance *(securantza)* to cover the capital loss based on the total outlays of the merchant.

The following excerpt from Meder's book[5] contains a list of items included in the calculation of oil cost. The first interest item is *(ziza)* which is calculated at 10% of the purchase cost of oil (Real 1,350) and is to be shared equally (Real 1,350/2 = Real 675) by the seller and by the buyer. The second interest item is *(securantza)* which is calculated at 8% of the total oil cost (Real 15,908 × .08 = Real 1,272).

Lisaboner Oll per Antorff:		
Oll in Lissabona einkaufft, Rechen erstlich daz das Faß vngefehrlich kost	Real	13500
Vnd Ziza, das der Kauffer ½ vn der verkauffer ½ zalt	"	675
Unterkauff vom einkauffen ½%	"	67
Fur zwo Pipen vngefehrlich mit der Ziza	"	900
der stat Lisabona zeychen zu brennen	"	16
Rebatimenta der Fasser - - -	"	60
Tretto del Pattron	"	90
Aufzutragen und einzuladen -	"	50
Auaria quida in di marinner	"	50
Vnnd wo mans auff dem land einkaufft, sy nahet oder fern biss in Losabona bracht, setz ich ungefehrlich	"	500
Summa 15908, Securantza 8 Ph.	"	1272
Fracht, 5 Duck. p. Tonnöl	"	2000
Abgang der Lachi p. 100	"	895
Vnkost vnd Zoll im Niderland	"	400

Trading practices were freed from the interest prohibition during the Cameralistic period, a German form of Mercantilism, in the 17th and 18th centuries. The first relevant document available from this period is by Becher in 1673.[6] Becher tried to distinguish between capital tied up in fixed and current assets, and separately calculated imputed interest on these amounts. In the following excerpt Becher[7] gives an example of profit estimation for a manufacturer of silk stockings. He first determines the amount of fixed capital tied up in 34 pieces of equipment needed for the manufacturing process. Besides their purchase cost, this also includes freight, salaries for the training and set-up work performed by the foreman, and the rent for the rooms where the equipment is located. Interest of 50% is calculated on the total amount of fixed capital (Fl. 4,000 × .50 = Fl. 2,000).

The calculation of the amount of working capital includes material cost as well as wages needed at different stages of the manufacturing process. An interest charge of 50% is added on the total amount of operating costs treated as working capital (Fl. 13,171 × .50 = Fl. 6,585,18).

Becher compares the expected sales revenue (Fl. 24,752) with total costs, including the two interest items, (Fl. 21,756,54) and comes to the conclusion that this business deal would result in a profit of Fl. 3,045 in excess of all costs. However, in his last sentence, he still states that the total profit amounts to Fl. 11,630 which also includes interest.

Erster Ueberschlag auf ein Jahr und 34 Instrumenten, was die darauff gewurkten so Seidene als wüllene Strumpf zu bereiten kosten, und was darbey für ein Gewinn seyn kann:

Lit. A.

	fl. Kr.
Unbeweglich Kapital, so auf den Instrumenten liegt.	
1. Die 34 Werk kosten zu verfertigen 1600 Rthlr. wiewohl solche nicht kloecken werden, sondern müßte noch 400 Rthlr. darzu seyn, Thut 200 Rthlr. an fl. aber	3000,—
2. Es haben die Handwerksleut und Instrumenten aus Holland zu bringen gekostet ongefähr 200 Rthlr. thut	300,—
3. Der Meister hat Besodung vor Lehr- und Einrichtgeld	600,—
4. Beständiger Hauszins, wo die Werken stehen	100,—
Und soviel kapital ist gangen auf die Substanz des Werkes, nehmlich auf die Instrumenten und derer Zurichtung, auch Unterrichtung der Jungen, welches Kapital stets darauf liegen bleibt, und verinteressiert werden muß, sich belauffend auf	4000,—
Diese 400 fl. mit 50 pro cento jährlich verinteressiert belauffen sich an jährlichem Interesse	2000,—

Lit. B.

Beweglich Kapital, so auff den Verlag gehet: Nun folget das Kapital zum Verlag, welches beweglich ist und sich jährlich sampt dem Interesse wiederumb einbringen muß.	
1. 34 Jungen, so arbeiten, einem die woche einen fl. geben, thut in zwey und fünffzig wochen fl.	1728,—
2. Nun wird gerechnet, daß ein jung täglich 1 paar Strümpf oder doch die wochen nur 4 paar mache, thun 34 instrumenten, wochentlich 136 paar, ist jährlich paar 7072. Die betragen sich 5 paar auf ein lb. (wiegend das paar bey 6 Loth, wèlches das rechte englische Gewicht ist, jährlich an Seyden 1326 lb., das lb. vor 6 fl. thun	7956,—
3. Die Seyden zu Zwirnen, vor das lb. 1/2 fl., thun 1326 lb.	663,—
4. Die Seyden zu färben, das lb. einen halben fl., thun 1326 lb.	663,—
5. Die Strümpfe zu nähen, das paar 15 Kr., thun 7072 paar	1768,—

6. Das paar zu pressen und einzupacken, 3 Kr., thun 7072 paar	353,36
Summa aller Unkosten jährlichen Verlages	13171,36*

*Dusemann points out here a calculation error. The correct total amounts to 13,131.36. This results, of course, in errors in the following calculations. However, they may not be taken here into consideration.

Lit. C.

Bilanz, oder Gegeneinanderhaltung des Gewinns gegen die Unkosten:	
Lauth Lit. A. wegen der 4000 fl. Capital auff den instrumenten hafftend, und darauf liegen bleibend, jährlich mit 50 pro cento verinteressiert, belaufft sich das Interesse fl.	2000,—
Lauth Lit. B., des jährlichen Verlages und des dazu erforderten Capitals, welches jährlich wiederum aus der Handlung resultieren muß, sich erstrekkend auf	13171,36
Welches jährliche Kapital auch mit 50 pro cento verinteressiert werden muß, belauft sich also das jährliche Interesse	6585,18
Summa summarum aller Spesen, so jährlich dieser Verlag austragen muß ist	21756,54
Hingegen seynd verfeinert und gelieffert 7072 paar Seyden Strümpf, das paar nicht höher gerechnet als pro vierdtehalben fl., thun	24752,—

Die Einnahm gegen schuldige Bezahlung abgezogen, nehmlich 21756,— gegen 24752,— befindet sich nicht allein, daß das Kapital Lit. A. sich mit 50 pro cento verinteressiert, sampt Ueberschuß von 3045 fl. 6 kr. Aus welchem allem dann klärlich erhellet, daß sich diese Manufaktur salvo kapitali, nicht allein mit 50 pro cento verinteressiert, sondern auch, wenn diese gesamptliche Fabrikam gawonnen habe.

Schluß: Befindet sich also, daß 34 Instrumenten in 1 Jahr über alle Unkosten Gewinn geben 11630 fl."

Other notable authors of this period include Zincken,[8] May,[9] Jung[10] and Leuchs. Zincken [1755] calculated interest on total capital goods used, without distinction between borrowed and equity capital. He makes the suggestion that businessmen should also include labor cost for their own work performed in their business in their cost calculations along with interest on capital tied up in the business. This seems to be the first mention of an imputed labor cost concept by a scholar.

May [1763] introduced imputed rent as a special item of interest for self-owned buildings used for business purposes. Jung [1799] went one step further by using average capital tied up in business for the calculation of interest. The following excerpt from Jung's book[11] contains a seven-point list of all cost items to be considered in a manufacturing business. Items 2, 3, and 6 relate to interest to be calculated on fixed and working capital tied up in the manufacturing process.

1. Der Einkaufspreis der rohen Waaren oder sämtlicher Materalien zu einer Fabrike.
2. Die Interessen von diesem ausgelegten Gelde, von der Zeit des Einkaufs an, bis zum Verkauf.
3. Die Interessen von dem Kapital, welches alle Gebäude gekostet haben, die um der Handlung willen da sind, nebst der jährlichen Unterhaltung derselben, in mittlerem Durchschnitt genommen.
4. Der jährliche Aufwand auf alle Werkzeuge, welche die Handlung oder Fabrike erfordert, wiederum nach dem mittleren Verhältnis angeschlagen.
5. Alle Arbeitsclöhne, nebst Transportkosten, Spedition, Zöllen, Aus- und Eingangsrechten u. dgl.
6. Die Interessen von diesen Geldern, von der Zeit des Vorschusses an bis man wieder Geld für die Ware bekommt.
7. Endlich alle Comptiorunkosten, Besoldung der Bedienten, eigene Diäten des Handelspatrons, Papier, Bücher, Dinte, Feder, Briefporto u. dgl."

Jung also appears to be the first one to distinguish between direct and indirect costs. He states in the following excerpt that some costs may be incurred not for specific jobs but for the factory as a whole. These should also be allocated to products along with interest costs. Otherwise, they would be "lost".

> . . . , es gibt nemlich bei einer Fabricke vielerley Ausgaben, die nicht auf einzelne Waaren sondern auf die ganze Fabricke verwendet werden, zB. Bau-Reparationen, Werkzeuge-Aufwand, wenn nemlich neu angeschafft werden oder alte verbessert werden; Arbeitslöhne für solche Arbeiten. die nicht an einer bestimmten Waare, sondrn bald hier bald da arbeiten, . . .
>
> Auf S.93, §191 des gleichen Werkes verlangt er, daß alle diese Kosten auf das einzelne Erzeugnis verrechnet werden müssen, da sonst "die Unkosten, nebst den Zinsen vom Bau- und Werkzeug-Capital verlören" wären."

A more detailed treatment of interest cost can be found in the works of Leuchs [1804].[12] For the first time, Leuchs explicitly distinguishes between borrowed and equity capital, and offers a clear explanation for the inclusion of equity interest as an opportunity cost. In the following excerpts Leuchs[13] first mentions the interest cost on working (No. 9) and fixed capital (No. 10) as two items to be considered in cost and profit calculations. The first interest is for capital tied up in inventories starting from the time of their purchase until the time their sales revenue is collected. The second interest is to be calculated on capital tied up in buildings and equipments including their maintenance costs, and considering the time period this capital cannot be used for other purposes (would be lost).

The last part of the excerpt contains the interpretation presented by Leuchs for the calculation of an imputed cost of capital. He states that capital tied up in business could also have earned an interest by lending it to other users. Therefore, a portion of the business income equal to this foregone interest should not be considered as profit but should rather be added to purchase prices as an interest cost, even without having an actual cash outlay. In case of using borrowed capital instead of owners' equity, interest cost would result in real cash outflow.

9. Die Zinsen des an einer Ware liegenden Kapitals, von der Zeit der Bezahlung bei dem Einkauf bis zur Zeit des wahrscheinlichen Wiederempfanges bei einem zu hoffenden oder schol geschlossenen Verkaufe. . . . Zu diessen Zinsen vom Einkauf bis zum wahrscheinlichen Verkauf, müssen dann noch die Zinsen vom Verkauf bis zum wahrscheinlichen Eingang des Verkaufspreises geschlagen werden".
10. Die Zinsen des Kapitals, das an den Gebäuden liegt, in so ferne wir sie vloß Handels wegen haben müssen, nebst den Unterhaltunkskosten, oder der Miethe. Ferner die Zinsen des Kapitals, das an Gefäßen, Geräthen usw. liegt, und die Unterhaltungskosten, mit Zuziehung der Dauer ihres Gebrauchs, in so ferne das Kapital damit verloren gehet".

Sobald wir nämlich eine Waare gekauft und bezahlt haben, so ist sie als todtes oder uneinträgliches Kapital so lange anzusehen, bis wir sie nicht nur verkauft, sondern auch die Verkaufssume dafür erhalten haben und wieder verwendet haben. Nun erhalten wir aber von unserem Gelde schon durch das Verleihen ohne Arbeit einen Gewinn (Zins), und der Gewinn also, der bei einem Handel nicht größer wäre als die Zinsen, die man von dem daran gelegten Gelde, von der Zeit der Auslage beim Einkauf bis zur Zeit des Eingangs der Verkaufssume erhalten würde, ist kein Handelsgewinn, wir müssen diese Zinsen also als Auslage zu dem Einkaufspreis schlagen. Ist das Kapital ganz oder zum Theil nicht unser Eigenthum, dann sind die Zinsen wirkliche Auslagen, und müssen um so notwendiger zu den Einkaufskosten geschlagen werden.

These ideas were transmitted to German accounting theory by Schmalenbach [1899, 1919, 1934].[14] He first provided a clear separation of the areas of financial and cost accounting: Financial accounting has the function of reporting on the financial results of an entity for a given time period, whereas cost accounting is primarily output-oriented and concerned with the allocation of production costs to units of output. Secondly, and more importantly, unit cost is defined by Schmalenbach as the value of production factors consumed during the production process. This value implies a broad concept and is essentially based on the marginal utility theory of the Austrian economist Wieser [1914]. Production factors also include capital tied up in the production process. The cost of capital as a limited resource is determined uniquely by the foregone profit of the least profitable alternative of its use. Therefore, production costs not only include the expenditures made for the acquisition and use of different factors of production, but also the cost of tying up capital, regardless of its source, for the availability of these factors over a given time period. In fact, the same kind of reasoning also leads to the inclusion of an imputed depreciation amount for the unit cost calculations, one which may differ from the financial accounting depreciation with respect to its basis and rate. The clear separation of the fields of financial and cost accounting within the whole accounting system facilitates the allocation of imputed costs to units of production. This broad concept still constitutes the basis of the current cost accounting theory and practice in West Germany.

FOOTNOTES

[1]Anthony, Robert N. His main publications on this topic are listed below:

—"Accounting for the cost of equity," *Harvard Business Review,* Vol. 5 (November-December 1973), pp. 88-102.

—"Let's account for interest", American Accounting Association, *Collected papers for the Annual Meeting (August 18-20, 1975),* Sarasota, Fl., pp. 268-271.

—*Accounting for the cost of interest,* Lexington Books, 1975.

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THE CLASSICAL MODEL OF CONTROL IN THE ACCOUNTING LITERATURE

Abstract: This paper outlines a classical management model of control based upon concepts identified in the writings of Frederick Taylor and Henry Fayol. The classical model's constituent concepts are found to be replicated in early accounting literature. The accounting model persisted right through the 1970s with only one conceptual change that reflected a concept discussed by Fayol. A number of factors which may have influenced the accounting model's replication of the classical management model are then considered. These include the linguistic derivation of the term "budget", historical approaches to budgeting by governments, the scientific and efficiency orientation of accountants in the past and their perception of the corporate budget.

In 1964 Luneski [p. 592] published a paper on the meaning of control and pointed out that there is a lack of "universal agreement as to the precise meaning of the word." In analysing various definitions he concluded that the meaning and scope of the term depended on the particular structure of management functions involved. This paper sheds further light on the classical concepts of control in accounting by tracing their historical development and by showing that their foundation was the work of Frederick Taylor and Henri Fayol.

After outlining the classical management model of control and documenting its influence on accounting, an accounting model is constructed and its replication of the management model is demonstrated. The centrality of the budget to the accounting control model is established and factors which appear to have influenced this development in the accounting literature are discussed.

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THE CLASSICAL MANAGEMENT MODEL

The classical management control model is based on ideas introduced by both Taylor and Fayol. Taylor strove for minutely specified total control of the individual worker including every aspect of a worker's job,[1] from methods to final results through orders and obedience [Taylor, 1916; 1947a,b]. Planning was a higher management function while lower levels were required only to perform specific routine tasks [Taylor 1947a; 1916]. Taylor's belief that workers were to be treated as children is central to his concept of authority-based control. Fayol's notion of control was also authority-based. Fayol [1949, p. 21] defined authority as "the right to give orders and the power to extract obedience" and he argued that good management required the "application of sanction to acts of authority."

The classical management concept of coordinative control[2] sprang largely from Fayol's writing. He argued that an identifiable relationship existed between control and a group of principles known as Unity of Command, Unity of Direction and Subordination of Individual Interest to General Interest [Fayol, 1949]. As a virtual prerequisite to these, Fayol placed great emphasis upon coordination in order to establish harmony, maintain equilibrium between organizational forces, ensure unity of effort and to promote collaboration of department heads.

The concept of exception control was subscribed to by both Taylor and Fayol. Taylor argued that through the assignment of daily tasks to workers:

> "The success of a good workman or the failure of a poor one is thereby daily and prominently called to the attention of the management."
>
> [Taylor 1947a, p. 70]

Management was therefore to receive condensed, summarized reports of operating results in which significant variations of actual performance from controls (e.g., standards) only were highlighted. That Fayol took the same view is clearly shown in his well-known definition:

> "In an undertaking, control consists in verifying whether everything occurs in conformity with the plan adopted, the instructions issued and the principles established. It has for object to point out weaknesses and errors in order to

> rectify them and prevent recurrence. It operates on everything, things, people, actions."
>
> [Fayol, 1949, p. 107]

"Controls"[3] developed as a control concept largely to facilitate the identification of exceptions and in the main resulted from Taylor's [1947a,b] notion that control must be information-based. Information about all aspects of the workplace was to be tabulated and reduced to laws, principles, and records of working methods, timing of operations, pace of production etc. These legalized "controls" were the benchmark against which actual performance was to be measured and as the trigger for activating sanctions.

Disciplinary control was strongly advocated by both Taylor and Fayol. In effect emphasising the need for direction and close supervision, Taylor argued:

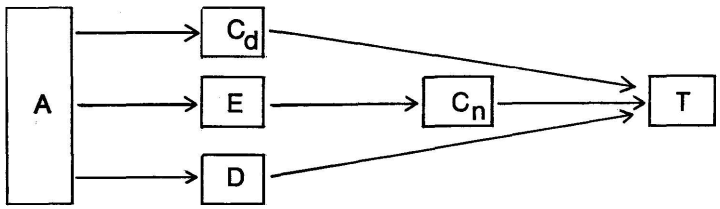
> "It is only through *enforced* adoption of the best implements and working conditions, and *enforced* co-operation that this faster work can be assured. And the duty of enforcing the adoption of standards and of enforcing this co-operation rests with *management* alone."
>
> (emphasis in original)
> [Taylor, 1916, p. 83]

This control through enforced worker co-operation was to be secured through the "carrot" of differential piece rates and the ultimate "stick" of dismissal [Taylor 1947a; 1916]. Fayol defined discipline as "obedience, application, energy, behaviour and outward marks of respect observed in accordance with the standing agreements between the firm and its employees" [Fayol, 1949, p. 22]. He argued that discipline was essential to the smooth running of a business, and was to be secured through good superiors, clean and fair agreements and judiciously applied sanctions.

These concepts allow the construction of a composite classical management model of control as represented in Figure 1. The composite classical model of control was focussed upon the concept of total control and had its source in the concept of authority-based control, which operated through the agency of coordinative control, exception control and disciplinary control in order to achieve total control. In turn, the concept of exception control operated through the agency of "controls". These concepts were then reiterated and embellished by such management writers as Urwick [1937, 1942], Brech [1948], Rose [1948] and Werolin [1947].

Figure 1

The Classical Management Model of Control



A = authority-based control
C_d = co-ordinative control
E = exception control
D = disciplinary control
C_n = "controls"
T = total control

THE CLASSICAL ACCOUNTING MODEL

In common with their scientific management forebears accountants specified principles of control, sought simple step-by-step processes, attached responsibility in terms of the hierarchy of authority, focussed upon measures of performance and efficiency, and reported according to the principle of exception [Hill, 1945; Matz, 1945]. Indeed, accounting writers closely followed classical management thinking.

Authority-Based Control

For accountants centralized control required clearly laid down lines of authority and classification of responsibility at each point of the organizational hierarchy. Budgetary authority and responsibility were to be specifically assigned to individuals or departments through a centralized accounting system [Tobey, 1925; Davis, 1932; Theiss, 1932; 1935]. This authority-based concept of control was further expressed in terms of "responsibility budgeting" [Matz, 1945] through which cost-centre budgets were set up for each department head. This supplied top management with information about planned versus actual performance of subordinates and thus fixed responsibility [Muth, 1947; Kassander, 1942].

Disciplinary Control

By the 1930s accountants advocated the enforcement of control, initiated by directives, to keep department heads "on their toes" [Hovey, 1931; Perry, 1938; Rose, 1948]. Budgeting was considered to be vital to this exercise [Gessner, 1936, p. 261]. Direction and discipline alone was insufficient. Such an approach to control also relied upon restriction and even prohibition. This often took the form of budgetary regulation and affected areas of activity such as production, sales and administration expenses [Coonley, 1925; Hecox, 1929]. In this way materials, labour and overhead expenditures were to be restricted much in the manner of a motoring speed limit [Kassander, 1942]. As early as 1922 "proper control of expenditures" was seen as a desired product of budgetary control, to be achieved by the prohibition of expenditures in excess of departmental estimates [National Association of Cost Accountants, 1922; McGladrey, 1934].

Coordinative Control

Coordination was also part of accountants' conception of control [N.A.C.A., 1922]. McKinsey [1919] for instance saw accounting as promoting control through coordinating the functions of sales, purchasing, stock control, production planning, plant maintenance and funding of credit. It also was argued that the control function of accounts connected and unified technological operations with the business administration that controlled and directed production [Scott, 1973]. In both views control was partly a coordinating activity which some referred to specifically as "control by the coordinated budget" [Hovey, 1931, p. 105].

"Controls"

While the management control model emphasized the importance of "controls"[4] as tools for the achievement of control, the accounting model relied at least as heavily on "controls", particularly in the form of budgetary standards. To accountants the budget became the best method of controlling costs and virtually synonymous with their classical control model [Davis, 1932]. As Theiss [1932, p. 13] argued:

> "For example, it is quite clear that the modern budget must be more than a restricting and restraining device for cash outlays, a few unusual expenses, and production costs;

> it can and should provide also a control of sales and selling expenses and we may add, it can and may, before many years, provide a means of measuring and controlling the costs of management. This last mentioned objective would mean a control of the administration by the owners of the business."

This is further evidenced by the widely held view of the budget and its component standards as mechanism for orderly attainment of effective control of operations and costs, particularly in large firms where it could provide a substitute for sole owner-manager control in a small business [McKinsey, 1921; Hawkins, 1935; Werolin, 1947]. This emphasis upon "controls" in the form of budgets and standards paved the way for accounting writers' emphasis upon the concept of control by exception.

Exception Control

Great importance was conventionally attached to checking for expenditure excesses. As early as the 1920s budgeting was regarded as a venue for providing results against estimates [N.A.C.A., 1922]. Check-ups on policy execution, checks for unfavourable trends, and so-called scientific checks on salaries were widely advocated [Coonley, 1925; Drucker, 1930]. Thus the budget was seen as an alarm system which would automatically sound when predetermined figures were exceeded [Hawkins, 1935]. The notion of checking up on subordinate performance via the budget persisted as an integral part of accounting thought on control into the 1950s and beyond [Edey, 1959; Barrett,[5] 1959]. In the U.K. the Institute of Cost and Works Accountants defined budgetary control:

> "Budgetary control is the systematic control of business operations by means of predetermined statements prepared in minute detail and assembled into a comprehensive programme, in order to provide a basis of comparison with actual performance and costs, with the object of obtaining the final results indicated in the programme."
>
> [Makin, 1940, p. 229]

The statements of minute detail, in effect, were budgetary standards, the key means of preparing statements of planned performance for comparison with actual results and a key tool of budgetary control [Davis, 1932; Ashworth, 1935; Peden, 1937]. Exceptions were measured by variances of actual operating results from standards and in the main were held to denote inefficiency and weakness.

Accountants saw it as their prime concern to identify and correct inefficiency and organizational weaknesses [Baker, 1918; Holden, Fish and Smith, 1951]. Accompanying corrective action was not forgotten:

> "The subject of control takes on a significance that should not be minimized, if corrective influences are to be set in motion . . ."
>
> [Peck, 1938, p. 471]

Indeed exception-based control was pursued through the budget with such vigour that the onus for unfavourable variances was all too easily placed upon managers and supervisors personally.

> "If the allowance on a job is two hours and the machinist requires three, the foreman knows at once that he has exceeded his standard and that he has failed in his control."
>
> [Kassander, 1942, p. 4]

A Classical Management Model Replica

From early in the 20th Century, accountants adopted a replica of the classical management control model. Authority-based control, disciplinary control, co-ordinative control, "controls", and exception control formed the foundation components of both management and accounting models. While the control model as originally developed by Taylor and Fayol also included the concept of total control, this aspect received less attention in subsequent accounting and management literature. Thus, prior to 1960 the classical accounting control model was identical to its management counterpart, as already shown in Figure 1.

PERSISTENT MODEL: CHANGING ENVIRONMENT

By the 1960s, alternatives to the classical control model had begun to emerge. Behaviouralists developed concepts of self-control, social control, power-based control and expectancy control. Systems theorists pioneered concepts of the control cycle, open and closed control systems, control timing and contingent control. Nevertheless many organizations continued with classical (Weberian) bureaucratic structures and (Taylor-Fayol derived) classical control concepts. Indeed the classical control model continued to be predominant in accounting and many definitions of control closely approximated Fayol's early definition [Morris, 1974; Dew and Gee, 1973; Lowe, 1970]. The concepts of authority-based control [Dew and Gee, 1973; Benninger, 1973] disciplinary control [Anderson, 1963; Matheson, 1970], "controls" [Lowe, 1970; Dew and Gee, 1973; Searfoss, 1976] and exception control [Taylor and Palmer, 1969; Jarvis and Skidmore, 1978; Welsch, 1976] also were reiterated by accounting writers.

Criticism of the classical control model began in the early 1960s. Management writers discussed the importance of individual aspirations, the obsolescence of force-based authority, the difficulty of achieving coordination and the dysfunctional effects of control [McGregor, 1967; Machin, 1973; Lawler, 1976]. Accountants began to adopt a similarly critical stance with behavioral accounting writers studying self-control, dysfunctional effects of "controls", the impact of performance evaluation and the importance of motivation [Hopwood, 1972, 1973; Ronen and Livingstone, 1975; Searfoss, 1976; Otley, 1978].

Such critiques and new directions of conceptualizing control reflected to a large degree a basic change in the industrial environment since Taylor and Fayol's time, particularly with respect to employee types, education and expectations, relationships between managers and subordinates, and employee attitudes to work, profit and authority. As the decades passed, firms employed both men and women, people of increasing basic education standard and a growing proportion of qualified professionals.

The resurging power of trade unions, new technology and improved living standards prompted higher employee expectations of economic reward and personal satisfaction in the workplace. Subordinates began to seek equal opportunity, merit-based rewards, participation in management decision-making, and greater self-control in their immediate daily tasks. The role of managers changed from expecting automatic obedience to their instructions, to consulting subordinates, mediating between demands of competing interests, allowing degrees of autonomy to workgroups and taking account of the rights of disadvantaged or minority group employees. Employees no longer automatically subscribed to officially tested authority and the need to work unreservedly for profit. Many began to regard authority as vested in a range of informal groups within the organization and placed high priority upon stability, security and leisure [Roebuck, 1973; Murphy, 1973; Handlin, 1973; Wren, 1979].

From Coordinative to Congruent Control

The early classical concept of coordinative control was subsequently modified by accountants to become a concept of congruent control. After the early 1960s accounting writers became concerned that managers should not work at cross purposes and advocated a control system to suit an organization's formally specified objectives [Horngren, 1967; Jarvis and Skidmore, 1978]. A personal commitment to formally stated organization objectives was to be required of and secured from all personnel. This concept of congruent control relied upon an accounting system to motivate individuals to act in the best interests of the whole organization and contribute to the achievement of organizational goals [Buckley, 1973]. Top management's task was to create harmony of efforts by trying to reconcile intra-organizational differences and conflicts in the allocation of resources, policies, effort and time [Welsch, 1976, p. 19].

From this viewpoint controls were "devices designed to motivate action toward the attainment of stipulated goals" [Benninger, 1973, p. 20] and the manifestation of organizational goals (imposed by top management) was the budget. It was argued that a budget target represented a goal imposed on an individual by higher levels of management and that control was introduced to ensure that those goals were attained [Stedry, 1960; Welsch, 1971].

The congruent control concept was unique and different to coordinative control because it extended down the organizational hierarchy to include the personal goals and aspirations of all organization members. The stated object of control was to ensure a congruence between personal and organizational goals so that each individual, in attempting to satisfy his own personal goals, would be making the maximum possible contribution to the attainment of organizational goals [Jarvis and Skidmore, 1978; Welsch, 1976; Searfoss, 1976].[6]

Congruent control was also expressed in terms of goal and subgoal consistency. When subunits operated according to specified subgoals which were consistent with overall performance criteria, they were said to be collectively performing in the best interests of the organization as a whole [Lowe, 1970; Baumler, 1972]. Within this perspective, two strands of control for goal congruence were evident. They were consistency of subgoals with organizational goals and consistency of behaviour with goals and subgoals.

This accounting sponsored concept of congruent control was not an entirely new concept. Fayol [1949] had largely anticipated it in his combination of principles known as Unity of Command, Unity of Direction and Subordination of Individual Interest to General Interest. He saw these three principles as prerequisites to command which in turn influenced his concept of control. Unity of Command required each employee to receive orders from only one superior, Unity of Direction required a related group of activities to have one head and one plan, and Subordination of Individual to General Interest held that individual or group employee interests should not prevail over the interests of the organization.

In accounting, congruent control was distinguished from mere co-ordinative control by its concern about aligning personal goals and motivation with formal organization goals set by top management. Fayol had also introduced a quite separate concept of co-ordination into his control model, leaving his principles of Unity of Command, Unity of Direction and Subordination of Individual Interest to General Interest as likely predecessors in many respects to the accounting concept of congruent control. However Fayol's principles were more strongly authority-based in the management tradition of his day. The later accounting notion of aligning personal with organizational goals allowed for a wider range of methods (such as discussion, persuasion and consultation) than authoritarian orders that were more typically used in Fayol's time. Thus accountants' discussions of goal congruence have more often referred to reconciliation rather than enforcement of goals. Nevertheless this classical concept persists today even though organization theorists and industrial sociologists have pointed out [Parker, 1976] that factors such as the distribution of informal power throughout the organization, the variety, strength and changeability of individual and group objectives, and the divergent motivations underpinning any one operation, make goal congruence an unattainable ideal.

FACTORS INFLUENCING ACCOUNTING REPLICATION

The relatively detailed matching of classical management control model components by the classical accounting model suggests that accounting writers derived their model from the work of their management counterparts. It is therefore important to consider what factors appear to have predisposed accountants towards adoption of the classical management control model. These were, in the main, budget-related, and concern the historical evolution of the budget, the scientific and efficiency orientation of accountants as well as their perception of the budget.

Historical Evolution of Budgets

The notion of control through limitation and restriction by those in higher authority is found in the origins of the term "budget". The Gallic word "sack" was Latinised as "bulga", and appears to have been first used in Romanised France. Subsequently the old French term of "boge" or "bouge" became "bougette", meaning "little bag". This appeared as the terms "bogett" or "bougett" in Middle English from which the Modern English term "budget" appeared [Theiss, 1937; Rautenstrauch and Villers, 1968]. Subsequently the term "budget" was used to include not only the container but also its contents (in a restrictive sense).

As early as 1760 the Chancellor of the Exchequer presented the national budget to the English parliament at the commencement of each fiscal year. Indeed government first used budgets for expenditure control [Theiss, 1937; Rautenstrauch and Villers, 1968]. The budget was a restrictive device adopted to check or limit the king's power to levy taxes and to limit the expenditures of public officials [Theiss, 1937]. In spite of its early British origins, a national budget was not adopted in the U.S.A. until 1921 and business budgeting did not achieve prominence until the late 1920s [Rautenstrauch and Villers, 1968]. When business use of the budget did become commonplace, emphasis was on the same restrictive and authority-based concepts of control as government budgets, restricting and limiting expenditures for advertising, welfare, research, personnel and plant extension [Theiss, 1937; Potts, 1977].

The development of business budgets in U.S.A. owed much to the work of engineers in the period 1880-1920. These included Towne, Halsey, Church and Taylor [Tsuji, 1975; Wells, 1977] and their work focussed upon standardising factory operations and securing operational efficiency. This concern for efficiency and cost reduction in turn drew attention to the need for accurate cost finding and restrictive cost control [Theiss, 1937; Wells, 1977]. To that end, engineers dominated the early development of business budgeting in orienting their measurements of efficiency to measuring the difference between actual and standard performance in physical input/output terms. From this viewpoint the role of the accounting system was limited to recording, in money terms, the engineer's progress in moving towards the ideal 100 percent efficient state [Sutcliffe, 1976]. Thus the classical management and accounting models of control shared the common ancestry of engineering thought, in part expressed through their work in costing and budgeting.

Scientific Orientation

That engineers influenced the accounting control model is further evidenced by the frequency of accounting references to the "scientific management" approach. While accountants were in favour of classical concepts such as "centralised control of the highest type" [Coonley, 1925, p. 64], they also identified information as a basis of control and called for scientific administration through the proper application of correctly interpreted information [McKinsey, 1919; Ashworth, 1935]. Most of these references arose in connection with the budget. For example, Theiss [1937] claimed that accountants' interpretation of budgetary estimates, results and variances only became commonplace in the late 1930s.

> "Budgeting has merely aided business management to realize its profit objective by providing a scientific technique for forecasting business operations and establishing standards."
>
> [Theiss, 1937, p. 48]

The budget quantified in financial terms the benefits of scientific management [Frazer, 1922], and provided a scientific basis for centralised authority and adequate control [Rightor, 1917]. Businesses also required "scientifically recorded" cost information as a foundation for future estimates [Frazer, 1922; Harrison, 1924]. While writers like Theiss [1935, p. 158] considered scientific method to be "generously applied, both in the preparation and enforcement of the budget," Weger [1926] claimed that scientific management contemplated and embraced a budgetary system of control as one of its component strategies. Later, Urwick and Brech [1957] similarly argued that the post-World War I development of budget standards was a refinement of scientific management techniques rather than a pioneering stage in itself.

Scientific standard setting appealed to accountants as a substitute for nebulous ideals, with the engineer determining the standards and the accountant measuring performance. Thus standard costs and budgeting were advocated by numerous accounting writers as a natural corollary to scientific management [Scovell, 1914; Harrison, 1924]. Since much of their discussions of control took place in the budgeting context, accountants were again predisposed to adopt a scientific (and eventually classical) management control model.

Efficiency Orientation

Accountants also shared the scientific management concern for efficiency. "The modern cost-accounting fundamentals are Standards, Efficiencies, Equivalents" [Emerson, 1913, p. 389]. Advocates of scientific management argued that in the ideal form of organization for industrial efficiency, specialists would first formulate principles of efficiency and then their observance and neglect would be revealed. Gantt [1916] called for a cost system that would reduce to a financial expression the difference between efficient and inefficient operations. Just as Taylor had sought daily reports on operations, so writers such as Peden [1937] began to argue for daily rather than monthly reports to foremen on their production efficiency, labour control and economy in use of materials. Thus, efficiency became a key concern of accountants as a scientifically inspired object of control:

> "Finally, a word to Cost Accountants in particular. Do not be scared of the term 'budgetary control', forget 'budgetary' if you like and only remember 'control', 'standard', 'estimate' or any other term you like. Go out after the main idea, 'efficiency' — efficiency in selling, efficiency in manufacture."
>
> [Hawkins, 1935, p. 227]

Accounting records were seen as an agent of control in the pursuit of efficiency, fighting the tendency towards waste and counteracting the insidious factory disease of expense [Scovell, 1914; Franklin 1912a,b]. Efficiency was to be attained only by striving for high standards which had been worked out scientifically [Franklin 1912c]. By the mid-to-late 1930s the budget was being "sold" to accountants and managers as a mechanism for keeping departments operating at maximum efficiency with budgetary control causing departmental managers to discover errors and correct inefficiencies [Banks, 1937; Hawkins, 1935; Dunkerley, 1935].[7] This scientific management concern to control for efficiency appears to have influenced the adoption of the exception control concept in accounting. Through the budget, control was to be "effected by a system of variations which disclose inefficiencies, and operates on the principle of exception, whereby normals may be neglected and attention focussed on the exceptional cases" [Morris 1936b, p. 925]. This view continued through the 1950s and recorded the efficiency of individuals, groups and departments, detected inefficient production, measured idle capacity and encouraged waste avoidance [Matz, 1945; Barrett, 1959].[8]

Accountants' allegiance to the classical management control model was attributable to the adoption of the scientific management philosophy, including its pursuit of efficiency.[9] Makin [1940, p. 228] put it this way:

> "Just as scientific factory management is instituted to bring about full economic efficiency of the manufacturing unit, so is budgetary control operated to ensure that the business as a whole is controlled by sound and precise methods as opposed to rule of thumb."

Accounting Perceptions of the Budget

Since most of the analysis of control took place within the budgeting context, further understanding of the accounting control model's replication of the classical management model can be gained by considering how the budget was perceived by accountants. While planning for profitability was seen as one budgetary advantage [Rose, 1948], control of expenditure through budgeting and other restrictive practices, like reductions in personnel, expansion of supervisory workloads and cost reduction programs were emphasised even more [Banks, 1937; Loncar, 1956]. The budget was seen to be a counter measure to economic uncertainties [Lazarus, 1924], and expense control helped reduce the likelihood of business catastrophies [Vieh, 1925; Hensel, 1937]. Few attempts, however, were made at specific definition of budgetary control, because as Dunkerley [1935, p. 26] argued:

> "It does not seem possible to lay down a general ruling on the literal interpretation of the term 'Budgetary Control.'"

Budgeting was variously defined as foreseeing problems [Coonley, 1925], accomplishing planned results [McGladrey, 1934], developing a business program and then assisting management to control operations [Perry, 1938].

Accountants considered the budget to be a means of projecting desired profit and controlling activities. Control was required to ensure that capital and labour were utilized in the most profitable manner [Dunkerley, 1935; Morris 1936a; Perry, 1938]. Centralized control of costs and expenses was exercised by higher management [Tobey, 1925; Colgan, 1928] who ultimately controlled subordinates, activities and expenditures through the budget [Theiss, 1932; Ashworth, 1935]. Indeed many saw the purpose of budgeting as control [Hawkins, 1935] so that they tended to concentrate upon the control function to the exclusion of all else (e.g. planning) [Theiss, 1937]. This pronounced emphasis upon control continued in the accounting literature into the 1950s [Hensel, 1937; Morrow, 1948; Rose, 1952].

The emphasis upon control in the budgeting literature was reflected in budgeting practice. Coonley [1923] described the production and inventory control practices of the Walworth Manufacturing Company and found that control via the budget emerged as a key focus of that company's management system. In 1932 Theiss extensively surveyed budget practices in the USA and classified budgetary systems into five categories: cost control, sales promotion, financial, executive and analytical accounting control. With the exception of sales promotion, these categories were concerned largely with securing a centralized and authoritarian concept of control. Although most accountants perceived the budget as an instrument of control [Dunkerley, 1935], a minority did recognize a more balanced role for both planning and control in the budget [McGladrey, 1934; Perry, 1938; Makin, 1940; Stone, 1952; Loncar, 1956].

In July 1930 the International Conference on Budgetary Control sponsored by the International Management Institute was held in Geneva, Switzerland [Dunkerley, 1935; Theiss, 1937] and adopted the following definition of budgetary control:

> "Budgeting is not merely control: it is not merely forecasting: it is an exact rigorous analysis of the past the probable and desired future experience with a view to substituting considered intentions for opportunism in management'."
>
> [Stone, 1952, p. 31]

Giving equal importance to the budget's planning and control functions represented a significant departure from the control emphasis in the literature of the period. However most budgeting literature published after the conference continued to concentrate largely on the control function. Even the Geneva definition itself suffered from reinterpretation when Hawkins [1935] argued that it covered any system of *general control*[10] of a business activity by predetermined yardstick or budget. Nevertheless it was little more than a momentary aberration from accountants' control-oriented perception of budgeting,[11] based upon limitation, restriction, co-ordination and cost reduction [Tobey, 1925; Ashworth, 1935; Dunkerley, 1935; Hensel, 1937].

CONCLUSION

The classical accounting view of control developed within the budgeting literature and reflected the earlier involvement of engineers who had given budgeting a scientific framework. These factors had a strong influence upon the emerging accounting control model. In addition this control model reflected the early governmental use of budgeting, the efficiency orientation of the scientific management school and accountants' preoccupation with budgets as a principal instrument of management control. At the same time, these also appear to have predisposed the accounting control model to replicate the Taylor-Fayol based classical management control model. Thus the accounting control model became authority-based, having total control as its objective. The intervening concepts designed to contribute towards total control were coordinative control, disciplinary control and exception control (which operated through the agency of controls).

These findings stand in marked contrast to those of Luneski [1964]. His study was founded in the classical management tradition but did not recognise its influence. While attempting to draw inferences for accounting from management approaches to control, Luneski considered a range of definitions and attempted to link them to management functions while lamenting the difficulty of capturing all dimensions of control in one definition. This study has explored the foundations of the classical approach to control, set the resulting accounting control concepts within their classical management framework, recognised the emergence of other schools of thought and offered some explanations for the accounting replication of the classical management model.

The accounting replication of the classical management control model exhibited only a brief time lag and retained strong support from accounting writers for many years. This may be attributed to a number of factors. Before the 1930s, the classical model was the only control model available to accountants (behavioural and systems models emerging later) and presented itself as a set of all-purpose general principles to be readily applied in practice. Furthermore the publicity given by Taylor's followers and the model's compatibility with a restrictive budgeting tradition reinforced the classical model's aura of certainty and time-saving simplicity. Hence the classical control model has continued to attract accountants right up to the present.

The results of this research clearly demonstrate that the conceptual dimensions of the classical accounting concept of control are more complex than is commonly realized. Accordingly use, development and criticism of the classical accounting control model should first take account of the historical environment that accompanied its emergence. In this way the model's suitability to present-day industrial conditions and management practices may be better judged.

FOOTNOTES

[1]The oft-quoted example of the retraining of the Dutch worker, Schmidt, in pig iron handling [Taylor, 1916, pp. 40-48, 59-64] demonstrates this point.

[2]Essentially the retention of centralised top management control by coordinating subordinates' activities through the authority of their superiors.

[3]The term "controls" is used here as a generally accepted short form expression for control tools such as cost standards, production targets, expenditure limits, quotas etc.

[4]Refer again to footnote 3.

[5]Barrett defined control (through accounting) in terms of selective checking of an organization's personnel more for dishonesty than for error!

[6]Few accounting writers in the 1960s and 1970s questioned the validity or appropriateness of the goal congruence concept. An exception is Parker [1976; 1979].

[7]Later, Holden, Fish and Smith's [1951, p. 11] empirical survey revealed that all companies studied stressed the importance of cost reduction and control but few were particularly well organized for achieving it.

[8]For many accounting writers, cost control for efficiency included the pursuit (not unlike F. W. Taylor) of cost reduction [Matz, 1945; Fiske, 1947; Muth, 1947].

[9]Of management writers contributing to the classical management control model, some also contributed to the classical accounting model of control (e.g. Brech, Coonley, Davis, McKinsey, Rose, Urwick and Werolin). This too would have strengthened the likelihood of the two models of control being very similar.

[10]Nevertheless Hawkins [1935, p. 271] demonstrated a laissez-faire attitude to the question of budget nature in stating "for so long as we all understand what is meant by the term 'budgetary control', it does not matter what people call it."

[11]Fiske [1947, p. 66] claimed that by 1938 budgets had been extended from their original planning orientation to include a control orientation. Alternatively, Loncar [1956, p. 950] argued that the advent of World War II brought a major

transition in budget philosophy, with government-sponsored defense programs shifting emphasis away from control towards planning with individual company budgets following suit. This study has been unable to detect any significant evidence in the literature to support such assertions.

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HISTORICAL NUGGETS

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A GENEALOGY OF TODAY'S CONTRIBUTORS TO ACCOUNTING RESEARCH

Abstract: This paper explores the "intellectual roots" of some of today's major contributors to accounting research. Specifically, twenty-four present-day contributors were identified through their publication records and editorial service. For each of these contributors, the dissertation chairman was identified and assumed to be the primary mentor; in turn, dissertation chairmen for these individuals were also identified. Several iterations of this process produced four generations of accounting genealogy. The intellectual roots depicted in this paper highlight noteworthy linkages with members of the Accounting Hall of Fame, recipients of the Outstanding Educators Award, and with education in the discipline of economics.

Published research in accounting represents a significant contribution to the profession. An equally significant contribution is the mentoring of each generation of accounting researchers. This paper explores the intellectual roots of several of today's leading contributors to accounting research. In establishing this lineage, the focus is on the mentor/protegé relationship between a doctoral candidate and his dissertation chairman.

DOCTORAL CANDIDATES AND DISSERTATION CHAIRMEN

A doctoral program represents the earliest and perhaps the most formative years in the career of an academic accounting researcher. During a doctoral program, candidates are exploring ideas and developing research skills. Generally, in the candidate/chairman relationship, research-oriented doctoral candidates align themselves with research-oriented faculty members. Doctoral students desiring a productive publication career typically select a dissertation chairman who has a publication record similar to that which they aspire to achieve [Dopuch, 1984]. In fact, prior research has shown "a strong relationship between a faculty's research impact and that of its graduates" [Brown and Gardner, 1985]. During their affiliation, an experienced dissertation chairman educates (mentors) his candidates on the critical factors necessary for successful research and publication.

A mentor teaches a protegé . . .

> . . . specific skills; develops the protegé's intellectual abilities; intervenes to facilitate the protegé's entry and advancement; serves as a host and guide who welcomes the newcomer into his profession, shows him how it operates, and introduces him to its most important players; provides advice, encouragement and constructive criticism; and serves as an exemplar who embodies values and an approach to professional endeavor and personal life that the protegé can emulate [Hall and Sandler, n.d.; p. 3].

In particular, a dissertation chairman acting as mentor, takes the student

> . . . under his or her wing; helps the person set goals and standards and develop skills; protects the novice from others in a way that allows room for risk and failure; facilitates the novice's successful entry into academic and professional circles and ultimately passes on his or her work to the protegé [Hall and Sandler, n.d., p. 3].

For most new doctoral graduates, this mentoring relationship evolves into a quasi-mentoring relationship where the graduate now enjoys the role of peer but still draws upon the chairman for intellectual guidance and as a touchstone for maturing ideas. Because of these initial and continuing relationships, a network of associations linking recently established contributors to accounting research and prior contributors is likely to be traceable and to be informative in depicting the evolution of accounting research.

IDENTIFYING TODAY'S "LEADING" RESEARCHERS

The first step in establishing this accounting genealogy is to identify the "leading" recent contributors to accounting research. Obviously, there are several criteria that could be employed in deriving such a list. One common measure is the publication record of researchers. The publication record, important in the tenure and promotion of accounting faculty, represents an outlet for exhibiting ambition, motivation, and professional contribution. [Campbell, Gaertner and Vecchio, 1983]. We have thus used it as one of our methods for identifying today's noteworthy contributors. In addition, we have also chosen to consider the contribution exhibited through editorial responsibilities on the profession's journals. This service is our second measure of noteworthy research contribution due to the role such service plays in evaluating, selecting and, in many instances, aiding publishable research.

Accounting academics consider the *Journal of Accounting Research (JAR)* and *The Accounting Review (AR)* to be the two leading accounting academic journals. [Howard and Nikolai, 1983]. Accordingly, work in these two journals was used to gauge a person's contribution to academic accounting research. For 1974 through 1983, all issues of *JAR* and *AR,* and the *JAR Supplements,* were reviewed and the authors and editorial members noted. A scoring system was used to assign points to each contributor based upon the following criteria.

Author of a main article	3 points per author
Author of a supporting article (*JAR:* Capsule and Comments Section) (*AR:* Notes and Financial Reporting Section)	2 points per author
Editor of *JAR* or *AR*	3 points per year
Associate Editor of *JAR* or *AR*	2 points per year
Member of the editorial board of *JAR* or *AR*	1 point per year

Using this scoring scheme, we ranked 396 persons who contributed to *JAR* and *AR* during this ten-year period. A significant natural break in the ordering occurred at 20 points, with 24 people being identified as the most recent (fourth) generation of contributors to accounting research whose intellectual roots would be traced. Eighteen of these people were also identified in another study as today's leading researchers based upon the accounting literature's citation of their research, thus attesting to the validity of our list. [Brown and Gardner, 1985].

LINKING THE PRESENT WITH THE PAST

We were able to identify the year and school of graduation, the dissertation chairman, and the research areas of these 24 leading contributors to today's accounting research, either through personal telephone interviews, or through various editions of *Dissertation Abstracts, Faculty Personnel,* and the *Accounting Faculty Directory.* Identifying the dissertation chairmen of these 24 contributors generated a list of 17 new faculty names which we call the third generation of researchers. For this generation, the process of determining dissertation chairmen, and year and school of graduation was repeated, producing the second generation. A final iteration of the process provided the first generation. Exhibit I presents a diagram illustrating all of these relationships. In nine cases, the process was halted because the dissertation chairman received his degree outside of accounting.

AN HONORED LINEAGE

The achievements and status of the accounting mentors identified in the first three generations were highlighted by two criteria: (1) membership in the Accounting Hall of Fame and (2) receipt of the American Accounting Association Outstanding Accounting Educator Award. Forty-two accountants have been inducted into the Hall of Fame, 12 of whom made their primary contributions as non-practitioners. The Outstanding Accounting Educator Award has been presented to 17 academics as of December 31, 1983; of these 17, two have also been inducted into the Accounting Hall of Fame. Therefore, in total, 27 academics have received these honors. Exhibit II identifies these 27 individuals.

INTERPRETING OUR GENEALOGY

Comparison of Exhibits I and II suggests a noteworthy link between today's leading contributors to accounting research and our professionally acclaimed lifetime contributors. Of the 26 *accounting* dissertation chairmen comprising the third, second, and first generations, ten have been honored by their profession. Four were inductees into the Accounting Hall of Fame, five have received the Outstanding Accounting Educator Award, and one received both awards. Moreover, 12 of these 26 dissertation chairmen were identified as major contributors to accountancy in a recent survey of accounting educators [Leinicke and Flesher, 1983].

Exhibit I illustrates that the 24 recent (fourth-generation) contributors received their degrees from ten different institutions. The third, second, and first generations included an additional nine institutions. Therefore, in total, the 58 contributors listed in Exhibit

EXHIBIT I
Accounting's Intellectual Roots

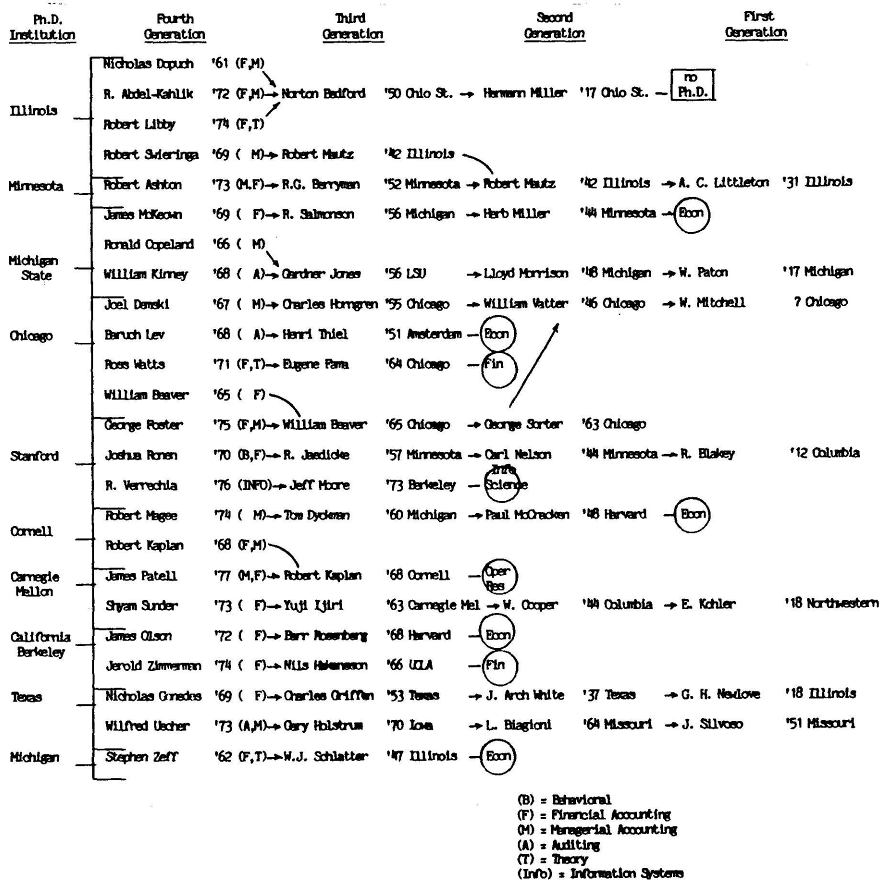

EXHIBIT II

Listing of Accounting Hall of Fame (academics only) and Outstanding Educators

The Accounting Hall of Fame:

* William A. Paton
Henry R. Hatfield
Charles E. Sprague
Hiram T. Scovill
* A. Charles Littleton
* Hermann C. Miller
Harry A. Finney
* Eric L. Kohler
Lloyd Morey
* Robert K. Mautz
Maurice Moonitz
Sidney Davidson

Outstanding Accounting Educator Award:

Wilton T. Anderson
* Charles T. Horngren
Kenneth W. Perry
James D. Edwards
* Carl L. Nelson
Sidney Davidson
Jack J. Kempner
* Herbert E. Miller
Charles T. Zlatkovich
* George H. Sorter
* Norton M. Bedford
David Solomons
Nicholas Dopuch
Catherine E. Miles
Gerhard G. Mueller
Carl T. Devine
* William A. Paton

*These names appear in Exhibit I as dissertation chairmen.

I graduated from only 19 different schools. These 19 schools, not coincidentally, have been rated highly by other research studies that used the publication success of the graduates of various institutions to rank graduate programs. The schools depicted in this genealogical study represent eight of the top nine programs highlighted in that regard. [Koch, Merino and Berman, 1982]. In one other research study, the ten schools associated with the fourth generation were ranked in the top 12 as determined by journal citations of the various universities' accounting Ph.D. graduates' published research. [Brown and Gardner, 1985].

The following four graduate programs appear to have had the strongest influence on the development of accounting research—i.e., their graduates represent almost 50 percent of Exhibit I's names.

	No. of Graduates in Exhibit 1	Percent of Exhibit 1's Names
Chicago	9	16%
Illinois	8	14%
Minnesota	5	9%
Michigan	5	9%
Total	27	48%

In one sense, these results are not surprising because these four institutions have old, established doctoral programs. Chicago's first accounting Ph.D. graduated in 1922, Minnesota's in 1936, and Illinois and Michigan awarded their first accounting Ph.D.s in 1939 [Hasselback, 1984]. Only three other schools in the country graduated accounting Ph.D.s earlier than 1939 (Harvard, 1935, Pittsburgh, 1932, and Texas, 1934). However, it is interesting to note that these four schools have graduated only 15 percent of all U.S. accounting Ph.D.s through 1983. Other research has also identified the nation's top private schools, Chicago included, and the majority of "Big Ten" institutions as having provided a disproportionately large share of contributors to accounting's most widely cited literature base.

Two other relationships within these four generations show the influence of peer interactions and inbreeding in these few top schools. Fourteen of the fourth-generation accounting researchers (58 percent) were in graduate school during a period which would have overlapped with the school years of at least one other of their fourth-generation colleagues from the same school. This overlap leads to the speculation that the peer-group interaction influenced, in a synergistic way, these contributors' propensity for adopting and executing a successful research strategy. Similarly, there were 15 instances (37 percent of Exhibit I's chairman/student relationships) where a dissertation chairman and doctoral student received their degrees from the same institution ("inbreeding").

Seven of these situations pertain to the current generation of researchers. Intuitively, this suggests that the perpetuation of successful lines of research is being achieved, in part, through a pipeline within institutions over successive accounting generations.

In another vein, seven of the 19 third-generation researchers are from non-accounting disciplines. Fields of study such as economics, finance, and information science have provided much of the intellectual foundations for accounting thought and are exemplified in such current research directions as agency theory, event studies, information economics, and so on. The fact remains that just as accounting was born out of economics, it still draws upon economics and ideas from other closely related disciplines.

CONCLUSIONS

This paper has traced the intellectual roots of 24 current contributors to accounting research. The lineage established focused on the relationships between doctoral candidates and their dissertation chairmen. Subsequent complementary research might focus on *previous* generations of honored accounting academics who do not manifest a mentor linkage with the *current* generation; it would be interesting to try to understand the reasons for such an absence of a linkage. Clearly, they may have mentored outstanding teachers or practitioners instead of academic researchers, and such an insight would again add to our understanding of how our profession has evolved.

As an academic body, we are still harvesting the fruits of a genealogy drawn from the fertile fields of economics and finance from the fertile minds of such outstanding accounting names as Paton, Kohler, and Littleton. This paper provides an attempt to understand the current array of leading contributors to accounting research through its links with the past. Who will comprise the fifth generation? Who will their intellectual forebears be?

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ACCOUNTING CONTROL: AN HISTORICAL NOTE

"Comptrol" is sometimes seen as an alternative spelling of 'control' and its use in the Auditor and Comptroller General's official title lends support to the view that it is an archaic spelling of the word. It is natural to suppose, further, that 'comptrol' might be the original form. Philologists tell us that this is a mistake and that comptroller is an erroneous spelling which arose because of confusion with the French 'compt'. 'Comptrol' is not the origin of 'control' but the mistake does serve to emphasise the close, and genuine, identification of the term with accounting. This article looks at the origins of financial control and suggests that accountants might benefit from recalling its true roots.

Control is a contraction of 'counter roll'. Just as the counterfoil was originally a parallel record of the 'foil', in the ancient system of recording by means of notches cut into tally sticks, so also the counter roll was a duplicate record serving to validate the entries made on the roll. R C Jarvis says "This system of accountancy and control 'by the counter-roll' (*per contrarotulum*) was a general medieval practice . . ." (Preface to *The Organisation of the English Customs System 1696-1786*—E E Hoon, David and Charles, 1968 —p. xiv). The system was imported with the Norman Conquest as an major feature of the procedures of the Court of Exchequer. It was described in some detail by Richard Fitz Nigel in his *Dialogue de Scaccario* (Dialogue of the Exchequer) which was written about 1179 (a translation of this work is contained in *English Historical Documents,* Vol II, D C Douglas and G W Greenaway, Eyre and Spottiswoode, 1953).

In the accounting system developed by the Exchequer, the counter-roll and the use of tallies were important components of a sophisticated (and complex) set of procedures. Sir Geoffrey Gilbert (1674-1726), a judge and legal writer, described the system as follows:

"When any Man pays in Money into the *Exchequer,* he pays the Sum to the Teller, and the Teller makes a Bill in Parchment for the

Sum so paid, in which is the Christian and Sirname of the Party, his Office, and the Day of Payment, and the Sum so paid wrote in Numeral Letters; this Bill is rolled up and thrown down through a Pipe into the Tally Court; then the Tally Cutter prepares the Tally, which is notched according to the Sum mentioned in the Bill, viz a greater Notch for (M.) and a lesser Notch for (C.) a lesser Notch for (X.) and so a lesser Notch for single Pounds, and for Shillings and Pence the Tally is but slightly cut with the Knife.

"Then the Auditor of the Receipt, who was anciently called the *Receptor talliar,* writes a Duplicate upon the Wood of the Tally, of the Contents of the Parchment Bill, and the Sum (which is writ in the Numeral Letters upon the Bill, and is expressed by Notches on the Tally). Then the Clerk of the Pells enters the Bill into his Book, and the *Scriptor talliar* reads the Tally; the Clerk of the Pells at the same time looking into his Book, to see that his Entry and the Tally agree together; and then the Chamberlains strike the Tally, that is, divide it into two, and the Tally or the Stock is given to the Party, and the Foil or Counter-part is left with the Chamberlains, and the Bill is carried away and filed by the Auditor of the Receipt.

In this Manner of Accounting there are several Things to be observed; First, that the superior *Exchequer,* which charges the Accountant, is perfectly distinct from the inferior *Exchequer,* where the Money is paid in, by which he is to be discharged; and the Reason of this is, that there may be no Collusion to charge or discharge the Accountant for less than what is due; for if he were to *tott* at the same Place where he pays, there might be a Collusion with the Accountant; therefore when he pays in at the Teller's Office, the Teller makes out a Bill, as a Warrant for the Accountant's Tally; and the Teller sits apart from the Tally Court, because the Tally is to be charged upon the Teller for the Money; and therefore it is, that the Auditor takes away the Bill with him in Order to charge the Teller; and the Chamberlain takes away the Foil or Counter-Talley, in Order to check the Discharge of the Accountant; for the Accountant must come to the Chamberlain's Office, and get his Tally joined, and that is markt by punching, and sent up by a Messenger into the Pipe, and is there kept by the Pipe, as a Voucher for them, to allow the same in Discharge of the Accountant; so that as the Tally, and Counter-tally, check the Discharge of the Accountant before the Account is made up; so they are Vouchers to the Pipe, in allowing the Discharge to the Accountant." *(An Historical View of the Court of Exchequer, and the King's Revenues, there answered* London 1738.)

Charles Dicken also described the system and its abandonment, but in scathing terms:

"Ages ago a savage mode of keeping accounts on notched sticks was introduced into the Court of Exchequer, and the accounts were kept, much as Robinson Crusoe kept his calendar on the desert island. In the course of considerable revolutions of time . . . a multitude of accountants, book-keepers, and actuaries, were born, and died. Still official routine inclined to these notched sticks, as if they were pillars of the constitution, and still the Exchequer accounts continued to be kept on certain splints of elm wood called "tallies". In the reign of George III an inquiry was made by some revolutionary spirit, whether pens, ink, and paper, slates and pencils, being in existence, this obstinate adherence to an obsolete custom ought to be continued, and whether a change ought not to be effected.

"All the red tape in the country grew redder at the bare mention of this bold and original conception, and it took till 1826 to get these sticks abolished. In 1834 it was found that there was a considerable accumulation of them . . . The sticks were housed at Westminster . . . and so the order went forth that they were to be privately and confidentially burnt. It came to pass that they were burnt in the stove in the House of Lords. The stove, overgorged with these preposterous sticks, set fire to the House of Lords; the House of Lords set fire to the House of Commons; the two houses were reduced to ashes . . ." (Speech on 'Administrative Reform' delivered at the Theatre Royal, Drury Lane, 1855.)

The pipe, the tallies and the counter-rolls formed a formidable system of internal checks. They now seem cumbersome but they were regarded as essential in medieval Britain and the principles involved and some of the needs that they answered can still be recognized as valid by modern accountants and auditors. Indeed the use of a 'pipe' to transport money to the physically separated cashier's office can be remembered by some of us as an intriguing feature of the internal controls of some departmental stores in our youth, and this has some similarity with the system described by Gilbert.

Over the centuries, control has expanded from its origins as a specialized accounting technique to cover many forms of regulatory activity in any area and its emphasis has expanded from that of ex post accountability to include ex ante planning and budgeting. Although financial control continues as a vital feature of accounting systems, accountants now frequently go outside their own discipline when they describe the major features of control systems. The accounting origins of control lay buried in the pages of The Oxford English Dictionary.

The engineering orientation of systems analysis and quality control has introduced such engineering terminology as *feedback* and *noise* and this has implied that the example par excellence of a control system is Stevenson's steam governor, where feedback automatically regulated the steam valve and the amount of steam fed to the engine. There are useful features in this analogy. Developments in information technology, engineering and process control have also provided the accountant with valuable assistance, both in terms of hardware and with the development of conceptual tools and software. There are, however, important differences between accounting and engineering control. Financial control cannot be achieved by an accounting equivalent of the steam governor or by adjusting a few dials on a control panel. Because of these differences it does no harm to remind ourselves that the word 'control' did not come from engineering but that it was originally a technical accounting term. Its pedigree should not be neglected.

The history of tallies (see "A Short History of Tallies" R Robert printed in *Studies in the History of Accounting*—A. C. Littleton and B. S. Yamey, Sweet and Maxwell, 1956) serves to stress the dangers of retaining obsolete control methods, but the medieval Exchequer system also emphasised the importance of internal check (which remains relevant) and some of the basic principles of control *per contrarotulum* likewise remain valid. One such principle is the necessity of establishing a common basis for the preparation of the roll and the counter-roll. There is rightly much emphasis on the need for accounting techniques and statements to be relevant for decision making purposes but less stress on the need to ensure that the counter-roll (used to record the results of operations) is prepared on a basis that is consistent with that used for the roll (which contains the plan). It is true that management accountants emphasise the importance of flexing the budget so that it conforms with actual conditions to enable a valid comparison to be made. Sometimes, however, this principle is disregarded. As an example, consider the adoption of a discounted cash flow technique for decision making purposes. If an investment opportunity is accepted because it promises a yield of X% then the subsequent accounts should exhibit this rate of return if things proceed according to plan. This is not achieved by the methods conventionally used for reporting on the results of the decision making. In such cases the roll and the counter-roll cannot be validly compared and control *per contrarotulum* is defective.

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BOOK REVIEWS

Barbara Merino, Editor
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REVIEW ESSAY:

Robert R. Locke, *The End of the Practical Man: Entrepreneurship and Higher Education in Germany, France and Great Britain, 1880-1940.* (Greenwich, Conn.: JAI Press, 363 pp., $22.50, individuals, $45.00, institutions).

Review by
O. Finley Graves
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Locke's investigation into the relationship of higher education and entrepreneurial performance in Germany, France, and Great Britain during the second industrial revolution (1880-1940) chronicles the accomplishments of German academicians in the area of business economics in the early decades of this century, accomplishments that not only resulted in a new business science but had a decided impact on German industry. Locke demonstrates that as early as the 1910s academic training and research met with a receptiveness among German entrepreneurs that remained uncharacteristic of their British and French counterparts until as late as the 1950s. In Britain and France, rather, the entrepreneur continued to esteem the practical man, the man who had received his training on the job or who had pioneered the first industrial revolution, and to view with contempt the idea of any academic orientation in business. As a result, Locke argues, Germany enjoyed a considerable degree of growth in the new high technology industries before and after the First World War that Great Britain and France did not. It was the legacy of the business economics movement in German higher education, moreover, Locke suggests, that enabled Germany to bridge the economic chasm of the post-World War II years and reclaim its leadership position in industry as readily as it did. Accounting historians will find Locke's account of the evolution of German business economics of special interest since the movement was centered at its inception around such accounting-oriented business economists as Eugen Schmalenbach of the University of Cologne and Fritz Schmidt of the University of Frankfurt.

Indeed, from the standpoint of the English speaking accounting historian, Locke's inclusion in his book of an overview of the advances made in accounting in Germany from 1910 to 1930 is most fortunate. The 1910s and 1920s constitute what well may be termed a golden age of accounting thought in Germany. Several theoretical studies appeared that have become accounting classics in that country while a number of new German language periodicals served as a forum for a plethora of extraordinary theorists. In addition to Schmalenbach and Schmidt, Johann Scharr, Heinrich Nicklisch, Erwing Goldmacher, Willis Prion, Ernst Walb, Walter Mahlberg, Theodor Beste and Alfred Isaac contributed to the development of accounting thought. But, outside of Germany, only the Japanese and the Swedes appear to have taken note of the ideas of these men. The British and the French, whom Locke criticizes for their insularity to international developments in business economics, paid little heed to the German theorists.[1] And little is known of German thought on this side of the Atlantic.[2]

The End of the Practical Man, especially in Chapter IV, "German Business Economics: The Theoretical Achievement," provides the American accounting historian with an introduction to a rich body of accounting theory. Two subsequent chapters trace the influence of German business economics on educational achievement and institutionalization of management. The three chapters provide an excellent description of the forces that have shaped German accounting and enhance our understanding of the accounting profession as it exists in Germany today.

The book also provides the accounting historian with a good example of historical research methodology. Locke's research is characterized first of all by an exhaustive examination of the relevant primary sources; his "Selected Bibliography," which contains over 800 entries, is a reference tool in the area of European accounting history and general business history in itself. The breadth of Locke's research, in turn, has equipped him with a thorough knowledge of the cultural conditions and social institutions in Germany, France and Great Britain that gave shape to the educational and industrial developments in those countries during the second industrial revolution. This enables him to explain why an economically stimulating relationship developed between higher education and industry in Germany and why such a relationship did not develop in Britain or France.

Moreover, Locke's international comparisons are not limited to European countries. Since certain innovations in U. S. managerial accounting (standard costing and budgeting) had a significant impast on German business economics, Locke incorporates observations concerning American contributions into his study (cf. Chapter III, "The American Challenge"). Thus, the book affords the reader an opportunity to place the history of U. S. managerial accounting in an international frame of reference. Unfortunately, Locke remains silent with respect to the role American higher education might have played in U. S. accounting innovations. Given the theme of the book and the frequent references to U. S. managerial accounting, one misses any mention of the relationship of higher education and entrepreneurial performance in this country.

Another area in which Locke's breadth of view serves him well is with respect to interpretation of statistical data. Locke [1979] has written previously about the fallacious conclusions to which a myopic interpretation of statistical data can lead and he reiterates this point in the first chapter of *The End of the Practical Man.* He notes that the data on which the cliometric school bases its conclusion, that the British and French performed well during the second industrial revolution, comes from old well-established industries. These data, however, do not reflect the fact that economic growth was concentrated in new high technology industries during the second industrial revolution, industries that were soon to eclipse the older industries. The cliometricians, Locke contends, failed to consider their data in its proper context. Locke uses statistical data throughout his study, but he uses the data to corroborate and resists extrapolating conclusions on the basis of statistical data alone.

Finally, while Locke's book is about the past, its lessons transcend the past. In its account of the impact of higher education on economic growth in Germany, the book highlights the importance of the teaching and research functions. Locke's description of rather unhappy developments in Britain and France during the second industrial revolution makes clear the exigencies of ongoing research and of a close working relationship between academicians and industrialists in today's technological environment. In addition, Locke points out the dangers of insularity. The success of the Germans during the first half of the twentieth century can be attributed to some extent to their ready assimilation of American breakthroughs in management sciences, and the success of the Swedes to their ready assimilation of German innovations. The British and the French, on the other hand, apparently suffered economic decline when recognition of new scientific management techniques might have resulted in economic invigoration. In sum, *The End of the Practical Man* has much to offer the accounting historian both in content and methodology.

FOOTNOTES

[1]The French, however, did experiment with German ideas on inflation accounting, see Wasserman, 1931.

[2]The American accounting academician may have read Schmalenbach's *Dynamic Accounting,* translated by Murphy and Most [1959], and perhaps, Fritz Schmidt's articles published in the *Accounting Review* and the *Harvard Business Review* in the 1930s, but overall, the ideas of German theorists have not had a significant impact.

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BOOK REVIEWS:

F. Sewell Bray, *Precision and Design in Accountancy* (London: Gee & Company (Publishers) Limited, 1947. Reprint edition, New York: Arno Press, 1980, pp. 145, $14.00).

Reviewed by
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This books is based in large part on selected articles that F. Sewell Bray, an English accountant, wrote for professional periodicals.

The book is divided into three parts. Part I, entitled "The Accountancy Profession — Philosophy and Background", consists of chapters on Philosophy of Accounts (3 pp.), Background of the Accountant's Art (5 pp.), Professional Education (3 pp.), Approach to Economic Science (7 pp.), Internal Equilibrium (3 pp.), and Relation between Accountants and Economists (6 pp.).

In Part II, entitled "Accounting Technique and Research", chapters are presented on the Development in the Functions of Accountants (7 pp.), An Accounting Statement of Profit (12 pp.), Theoretical Conceptions of Fixed Asset Valuation (3 pp.), Technique of Accountancy in Relation to Management in a Period of Transition (6 pp.), Uniform Accounting (5 pp.), and Accounting Standards (13 pp.).

Part III consists of 15 appendices containing mainly the author's letters to the editors of professional journals, and exchanges of letters with H. W. Singer and H. Norris.

As indicated by the above list of chapter titles, Bray reflects on a number of topics, including the education of accountants and the accounting concepts of historical cost, realization, uniformity, and conservatism.

He briefly describes some of the changes that have taken place in commerce, industry, and in the environment that have caused changes in the services, duties, and responsibilities of accountants. Bray felt that more is being expected from the financial accounts than was formerly the case and it is therefore important that a sound theory base be established to support the techniques that are followed in practice.

Much of the book is devoted to discussions of the differences in the thinking of accountants and economists in relation to the concepts of income measurement, fixed asset valuation, depreciation, and changes in money value. Bray's explanations of the differences in the accountants' viewpoint and the economists' viewpoint are easily distinguishable and well-defined.

This is a most interesting book that provides insight into the development of accounting thought, and thus would constitute valuable reading for courses so designated at the graduate level.

Richard P. Brief, ed. *Dicksee's Contribution to Accounting Theory* (New York: Arno Press, 1980, irregular pagination, $35.00).

Reviewed by
Walker Fesmire
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This book of readings consists of a selection (16 of 68) from the works of Dicksee. The editor's choice of articles covers Dicksee's accounting career; the earliest selection chosen was published in 1893 while the final selection was published shortly before his death in 1932. The subjects represent the topics of concern to accountants in England between 1892 and 1932, and read like a present-day list. This work establishes Dicksee as one of the leading accounting theorists during the first one-third of this century. Many of his thoughts and ideas were decades ahead of his time. He treated the auditor's responsibility for the discovery of fraud, the limitations of the auditor's opinion, and the effects of technological changes. At the end of his career, he prepared a series of articles that he called "Popular Fallacies". These addressed a number of philosophical issues concerning the general state of business and the related misconceptions that had developed about it.

The editor has prepared an Introduction which presents an excellent summarization of Dicksee's career. He classified Dicksee's contributions into three phases (not mutually exclusive) plus the Popular Fallacies group. In the first phase from 1892 to 1904, Dicksee treated the traditional subjects of auditing and financial accounting. During the second phase from 1905 to 1930, Dicksee had an interest in the area of information systems. The third phase he identified as overlapping part of phase two. From 1920 to 1930, Dicksee reconsidered some of the critical issues in financial accounting.

This reviewer felt as if he was listening to Dicksee in person as he read the various articles. His personality and thoughts came alive on the page. However, this reviewer was disappointed by physical organization of this work. All of the articles included were photocopies of originals. Many of the photocopies were of poor quality. Because of their quality, many were difficult to read. Several articles contained references to tables, charts, or graphs which were not included. The editor did not inform the reader as to why these items were omitted. This reviewer believes that the editor should have stated that it was his decision to omit the table, etc., or that they were not part of the originals. In addition, the book contains no page numbering. Irregular page numbering appears but it is the page numbering of the originals. The editor, in a bibliography at the beginning of the book, lists all of Dicksee's publications in chronological order. For the articles selected, the editor does not cite the date, issue, or journal from which the article was taken nor does he cross-reference it to the bibliography. In addition, the Introduction contains many quotes from Dicksee's work with only vague reference to the specific works and the page(s) that the quote was taken from. Finally, this reviewer believes that the editor could have contributed significantly if he had added a brief introductory comment to each article explaining why he included it and how this article contributed to an understanding of Dicksee.

In summary, the editor made excellent selections which presented Dicksee well but the physical organization of the book was poor.

Leslie G. Campbell, *International Auditing: A Comparative Survey of Professional Requirements in Australia, Canada, France, West Germany, Japan, the Netherlands, the UK and the USA.* (New York: St. Martin's Press, 1985, pp. 249, $30.00).

Reviewed by
O. Ronald Gray
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In recent years international accounting has received increased attention in the literature. The focus of this literature has been accounting, financial control, and reporting in firms with multinational operations. The auditing implications of international financial control and reporting have received much less attention than they deserve. Campbell's book represents a major step toward filling this void and is in this respect a noteworthy contribution to the international accounting and reporting literature. As the title suggests, the book presents a comparative analysis of auditing standards in eight major economic countries which serve as headquarters for many multinational corporations.

The book, which is written from the perspective of a United Kingdom national, is organized into four parts. Part I provides a general background and introduction to the importance of multinational auditing. In addition, there is the theoretical justification for the existence of auditing and auditing standards. Campbell's presentation in this area is traditional and draws on the relevant theoretical and empirical literature. The reviewer would characterize the material in this section as being conventional and predictable.

Part II outlines auditing standards in eight countries. Campbell's presentation is standardized. Each of the eight chapters contains a discussion of: (1) the auditing and accounting environment; (2) auditing standards — source, history, and authority; (3) auditing standards — scope and content; and (4) summary. Reviewing auditing standards in this manner is an ambitious undertaking. The result of Campbell's effort is a very creditable survey of auditing in eight countries. However, after having reviewed auditing standards in this manner, the reader would have benefited from the inclusion of a separate chapter which summarized, compared and contrasted the auditing standards in each country. Unfortunately, the author did not consolidate the material in this manner. From an accounting historian's viewpoint, the author's treatment of the evolution of auditing standards in each country studied is particularly interesting. While the author's primary focus is not on the historical evolution of auditing standards, the significant circumstances and events influencing the development of auditing standards in the countries studied are noted and discussed. While this historical presentation is somewhat limited, it is sufficient to allow the reader to develop historical parallels and highlight differences in the evolution of auditing standards in the countries studied.

Part III contains a discussion of several issues in international auditing. Much of the material in this section of the book appears to be oriented toward the practitioner involved in auditing international clients. There is a discussion of audit problems peculiar to multinational companies which arise from international differences in auditing and accounting environments. Among the problems noted are the predictable language and cultural barriers, differences in generally accepted accounting principles, perceptions as to the objectives of an audit, concepts of auditor independence, and varying auditor education and training qualification standards. Problems which arise when another firm of auditors is used to audit an overseas subsidiary are discussed and the possible solutions are reviewed. The theoretical and practical barriers to progress in harmonization of auditing and accounting standards are discussed in another chapter. This discussion of harmonization offers little but restatement of conventional wisdom. The international harmonization of auditing standards is seen as a necessary step towards improving the international allocation of resources via increased comparability of financial statements. The main objection to harmonization is considered to be the fundamental differences in the national environments which created the different auditing standards. One chapter deals with auditing non-financial information included in the financial statements of multinational companies. The final chapter describes the size and nature of the international auditing firms and analyzes their structures and strategies. In Part IV, Campbell concludes by noting several areas in which further research could be conducted in international auditing.

Campbell's book should serve several audiences well. It should prove useful as a supplemental reading source in an undergraduate international accounting course. Practitioners who are involved in international auditing should find the book useful in their practices. Investors who receive international company financial reports should find the discussion of comparative auditing standards useful in evaluating audit reports. For accounting historians, the book offers a survey of the evolution of auditing standards in eight countries.

Sir Hugh Cocke. *A Summary of the Principal Legal Decisions Affecting Auditors.* (London: Gee & Co., 4th ed., 1946. Reprint ed., New York: Arno Press, 1980, 109 pp., $12.00).

Reviewed by
Raymond T. Holmes, Jr.
Virginia Commonwealth University

A collection of court cases citing the trials and transgressions of auditors might, at first brush, appear to be not the most stimulating reading in finance and accounting. However, this preconception is quickly overcome as the reader weighs the courtroom arguments and evaluates the parties involved in arriving at his own decision as to what constitutes a just conclusion to these cases.

This slender volume is filled with the essential elements of fifty-eight legal decisions affecting auditors and their work. The pertinent facts of the cases are written in a clear and concise manner with very little legal jargon.

The cases are presented in approximate chronological order, with an 1887 controversy being the earliest reported, and a 1940 appeal to the Supreme Court of Canada the latest. An unintended humorous sidelight may be drawn from Sir Hugh G. Cocke's preface to the fourth, and last, edition of his work. In his introductory remarks Sir Hugh observed: "Since the last edition of the book was issued in 1932, there have not been many cases of special interest to auditors, but several have been added to this volume . . ." It is safe to venture that there are many practicing accountants in England and the United States who wish that statement could have been made at any time during the last ten years.

A tabulation of the points at issue in the cases reveals that nearly one-half involve claims that the auditors had been negligent in their duties. The question of how well the work had been performed almost invariably raises issues as to the understanding between the parties regarding the scope of work which was contracted for. The second most prevalent matter of dispute involved the erosion of capital brought about by alleged illegal payment of dividends out of capital. Other cases address the questions of the role of the auditor, the nature of his work and whether the auditor may take a lien on client records which the auditor has compiled and recorded. Less frequent are issues regarding special reserves, writing-up assets, contingency fees, and special fees for special services. Of course it is most often true that several issues may be raised in a single case, with one issue recognized as the dominant concern.

In addition to the advantage derived by any profession from reviewing its history from several perspectives, the primary value of these cases is the insight they provide into the evolution of accounting standards and practices. Although the author presents the cases without any commentary, they point to a number of persistent problems which have faced the accounting profession. The decisions rendered, and attention given to avoiding these controversies in the future, have been a major influence in determining how the practice of accounting is presently conducted. The necessity for an engagement letter explicitly defining the contract between accountants and their clients is obvious from a review of the misunderstandings which have arisen over this point. The present day treatment of problems relative to independence of the accountant, full disclosure, contingency fees, and the requirement that dividends must be declared and are not automatic even though there appears to be sufficient income, all may be traced to decisions in these cases.

One remarkable feature of these cases is the respect and deference paid to accountants and the accounting profession. This attitude seems to prevail from the earliest cases, and accountants are continually referred to as men of outstanding integrity and ability.

Hawawini, G. A. and Ashok, V., eds. *The History of Interest Approximations* (New York: Arno Press, irregular pagination, $25.00).

Reviewed by
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This book is a collection of reprints of articles, many from actuarial journals, reflecting the historical development of approximation procedures for implicit unknown interest rates in annuity and bond problems. The book is prefaced by an extremely useful interpretive review of that history by the editors.

Today, inexpensive handheld calculators permit anyone capable of pushing a few buttons to approximate the implied unknown interest rate that equates an initial payment amount with one or more repayment amounts, for problems in economics, finance, and accounting. The solution to implicit unknown interest problems in these fields bear such names as the discount rate, the internal rate of return, the yield to maturity, and the effective interest rate.

Why should anyone in these fields be interested in the history of such approximation methods and in original readings in the development of such approximation methods when it is now possible to enjoy excellent approximations in blissful ignorance of the actual solution technique employed by one's black (plastic) box and its transistors or chips? The reason, of course, is that the process of conceptualization in one field may be both of interest in itself and of use to those engaged in similar conceptualization in another field. For example, in the final selection of the book, the editors point out that in a capital budgeting context, the exact yield to a premium or discount bond problem is the internal rate of return, the conventional approximate yield is similar to the accounting rate of return on average investment, and the current yield is the reciprocal of the payback period of the investment proposal.

The history of interest approximations has involved issues dealing with the concept of return to capital and issues dealing with approximation accuracy. The Sutton (1875) selection is interesting both for its humorous comments on the floating of risky foreign bonds and for its discussion of mean investment period in an analysis of sinking funds. The Hardy (1921) selection, itself a reprint of a 1890 paper, comments on what would now be called risk free return and risk premium in analyzing the income of an insurance company. History also involves people; The DeMorgan (1859) selection discusses the seventeenth century developers John Newton and Michael Dary.

The historical review provided by the editors identifies the principal approaches to the implicit interest problem as applied to annuities and bonds, the advantages and disadvantages of the approaches, and the principal authors involved in the development of (or attack upon) a given approach. A non-actuary will wish to start with that review. Notation is always a problem in dealing with a mathematical history, and appended to their historical review, the editors have rearranged the various formulas of the authors into standard forms that permit the different issues emphasized by the authors to be more readily identified. In the case of band approximations, the standard form involved recognition of an implied functional relationship, namely, the fractional amount of a discount to subtract from face to estimate average principal. Recognition of the functional relationship reduces the approach of different authors effectively to different estimates of the function. The mathematical behavior of the function is then analyzed to provide insight into the conditions under which given approaches lead to better or worse approximations.

The authors included in the anthology are Bizley (1962), Cantelli (1907), Craig (1929), DeMorgan (1859), Evans (1944-46), Hardy (1882), Hardy (1921), Hawawini and Vora (1980), Henderson (1907-08), the editors of the Journal of the Institute of Actuaries (1924), Karpin (1967), "M' (1855), McLauchlan (1874), Newling (1903), Spencer (1904), Steffensen (1916), Sutton (1875), Todhunter (1897), Webb (1930), and Worger (1967).

The editors have chosen not to add new page numbers to the reprints, which will make the book more difficult to use and cite. There is an error in the table of contents: the seventh selection, Hardy (1882), is not listed. This would have been more easily noticed if new page numbers had been added.

McCraw, Thomas K. *Prophets of Regulation* (Cambridge: Belknap Press of Harvard Univ. Press, 1984, 387 pp., $20.00).

Reviewed by
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Essential in the study of business regulation are questions of both origin and form. In his book *The Prophets Of Regulation,* McCraw hopscotches through the development of business regulation in the United States, skimming over the first question, his thesis being that individual personalities are the most potent forces in the establishment of regulatory form. Specifically, McCraw traces the lives of four men prominent in the regulatory arena; Charles Francis Adams, Louis Brandeis, James Landis, and Alfred Kahn.

McCraw's choice of the four is interesting. None, save Kahn, is regarded as a theoretician. Instead, McCraw chose men whose publications were able to infuence implementation of their view of business regulation. Charles Francis Adams, the grandson of President John Quincy Adams, gained his reputation as a commissioner of the Massachusetts Board of Railroad Commissioners and pioneered the "sunshine" form of regulation, while encouraging industry self-regulation. Brandeis, a brilliant attorney and later a Supreme Court Justice, engaged in a lifelong battle against big business, and his influence was important in the development of the Federal Trade Commission. Landis, another lawyer, who principally drafted the 1933 and 1934 securities acts worked under Felix Frankfurter as a member of Roosevelt's "Happy Hotdogs". Subsequently, his presence as a commissioner of the SEC was important in establishing its early focus. Finally, Alfred Kahn provided the "economist's hour", beginning with numerous thoughtful publications on regulatory theory, then as a New York utility commissioner, and more recently as the deregulator of the commercial airline industry.

McCraw presents his subjects chronologically and devotes a chapter to each. Each chapter includes a broad biographical sketch and selected detailed biographical information. McCraw takes pains to tie these details into the subject's regulatory thought and action. The scene for each of these vignettes is set with a brief intervening chapter. McCraw concludes the book with unifying thoughts in "Regulation Reconsidered."

Of particular interest is the entire chapter on James Landis and the development of securities regulations. More narrowly, a discussion of pre-SEC financial reporting is touched on [165-168], in which McCraw innocently mistitles the 1917 publication *Uniform Accounts* as *Uniform Accounting,* but which is otherwise interesting. In addition, a brief section covers the enlistment of the accounting profession to the regulatory banner [188-192]. A page and a half of notes to this material [349-351] yields additional discussions on the cooperation between the SEC and the profession (Carey's *Accounting Historians Journal* article "Early Encounters Between CPAs and the SEC" is referenced), the effect of McKesson and Robbins on auditing standards and oversight.

The style is entertaining. The work is well referenced. Although some profound influences on business regulation are omitted, McCraw succeeds in demonstrating the power of the individual on regulatory form. At a time during which regulation is of great concern to the profession, McCraws book conveys some interesting insights into regulatory theory and formulation.

D. R. Myddleton, *On A Cloth Untrue: Inflation Accounting — The Forward Way* (Dover, N.H.: Faulkner Publishers Ltd., 1984, 133 pp. $25.00).

Reviewed by
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The author's main objective is to convince the reader that financial reports should be prepared employing units of constant purchasing power (CPP). He prefers base period units over current units, to avoid the need for rollover adjustments. He ends the book with a chapter that presents a proposed CPP Statement of Standard Accounting Practice for Great Britain.

The author clearly explains that the impact of inflation on money as a unit of account is independent from questions about the adequacy of historical cost that are raised when prices change. He believes CPP accounting is relevant, reliable and simple, and that it is impossible to present a "true and fair view" without it.

On the other hand, the author sees no merit in the commonly recommended variants of current value accounting (CVA). Most of the mischief in CVA comes about because, as he puts it, "The contrast is between *actual* historical cost and hypothetical current value." (p. 85) He believes variants of CVA such as current cost or replacement cost are complex, irrelevant and unreliable.

U.S. readers get a couple of bonuses in this book. One is the opportunity to compare the U.S. experience with financial reporting problems caused by inflation and changing prices with the British experience. The author covers the official developments in Great Britain's efforts to deal with inflation and changing prices from 1952 into the 1980's. The second bonus is the opportunity to observe criticism delivered with more smack than is common in the writing of U.S. accountants. The author turns an especially rough tongue on the well known Sandilands Committee. He is upset by the committee's accounting ignorance and political motivation.

The author is obviously sophisticated and knows that financial accounting and reporting influence both wealth distribution and performance evaluation. For this reason one wonders at the author's apparent surprise that political motivation played a part in the work of the Sandilands Committee.

The author believes that CPP accounting is based on the proprietary concept of accounting and current cost accounting is based on the entity concept. In this he is mistaken because the choices are independent. For example, a preference for the entity approach does not preclude a preference for a stable unit of account, CPP. Preference for the entity approach merely influences the disposition of purchasing power gains and losses, which include what the British call the gearing adjustment.

Overall, the book is a very good piece of work. The author presents a capably argued point of view on subjects in which accountants have shown an intense interest for more than half-a-century.

Beresford Worthington. *Professional Accountants* (London: Gee & Company Publishers, 1895. Reprint edition. New York: Arno Press, 1978, 127 pp., $12.00).

Reviewed by
Katherine S. Moffeit
Wichita State University

This book, originally published in 1895, provides an enlightening view of the development of the accounting and auditing professions in England from the earliest writings to 1893. The author discusses the effect of such landmark events on the accounting profession as the "South Sea Bubble" (1720), the Bank Act of 1844, the Railways Companies Clauses Consolidation Act of 1845, the Companies Act of 1862 and the Bankruptcy Act of 1869, and provides a historical perspective by a person living during the time of many of these events. The author says, "It will be seen that the commercial crises of the present century, which is deemed necessary to refer to hereafter in some detail as being explanatory of cause and effect, have largely augmented the business of professional Accountants." (p. 13)

Worthington provides detailed information on the events leading up to the "South Sea Bubble" and subsequent to it. According to him, an investigation and report by an accountant of the records of Sawbridge and Company (Sawbridge was one of the directors of the South Sea Company) was perhaps the first existing record of an accountant being employed in an investigative capacity. The report by Charles Snell on his investigation, undated but probably prepared in late 1720 or early 1721, is discussed in detail and presented as Appendix I in the book.

The sketch of the development of the accounting profession is interjected with humorous quotes, anecdotes, and comments by the author. Included with information describing the Companies Act of 1867 (which provided for a "Liquidator" position usually filled by accountants) the author relates,

> It will not perhaps be considered invidious to remark that possibly Acçountants, like other industrious people who are paid by time, are not so anxious as other sections of the public to be restricted to the eight hours system, for it is recorded, but the accuracy is not here vouched for, that a Liquidator, on one occasion, managed to get 148 hours out of a single week, which, not including Sunday, works out as the rate of 24⅔ hours to the 24. If true, a paralysing feat of Accountancy! (p. 53)

The excerpts from early works by authors describing themselves as "Accountants" or "Accomptants" such as Richard Dafforne (1660), Richard Hayes (1793), and John London (1758) are sometimes amusing, and always interesting. The author's descriptions of the early days of accountancy, although sketchy, contribute enough information to provide the reader with a special insight of the many developments which led to the profession's growth in England.

Worthington traces the auditing profession from biblical days to his day, giving the effects of recent legislation on the growth of the profession. For example, the Railway Companies Clauses Consolidation Act of 1845, the Metropolitan Water Act of 1871, and other legislation all provided for auditors to be appointed. He also relates the circumstances of a then recent (probably 1893) legal judgment brought against auditors of the London and General Bank, thus demonstrating that auditors' legal liability problems have existed for some time.

The author presents a very detailed account of the formation of The Institute of Chartered Accountants in 1880, as well as stating the rules of the Institute contained in its Charter. It appears a new concern faced the Institute of Chartered Accountants in its early days. As related by the author:

> The ranks of the profession have lately been invaded by that irrepressible development of cheap education — the New Woman; and a memorial has been presented to the Institute. from the Society for Promoting the Employment of Women, asking for admission. This is not surprising in an age which encourages female doctors and lawyers, and agitates for female suffrage; (p. 92)

The fascinating aspect of this book is that, although written ninety years ago, some of the author's comments could be made today. For example, the author states, ". . . Accountants should deal with figures as facts simply. It would be well to act strictly in accordance with this principle, gratuitously suggested here, in remembrance of threatened legislation to provide a Government Department to audit the accounts of public companies." (p. 67) Many aspects of this book seem to call for additional research, whether to satisfy curiosity or to gain more information.

CAPSULE COMMENTS:

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Edwards, J. R., ed. *British Company Legislation and Company Accounts, 1844-1974,* 2 vols. (New York: Arno Press, 1980, 242 pp., $60.00).

Professor Edwards has done an excellent job in providing a useful working tool for accounting historians. His objective is to give historical researchers the means of identifying the origins of current regulatory provisions of the Companies Act of 1948, as amended by the 1967 and 1976 Acts. The first volume of this set is divided into three parts — (1) tables with respect to accounting and auditing regulation (2) the accounting and auditing requirements of the companies acts, 1844-1976 and (3) comparable data related to railroads. Readers should find Table V, which traces comparable regulatory provisions related to annual returns and accounting and auditing to each of the relevant companies acts, especially useful.

Volume II contains reproductions of accounting and auditing provisions in selected companies acts or amendments to companies acts (1844, 1895, 1906, 1918, 1926, 1945, 1962) and excerpts from evidence given before the various legislative committees. The editor has attempted to provide a representative sample of this testimony, but, warns that the selection is by no means comprehensive. However, for accounting historians, who do not have access to legislative records, these two volumes should be extremely useful, especially for comparative studies of how regulatory standards have evolved in different countries.

The Institute of Chartered Accountants in England and Wales Library Catalogue, 1913. 2 vols. (New York: Arno Press, 1980, paginated by volume, $80.00).

The Institute of Chartered Accountants in England and Wales Library Catalogue, 1937. (New York: Arno Press, 1980, paginated by volume, $45.00).

Anyone interested in the development of accounting during the last half of the nineteenth century will find the 1913 catalog invaluable. The catalog lists all items by both topic and author and includes a wide range of books, pamphlets, lectures and articles in the Institute library. For those interested in bookkeeping, the catalog is an especially rich source. Bookkeeping pamphlets and texts are arranged in chronological order, by language. The English language section is comprehensive; it begins with a pamphlet by John Mellis and the next 35 pages are devoted to texts published between 1588-1912.

The two volumes of the 1937 Catalogue are reprinted in one volume in the Arno series. Readers will find that Volume I of this catalog is less comprehensive, although updated, than the earlier work; but, Volume II "The Bibliography of Bookkeeping" is far more extensive, reflecting the Institute's acquisition of banker Karel Petr Kheil's 1,634 volume bookkeeping collection in December 1913. The first volume, arranged by both subjects and authors, includes references to selected books and pamphlets, but, unlike the earlier catalog it excludes articles and lectures. Limited selection provides some information about the perceived quality of books since the librarian attempted to include the "best' books, regardless of age, on all subjects. The second volume contains a wealth of material for the accounting historian interested in bookkeeping. It starts with a 12 page listing of secondary sources, i.e., bookkeeping histories and bibliographies; the subsequent 201 pages contain a chronological listing of bookkeeping texts and pamphlets, starting with Pacioli's 1494 text and continuing through 1937. There is a brief summary of each book and, for books, written prior to 1800, there is a bibliographic collation of various editions and translations. The *Catalogues* provide an excellent source for those interested in the history of bookkeeping.

Papers and Proceedings of the American Association of University Instructors in Accounting. 3 vols. (New York: Arno Press, 1980, irregular pagination, $99.00).

The three volumes contain the proceedings of the annual meetings of the American Association of University Professors from 1916 to 1925. The contents include papers presented, committee reports, minutes of business meetings, as well as occasional membership rosters. Volume I [1916-1920] and Volume II [1921-1922] will be extremely useful to anyone examining the evolution of accounting education. The majority of the papers and committee reports deal with accounting instruction, i.e., curriculum standardization and correlation with other disciplines. Those interested in the history of taxation also will find some interesting material in these two volumes.

Volume III [1923-1925] reflects a broadening of the objectives of the association. While a significant percentage of the papers continue to deal with education, this volume contains a broader range of topics and indicates the concern of the association's members with both development of accounting theory and practice. The three volumes should be in every university library; they add to our understanding of the "roots" of the academic accounting profession in the United States. They also may raise some interesting questions as to how far we have come.

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DOCTORAL RESEARCH

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Among the concerns expressed about the prospects for academic careers in accounting is the fear of decline or disappearance of the discipline's renaissance men and women because of narrowing perceptions about meritorious research and methodology. What may well be a critical factor in keeping broad perspectives alive in our field, however, is the continuing interest of scholars from other areas, particularly the liberal arts, in accounting as a second career choice.

The understanding which these experienced researchers can bring to accounting is exemplified by Graves's comparative analysis of the writings of Schmalenbach, Schmidt, and Mahlberg during Germany's great inflationary period of the early 1920s. With this very well-written dissertation, Graves, who brought to accounting a Ph.D. in German, has now made it possible for linguistically-limited English speaker to appreciate the German seminal works on inflation accounting as well as the general theories from which they sprang.

A second linguist who follows Graves in opening up the foreign literature is Fortin, whose native tongue is French and who went to France to study how the accounting discipline and profession evolved there after the second world war. From her archival research and personal interviews we gain some vivid impressions of the various institutions and events which shaped the accounting function in France over the past four decades.

A very similar time period was selected by Bracken for his investigation of certain influences on auditing practice in the United States, particularly the effect on development of auditing pronouncements of lawsuits alleging misconduct by client management. He takes the many-faceted McKesson and Robbins case as his point of departure, emphasizing its force in reversing a general trend away from concern for fraud detection as an audit objective, as well as its importance in redirecting audit attention to the issue of management integrity.

A very different interest is brought to bear in the remaining five dissertations which all look into various aspects of the concept of social justice. Ferraro's takes precedence as her work reaches back the furthest, that is, to the early years of the fifteenth century in Brescia. This city, in the northern Italian province of Lombardy, became an independent commune in the twelfth century but by the time Ferraro's narrative begins, Brescia had come under Venetian domination. From her analyses of the central and municipal reports, tax records, and local archives spanning over two centuries, we learn how social justice and welfare suffered at the hands of the local government, and how the situation was exacerbated by the central government's struggle for control.

The administration of social welfare in a similar, but shorter, period of history is also Tronrud's concern. Back we go with him to three of the English cinque ports whose main obligation, before the reign of Henry the Eighth and the founding of the permanent navy, was to provide ships and men to protect the country from invasion. From his research in the archives of Romney, Faversham, and Sandwich, Tronrud developed his evidence about the extent of poverty in that part of Kent and the types and costs of relief which each community provided.

We move forward another century in time to imperial Russia in the 1760s when the Russian Free Economic Society was founded in St. Petersburg by the second Catherine. One of its main goals was to assist the indigent in rural communities and Pratt's dissertation suggests that the society's experiences could prove useful today to those interested in bringing reform to developing countries.

The last two dissertations bring us back to the industrial world of the twentieth century. Humphreys looks at the effect on industrial relations in France, just before and during the first world war, when industrialists introduced some of Taylor's philosophies of scientific management. Labor's fight against these reforms, Humphreys claims, was brought on not only by fears for the status of skilled workers but also by the clumsy way in which the changes were implemented. Ineptness in handling social issues is encountered again in Zahavi's dissertation which examines Endicott Johnson's programs to provide for the welfare of its employees. Although management tried various reforms, the success of the firm's paternalistic attempts to increase loyalty and productive efforts is hard to assess because of discordant class sentiments in the work place. The second world war changed many traditions on the industrial scene and Zahavi's dissertation closes with a review of the forces which worked to bring about the descent of welfare capitalism and the ascent of new notions of forwarding well-being in society.

Accounting for Inflation: German Theory of the 1920s (The University of Alabama, 1985) by Oliver Finley Graves. This dissertation describes, analyzes, and contrasts the general and inflation accounting theories advanced in Germany during the 1920s by Eugen Schmalenbach, Fritz Schmidt, and Walter Mahlberg. It also considers the significance of these German contributions to the further development of inflation accounting theory, referring to the later work by Sweeney and Edwards and Bell, as well as FASB Standard No. 33.

First to be examined is Schmalenbach's "dynamic" price-level-adjustment model which was an extension of his dynamic balance sheet theory dating back to 1908. Because of its origins in, and congruence with, a general accounting theory which was conceived before any periods of significant inflation, the model is based on price level adjustments and seems to be put forward as a temporary measure. According to Graves, the model's design can be attributed to Schmalenbach's primary concern with achieving comparable periodic income figures in periods of changing price levels. This, Schmalenbach asserted, required an all-encompassing stabilization which, in turn, called for a systematic and stable measuring unit which would adjust both monetary and nonmonetary items for inflation effects. Schmalenbach selected indexation for the measuring unit, after considering and rejecting two other candidates, recommending a wholesale price index published by the German Bureau of Statistics rather than consumer or retail price indexes. These were to be used to express values at the end of a period in terms of some base year price level. Under this approach, individual balance sheet items retained their position relative to other balance sheet items, congruent with Schmalenbach's view that balance sheet items were not values with lives of their own but merely unallocated revenues and expenses or receipts and disbursements. His lack of interest in the topic of inflation accounting in the latter part of the 1920s when the most severe inflation had ended shows Schmalenbach's commitment to the tradition of historical cost and his fundamental concern with nominal capital maintenance.

Fritz Schmidt's "organic" current value model grew out of the great inflation itself and was proposed as a general accounting theory intended for both inflationary and noninflationary conditions. Schmidt identified the reporting of fictitious profits, resulting from an assumed stable monetary unit in periods of rising prices, as the accounting factor which aggravates price level changes and is responsible for the oscillating swings of business cycles. This problem of fictitious profits could, however, be solved by current value accounting which corrects the error intrinsic to the accounting use of a nominal monetary unit. This is effected by separating asset valuation from income determination so that profits could be distributed in full without impairing capital. True shifts in demand would be disclosed so decisions with respect to expansion or contraction of operations would have a sound basis and market disequilibrium would be counteracted. Profit would be determined as the amount realized in excess of the current replacement value of costs but the primary problem here is in correctly valuing such costs. Schmidt put forward replacement value as of the date of sale on the twin grounds that it allowed for continuity of operations as well as adherence to the organic principle of equality of values in the balance sheet. This organic current value balance sheet would then pass on costs to the income statement which would maintain the firm's real position.

Mahlberg's gold mark model was a deflation method which restated ending balances of each monetary account in terms of a prewar gold mark. The restated ending balances appeared on the balance sheet and the gain or loss resulting from the account restatements was recorded in the profit and loss account. A similar treatment was accorded the inventory account but different procedures were followed for fixed assets and capital. Differences between nominal and gold mark values for existing fixed assets were to be recorded when the first gold mark balance sheet was prepared, or at date of acquisition for subsequent additions, and these differences transferred to the profit and loss account. These gold mark values were then to be carried forward with no further restatements. Capital account transactions, on the other hand, were to be restated as of the date of occurrence. Mahlberg's method, then, combines price level adjustments with both operating and real monetary gains and losses. It has the advantage, however, of enabling year-to-year balance sheet comparisons without the additional computations needed if, say, Schmalenbach's system of restatement at end-of-year marks were followed.

Among the problems of Mahlberg's approach which Graves considers and critiques are his assumptions about enduring relationships among the values of goods which will withstand disturbances, and enterprise success depending on large-scale monetary speculation by entrepreneurs during inflationary periods rather than on their management skills in normal operations.

Outside of Germany, Sweeney appears to be the only academic from the English-speaking countries to have been influenced by the work of these three theorists. His 1936 publication, *Stabilized Accounting,* draws on all of them but, as Graves puts it [p. 166]: "he synthesized and extended what he read to produce what is evidently the first model to attempt to combine price-level-adjustments and current costs in the accounting literature." However, Graves found it hard to assess Sweeney's direct influence on inflation accounting in the United States in view of the lack of attribution accorded him by subsequent writers. The fact that the main ideas in Accounting Research Study No. 6 of 1963 were "practically identical" [p. 167] with those in *Stabilized Accounting* provides an example of the independent development of concepts which have already been brought out elsewhere.

Edwards and Bell also refer to German thinking in their work *The Theory and Measurement of Business Income.* Graves [p. 169] suggests that while there are important differences between the Schmidt and Edwards and Bell models, Edwards and Bell's concept of current value operating income is "substantially the same as Schmidt's." The American authors probably did not fully appreciate this, however, because their interpretations of some of Schmidt's ideas are, as Graves states [p. 168] "puzzling" in view of what Schmidt actually wrote. After comparing recent developments in inflation accounting in the United States with approaches suggested by Schmalenbach and Schmidt, the dissertation closes with a chapter discussing the appropriateness of Schmidt's current value model for a U.S. inflation accounting standard.

The Evolution of French Accounting Thought As Reflected By The Successive Uniform Systems (Plans Comptables Généraux (University of Illinois at Urbana-Champaign, 1986) by Anne Fortin. Until the turn of this century, accounting in France was mainly constrained only by the provisions of the Code of Commerce and the 1867 company law. Some efforts had been made at the first congress of accountants, held in the 1890s, to arrive at some consensus on standardization of balance sheets but they failed for lack of interest. However, the first professional organization of accountants, the *Société de Comptabilité de France,* was established and it went on to play an important role in the education of qualified accountants. The provisions of the income tax law, passed in 1917, gradually helped to build up a body of accounting principles, but it was not until the 1930s that decrees were passed requiring consistency in both financial statement presentation and valuation rules in the interests of investor protection.

Fortin's dissertation concentrates on the development of accounting thought, as well as the accounting profession, in France after the second world war and is based on primary and secondary sources in France, Canada, and the United States as well as personal discussions in France with some of those officials involved in this evolutionary process. The study is divided into three time phases, consonant with the development periods of the three uniform charts of account: 1940 to 1947, 1948 to 1955, and 1966 to 1979. An earlier history spanning three centuries of accounting in France is provided in an appendix.

During the second world war, the need to monitor and control industries motivated the drafting of the 1942 Uniform Accounting Plan as well as the founding of the Order of Expert Accountants and Chartered Accountants. When it ended, a number of considerations, including the decision to undertake national economic planning as well as the need to reform and harmonize accounting in the nationalized industries, led to the creation of the Committee to Standardize Accounting. This committee's main task was to design an accounting plan which could be used in all sectors of the economy and thus form the basis of a system of national accounts. As a result of its efforts, the General Accounting Plan was published in 1947. It contained a chart of accounts, definitions and rules governing valuation and the use of accounts, financial statement formats, and a section on cost accounting. Although based on an industrial model, the plan was favorably received by companies in various sectors of the economy as well as local governments, and it was implemented by the Higher Council of Accounting created in that same year.

During the 1950s, the Council made a first revision and this was approved in 1957, the same year that the council's name was changed to the National Council of Accounting. In 1962, a decree was passed requiring the 1957 plan to be adopted in the private sector. However, it soon became clear that once again the plan needed to be revised, one of the chief considerations being a perceived need to improve the possibilities for financial statement analysis. The main changes approved by the Council in 1975 were new criteria whereby assets and debt were classified by economic function rather than degree of liquidity or maturity; separate disclosure of the effect of tax regulation on accounting income; mandatory preparation of a statement of changes in financial position; separate disclosure of production components on the income statement; and the required computation of value added for national income accounting purposes. Unfortunately, the 1975 plan could not be adopted as proposed because, due to its macro and micro orientation, it was not congruent with the European Economic Community's Fourth Directive. Therefore, in the 1979 draft plan which came into effect in 1983, the requirements for a statement of changes in financial position and the computation of value added were deleted, and modifications were made with respect to functional classifications in the balance sheet.

Fortin's dissertation reveals the strong influence that company and tax laws have had on the development of accounting in France, as well as the important roles played by the nationalization of enterprises, economic planning, national income accounting, and the EEC. Changes have also occurred in perceptions about user needs. The first two plans were designed primarily for management, government administrators, and investors, with emphasis placed on determination of distributable income and legal claims to assets by various parties. The latest plan, on the other hand, is basically oriented towards the needs of financial analysts, statisticians, and national income accountants. France's efforts to go beyond the fourth directive's requirements, which it was free to do, thereby possibly improving its financial accounting and reporting quality, were, however, resisted by those industry representatives on the National Council of Accounting who did not want to have to disclose more information than required of their EEC competitors. In fact, Fortin suggests, it may well be that future developments in French accounting will be conditioned by the directions taken in the European Economic Community.

The Accounting Profession's Specifications of Procedures and Actions Following Initiations of Selected Legal Actions Involving Allegations of Illegal Or Improper Management Acts: 1939-1978

(Mississippi State University, 1983; Vol. 45/03, p. 871-A)[1] by Robert M. Bracken. This study investigates the impact on the audit function of actions at law for alleged management misconduct, during the period 1939 to 1978, and is mainly based on library research in the accounting literature and the business press, as well as pronouncements by the American Institute of Accountants and the American Institute of Certified Public Accountants.

Bracken found two particular instances of periods where legal action was correlated with the relatively frequent issuance of auditing statements. This strongly suggested why the profession was motivated to act as a body to modify certain auditing practices. The fact that these outbursts of activity were followed by relatively long periods without judicial proceedings raises the assumption that the actions taken by the accounting profession had met public expectations.

The committees responsible for issuing auditing pronouncements during these forty years or so acted very consistently by handing down specific auditing procedures to be followed or audit actions to be taken almost every time a significant court action was resolved. As a result, the concept of "due professional care" was gradually defined with respect to such issues as misconduct on the part of client management, the use of judgment in decision-making by practitioners, and the need to redirect attention towards fraud detection. For example, pronouncements concerned with managerial misconduct laid stress on the need to evaluate the integrity of management personnel and to determine whether there had been complete and honest disclosure.

In Bracken's opinion, the accounting profession's approach to changing auditing goals, responsibilities, and practices today is a rational method of dealing with an audit environment where conflicting ideas exist about the responsibilities of businesses and auditors, and where society is not likely to want to pay for fees connected with extensive testing for fraud. Unless and until clients develop and implement controls over managerial misconduct which can be audited, and there is active involvement by independent parties in the control and oversight of management actions, the auditor will continue to be limited in his or her ability to provide services related to detection of improper management acts.

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[1] *Dissertation Abstracts International,* volume and page references.

Economy and Society in Brescia During The Venetian Domination, 1426-1645 (University of California, Los Angeles, 1983; Vol. 45/01, p. 274-A) by Joanne Marie Ferraro. Ferraro analyzed the relationships between local government in Brescia and its Venetian rulers, mainly during the sixteenth and seventeenth centuries, in order to learn how the balance of power was displaced when Venice asserted its authority. Her research evidence was primarily obtained from reports by central and municipal officials, tax records, and local histories. Venice's strengthened interest in governing its territories, which were known as the *Terraferma,* came about as a result of the decline in sea trading. Because the *Terraferma* were then of considerable economic importance, the Venetian government tried to increase its political influence in Brescia so as to gain more control over Brescia's resources.

At the same time, change was also taking place, politically and economically, at the local level. Due to the deterioration of commerce and industry, political power had been acquired by the landowners. This oligarchy then took over control of most of the municipal infrastructure, such as food provisioning, administration of justice, and imposition of taxes, as well as the financial and charitable institutions. This expansion of power by both the Venetian and the Brescian governments was accompanied by constant antagonism between the two as the local group tried to withstand the political and fiscal inroads Venice was making on its authority.

Ferraro concluded that the internal developments in Brescia could be considered typical of the social and economic discontent which existed throughout Italy at that time. Taxation was escalating and mismanagement by those in political power affected not only local government finances but also the institutions for social welfare. The strains resulting from this disregard for social justice snapped in 1644 when the Brescian bourgeoisie tried to sever the aristocracy's exclusive hold over the municipal government. These attempts at reform were to no avail, however, the political and financial control remaining with the local oligarchy for the remaining life of the Republic.

Poverty in Three English Towns, 1560-1640; A Comparative Approach (University of Toronto, Canada, 1983; Vol. 45/02, pp. 601-2-A) by Thorold John Tronrud. This is a comparative study of poverty and relief for the poor in three towns: New Romney, Faversham, and Sandwich, in the English county of Kent, during the sixteenth and early seventeenth centuries up to the time of the English Revolution. Using evidence obtained from each community's corporate, judicial, and parish records, Tronrud evaluated the various attitudes expressed about poverty and vagrancy and examined the extent of indigence, as well as the types and associated costs of relief made available to the poor. He found that each town's philanthropic response differed and in order to try and learn the reason for this, Tronrud looked at three main variables: economies and municipal finances, religious inclinations, and internal political relationships.

He concluded that political considerations played the greatest role in setting policies for social welfare because good political ties with the citizenry were essential for the authorities to be able to impose the new taxes and other financial burdens needed to provide relief. Financial considerations, in contrast, were of comparatively minor importance because of the fact that the relatively low cost of the poor relief programs did not pose any threats to municipal solvency. This was at least partly due to the low incidence of poverty in two of the three communities. Certain factors, such as the town's economic characteristics, the frequency and extent of epidemics, and the role played by religious beliefs, including the effects of Puritanism, significantly influenced attitudes about poverty and how it should be ameliorated. Tronrud suggested, in summing up, that maintenance of civic peace was the essential element in effective policies for social relief.

Taylorism in France, 1904-1920: The Impact of Scientific Management On Factory Relations and Society (The University of Oklahoma, 1984; Vol. 45/03, pp. 913-4/A) by George Gary Humphreys. Humphreys's work throws some light on patterns of industrial relations over the turn of the twentieth century by examining the history of Taylorism in French industry during part of the *belle époque,* He draws out the linkages between Taylorism and the traditional discord between management and labor over autonomy and discipline, as well as the unique way in which Taylorism developed during this time.

The adoption of Taylor's philosophies by some French entrepreneurs had both social and technical motivations, given their constant concern over discipline in the factories and their attempts to deal with social issues after the Paris Commune. Before the first world war, Taylor's ideas about scientific management were espoused by engineers, such as Henry Le Chatelier, as well as pioneers in the automotive industry, including Louis Renault. However, the inept way in which Taylor's methods were implemented drew opposition from the skilled workers who perceived the new approach as a threat to their domination of the production process. It was their fight to maintain both status and prestige which provoked the strikes at Renault against the new management movement.

Wider endorsement of Taylorism resulted from the war and the economic planning which followed it. The massive wartime needs for armaments led to high level government support for scientific management and its reforms were embraced by French engineers looking for professional advancement. By 1920, however, a number of factors worked against expansion of the Taylor movement. These included conservative reaction to economic intervention by the state, the Bolshevik revolution and postwar strikes, economic insecurity, and considerable resistence to management reforms by small companies.

Workers, Managers, and Welfare Capitalism: The Shoeworkers and Tanners of Endicott Johnson, 1880-1950 (Syracuse University, 1983; Vol. 45/02, pp. 613-4-A) by Gerald Zahavi. The term "welfare capitalism" was given in the late nineteenth and early twentieth centuries to a movement promoted by progressive business firms seeking to take on some of the responsibility for the welfare of their employees. In the view of these liberal entrepreneurs, a firm's personnel should be entitled to fair treatment and consideration and not be merely regarded as one of the basic inputs to the production process. Consonant with this concept, various industrial reforms were introduced in attempts to build up loyalty, improve morale, and lessen conflicts. Opinion, however, is still divided as to the extent to which such corporate efforts were successful in meeting these three goals. So, Zahavi undertook this investigation to assess the relative success which the Endicott Johnson Corporation experienced with this philanthropic philosophy.

By tracing the development of the Endicott Johnson firm, one of the largest shoe and leather manufacturers in the United States, as well as its labor relations history during the main period of corporate welfarism, Zahavi provides an interesting case study of the community which the company's owners and managers tried to establish out of its two dozen factories and tanneries.

The dissertation commences by examining the growth of the shoe industry in the late nineteenth century and analyzing the tensions between management and labor which were both typical of the industry in general and the firm in particular. Next follows a record of the gradual appearance of paternalism at Endicott Johnson, together with details of its welfare system. The author goes on to explain the class sentiments expressed with the factories and tanneries and why this environment tempered labor's reactions, and limited the success of programs which management attempted to build on the basis of a class-free philosophy.

Several elements combined to challenge the welfare capitalism approach and the study concludes by examining the related management and labor responses to the impacts of the Great Depression, the emergence and growth of the industrial unions, and the advent of the second world war. As an epilogue, Zahavi details the downward course which beset both the company and its social philosophy in the post-war years.

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