

7-1983

## Theory & Practice: Current Valuation Of Long Term Debt: A Proposal For Supplemental Disclosure

Florence Haggis

Larry H. Beard

Al L. Hartgraves

Follow this and additional works at: <https://egrove.olemiss.edu/wcpa>



Part of the [Accounting Commons](#), and the [Women's Studies Commons](#)

---

### Recommended Citation

Haggis, Florence; Beard, Larry H.; and Hartgraves, Al L. (1983) "Theory & Practice: Current Valuation Of Long Term Debt: A Proposal For Supplemental Disclosure," *Woman C.P.A.*: Vol. 45 : Iss. 3 , Article 7. Available at: <https://egrove.olemiss.edu/wcpa/vol45/iss3/7>

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Woman C.P.A. by an authorized editor of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

During the past decade, the accounting profession has encountered rapid and sometimes revolutionary changes in its environment and has responded with changes in accounting standards necessary to provide information beneficial to investors and other user groups. Although these changes have often been accepted by the business and financial community with mixed reactions, the profession's willingness to change is evidenced in part by the quantity of output from the Financial Accounting Standards Board (FASB). One approach used by the FASB in dealing with complex reporting issues has been to encourage experimentation with various accounting and reporting alternatives.<sup>1</sup> This approach implies that acceptance in the marketplace and continuing research are necessary and vital elements in resolving complex issues. It also establishes a mood of reflection and theoretical exchange concerning financial reporting which views authoritative pronouncements as evolving standards and not as immutable laws or decrees.

One of the most emotional issues recently addressed by the accounting profession, the FASB, and the SEC is the historical cost accounting model and the need for its modification. The continuing discussion regarding historical costs has generated Accounting Series Release (ASR) No. 190, as well as Statement of Financial Accounting Standards (SFAS) No. 33 — essentially a replacement of ASR No. 190. SFAS No. 33 presented a piece-meal approach to reporting non-historical cost information on a supplemental basis, and it stressed the experimental nature of the reporting requirements contained therein.<sup>2</sup>

SFAS No. 33 was issued primarily to deal with the effects of inflation on the measurement of net income from operations and the reporting of inventories and certain fixed assets. However, the liabilities component of the fundamental accounting equation was not addressed by this pronouncement except indirectly by requiring disclosure of net gains or losses resulting from holding both monetary assets and liabilities. Liabilities are, therefore, measured only on the basis of historical cost in the SFAS No. 33 balance sheet (net asset) disclosures.

Even though SFAS No. 33 has resulted in substantial improvement in

---

## Theory & Practice

# Current Valuation Of Long Term Debt

## A Proposal For Supplemental Disclosure

Editor:

Florence Haggis, CPA, MBA  
Touche Ross & Co.  
New York, NY 10019

Guest Authors: Larry H. Beard, Al L. Hartgraves,  
and Fred A. Jacobs

---

the relevance of accounting information, the required supplemental disclosures are not adequate with respect to liabilities. With these limitations in mind the purposes of this paper are:

1. To respond to the FASB's call for input and experimentation in the area of reporting the effects of inflation on financial statements.
2. To suggest that the presentation of many long-term liabilities in the financial statements do not adequately reflect the current economic environment.
3. To provide some evidence about the materiality of the difference between historical cost debt presentations and the present value of outstanding debt.
4. To suggest that long term liabilities should be restated each period using the present value approach, and this restatement should be given supplemental disclosure.

### Measurement of Liabilities Under Existing Standards

The authoritative literature that addresses the measurement of certain enterprise liabilities to be reported in the primary financial statements is Accounting Principles Board Opinion

(APBO) No. 21, "Interest on Receivables and Payables," issued in 1971.<sup>3</sup> The issue addressed in this Opinion deals with the determination of the historical cost of a transaction involving the exchange of a debt instrument. According to the opinion, when a debt instrument is exchanged for cash it is assumed that the stated interest rate represents the fair market value (FMV) of the funds, and the face of the note represents both the FMV and the historical cost of the transaction. However, if the debt instrument is exchanged for property, goods, or services, and the stated interest rate is not representative of the market for similar-risk securities (or is non-existent), then the value assigned to the exchange is the fair market value of the property, goods or services or the FMV of the debt instrument. In determining the FMV of the debt instrument, consideration is given to the "...credit standing of the issuer, the prevailing rates for issuers with similar credit ratings..." and other evidence useful in approximating an arms' length exchange.<sup>4</sup>

The Accounting Principles Board (APB) thereby established the present value of future cash flows relative to

# FINANCIAL POSITIONS

**\$25,000 to  
\$100,000**

**CALIFORNIA**

Send confidential resume:

**Donald C. May, CPA/MBA  
ALLIED SEARCH, INC.  
1750 Montgomery St.  
San Francisco, CA 94111**

*Free to applicant;  
companies pay our fees.*

debt exchanges as the appropriate method of determining the historical cost of a specific set of transactions under certain circumstances. However, in measuring present values, the APB expressed a preference for using (1) the FMV of the property, goods, or services exchanged (the cash sales price) or (2) the FMV of the debt instrument (current cash sales price when established markets exist). The rationale for the present value approach to measuring debt transactions was provided in Opinion No. 21:

*Nonrecognition of an apparently small difference between the stated rate of interest and the applicable current rate may have a material effect on the financial statements if the face amount of the note is large and its term relatively long.<sup>5</sup>*

Interestingly, APBO No. 21 requires that any interest rate changes subsequent to the date of the transaction be ignored. Obviously, the purpose of the Opinion was to establish historical cost using a measure which approximates current value on the transaction date.

It follows from the above stated logic of the APB that if, subsequent to the debt issuance, the current market interest rate differs significantly from the

rate used to establish historical cost, there will be a material difference between the present value of the debt and the recorded book value of the debt. SFAS No. 33 did not address this problem pertaining to the current measurement of liabilities. It required only the following minimum supplemental disclosures:

1. *Income from continuing operations on a constant dollar basis.*
2. *The purchasing power gain or loss on net monetary items.*
3. *Income from continuing operations on a current cost basis.*
4. *Current cost amounts of inventory and property, plant and equipment at the end of the year.*
5. *Increases or decreases in current cost amounts of inventory and property, plant and equipment, net of inflation.<sup>6</sup>*

It is apparent from the above summary, that SFAS 33 addresses debt only indirectly (item 2). All monetary items are netted to compute the purchasing power gain or loss which is presented as a separate line-item total in the supplemental information. The calculation of purchasing power gain or loss reflects historical changes in the purchasing power of the dollar, but excludes consideration of changes in the present value of debt resulting from shifts in the supply and demand for funds.

Because APBO No. 21 considers exclusively one class of liabilities and prescribes a present value calculation *only* at the transaction date, and because SFAS No. 33 excludes debt restatement from supplemental disclosure, it is appropriate to question the efficiency of these standards to provide the necessary information on long term debt under current inflationary and volatile money market conditions.

The literature provides theoretical support for a present value approach to debt measurement:

*...enterprise liabilities are sometimes affected by price changes changes in the purchasing power of the dollar, interest rate changes or other events and circumstances that may be partly or wholly beyond the control of an enterprise and its management.*

When one considers the stated objectives of financial statements, it seems apparent that some type of realistic disclosure must be made of the current values of an enterprise's...liabilities...

Ideally, the current value of assets and liabilities would be determined by

measuring the present value of their expected cash flows. If an enterprise had perfect knowledge of the amount and timing of net cash flows related to each of its assets and liabilities, it could determine precisely the current value of each of these items.<sup>8</sup>

The long-term liabilities addressed in this paper are those termed "Class A" in the FASB's "Conceptual Framework..." Class A liabilities are those that require specified money payments at specified dates. The FASB stated that:

*The essential information for measuring the present value of expected cash flows tends to be favorable for Class A liabilities. By definition, the amounts and timing of the cash flows are known; the appropriate rate of discount may be known or reasonably determinable...<sup>9</sup>*

Since the measurement approach for translating cash flows into present value is already established in APBO No. 21, and since an appropriate discount rate can be readily determined when debt markets exist, the present value calculations necessary to restate liabilities are, therefore, *easy, objective and verifiable.*

## Magnitude of the Liabilities Valuation Problem: Some Empirical Evidence

During the last two decades, short term and long term interest rates have increased dramatically; consequently, many companies have existing debt which was issued at effective interest rates far below the current rate for similar debt. As interest rates rise, the market, or real value, of debt decreases. When the difference between the issue rate and the current market rate becomes large, as has been the case with debt issues of many companies recently, the market value of the debt varies significantly from the accounting book value.

To illustrate the effects on debt when current market rates of interest differ from actual issue rates, the financial statements of eight major U.S. corporations were investigated. The disclosures contained in the financial statements of each company were inadequate to allow re-valuation of their total debt portfolios. Therefore, only certain debt issues from each corporation were selected. Each of these debt issues has been outstanding for several years, with at least ten years remaining to maturity, and with interest rates that vary from 5.3% to 9 $\frac{3}{8}$ %.



**EXHIBIT I**  
**Historical Cost and Current Valuation of Selected Debentures**  
**of Eight Major U.S. Corporations**

(1)	(2)	(3)	(4)	(5)
Debt Issue	Historical Book Value	Current Discounted Present Value	[(2) - (3)] Dollar Overstatement	[(4) - (2)] Percent Overstatement
<i>Phillips Petroleum</i>				
8 $\frac{7}{8}$ % 2001	\$250,000	\$145,395	\$104,605	42%
7 $\frac{5}{8}$ % 2001	175,459	88,272	87,187	50%
<i>Mobil Corporation</i>				
8 $\frac{1}{2}$ % 2001	729,000	404,570	324,430	45%
<i>Bethlehem Steel</i>				
9% 2000	110,600	65,136	45,464	41%
8 $\frac{3}{8}$ % 2001	200,000	109,510	90,490	45%
8.45% 2005	250,000	135,292	114,708	46%
<i>Sears</i>				
6 $\frac{3}{8}$ % 1993	73,500	36,699	36,801	50%
8 $\frac{5}{8}$ % 1995	103,000	61,451	41,549	40%
8% 2006	250,000	127,940	122,060	49%
7 $\frac{7}{8}$ % 2007	300,000	150,838	149,162	50%
<i>IBM</i>				
9 $\frac{3}{8}$ % 2004	500,000	299,813	200,187	40%
<i>General Electric</i>				
5.3% 1992	80,000	369,923	43,077	54%
7 $\frac{1}{2}$ % 1996	149,000	78,393	70,607	47%
8 $\frac{1}{2}$ % 2004	295,000	161,288	133,712	45%
<i>General Motors</i>				
8 $\frac{5}{8}$ % 2005	300,000	165,539	134,461	45%
<i>DuPont</i>				
8.45% 2004	286,000	155,503	130,497	46%
8.5% 2006	264,000	143,153	120,847	46%

The data collected and analyzed are summarized in Exhibit I. Information identifying the companies and the specific debentures selected is presented in Column 1. The book value of each issue is shown in Column 2, and the corresponding present value of the related future cash flows, discounted at 16%, is calculated in Column 3.<sup>10</sup> These values represent the current value measure of each debt issue. Comparison of the calculated present values with the current quoted market price for each debt issue produced only negligible differences. This would seem to add further credibility to the present value measurement of long term debt.

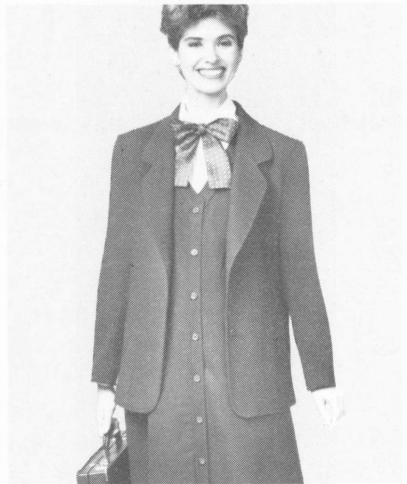
The dollar amount of the overstate-

ment of the debt issue (Column 4) and the percentage of overstatement (Column 5) are presented in Exhibit 1 to allow the reader to consider the significance of the overstatement. It should be noted that the percentages in Column 5 range from 40% to 54% of book value. These percentages appear to be significant when considered individually; however, it should be stated again that they resulted from analysis of only selected debt issues of each company and did not include entire portfolios of debt. Consequently, the overstatement of these issues may or may not be representative of those contained in the liabilities of mature companies. It is unfortunate that financial statement disclosures were inade-

quate to allow restatement of the entire debt of each company; and perhaps this lack of information further emphasizes the need for supplemental disclosure of either the FMV of debt or the minimum information necessary for user calculation.

It is not unreasonable to assume that there may be a significant group of companies whose entire debt portfolio is overstated by as much as 50% (as may be inferred by Exhibit 1). Clearly, in this event, if this information were readily available there could be a major change in the way the financial position of firms is analyzed. The implications of this type of disclosure on the capital markets can only be speculated. However, some compa-

## For the Pregnant CPA



Classic business clothing, traditionally styled for the pregnant CPA who must maintain a professional image throughout her pregnancy. Business suits and dresses for maternity.

For catalogue (sizes 4-14) including 22 fabric swatches, send \$3, refundable with order, to P.O. Box 40121, Dept. CP1, Philadelphia PA 19106.

*Mothers Work*

nies may find debt easier to acquire, perhaps even at a reduced rate because their financial statements are stronger from a long-run solvency standpoint. Stockholders may also be pleased to learn that they are in better condition than the traditional financial statements indicate. The potential impact and usefulness of more realistic debt values could be enormous

It has been suggested that the differences between the discounted present value and the historical cost of each debt issue should be calculated each period with the change from the previous period shown either as an adjustment to income or as an adjustment to equity.<sup>11</sup> This aspect of inflation accounting for debt represents a longstanding dilemma which will not be easily resolved. However, this dilemma certainly should not be allowed to

deter the profession from requiring disclosure of the current value of debt — which is a separate issue. If the current value of debt is disclosed as supplemental information, the financial statement user could make a personal choice regarding any related adjustment to income or equity.

### Summary and Recommendations

The escalation in long term interest rates in recent years has produced new and difficult problems for today's corporate leaders. These conditions, however, have caused managers who moved their companies into highly leveraged positions during the early and mid-seventies to appear to be financial wizards. It could be said that a firm's greatest asset today is its ten-year old debt. There is no question that stockholders of companies carrying large amounts of low cost, long term funds are enjoying an advantage in today's money markets. Financial accounting, however fails to measure and report such advantage. Under current accounting standards the balance sheet presents all debt as equivalent, whether it was issued in the current year at 16% or ten years ago at 8%.

The FASB did not specifically address the problem of debt valuation in its Statement No. 33 dealing with the effects of inflation on financial statements. Problems of failure to account for the changes in the real value of debt related to increased in long term borrowing rates may materially affect investor and managerial decisions. Accordingly, the FASB is encouraged to consider this problem and to issue a standard requiring supplemental disclosure of current valuations of long term debt. By issuing standards requiring supplemental disclosure, the FASB would ensure the availability of a realistic current measure of liabilities to financial statement users. Moreover, this approach would allow users the flexibility to interpret differences between the book value and current value of debt in the way they consider to be most appropriate. If the FASB decides that the current value of debt should

not be reported, then the disclosures should at least be expanded to provide sufficient information to allow users to make their own calculations of the present value of the total long term debt portfolio.

### NOTES

<sup>1</sup>"Financial Reporting and Changing Prices," *Statement of Financial Accounting Standards No. 33*, (Stamford, Conn: FASB, 1979), paragraphs 11-15.

<sup>2</sup>*Ibid.*, paragraphs 23-54.

<sup>3</sup>"Interest on Receivables and Payables," *Accounting Principles Board Opinion No. 21*, American Institute of Certified Public Accountants (New York, 1971).

<sup>4</sup>*Ibid.*, paragraphs 13-14.

<sup>5</sup>*Ibid.*, paragraph 10.

<sup>6</sup>"Financial Reporting and Changing Prices," paragraphs 29-56.

<sup>7</sup>"Elements of Financial Statements of Business Enterprises," *Statement of Financial Accounting Concepts No. 3*, (Stamford, Conn.: FASB, 1981), paragraph 34.

<sup>8</sup>Ellis, Loudell O. and Ronald J. Thacker, *Intermediate Accounting*, McGraw-Hill, 1980, pp. 1191-1193.

<sup>9</sup>"Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurement," *FASB Discussion Memorandum*, (Stamford, Conn.: FASB, 1976), paragraph 542.

<sup>10</sup>A discount rate of 16% represents the approximate prevailing market rate for high quality debentures at the time of this study.

<sup>11</sup>For an excellent discussion of this issue see "Inflation Accounting for Debt," by Lawrence Revsine, *Financial Analysts Journal*, May-June, 1981, pp. 20-29.

---

**Larry H. Beard, CMA, Ph.D.**, is associate professor in the School of Business Administration at Emory University. Dr. Beard is a member of NAA, Institute of Management Accounting, and American Accounting Association.

**Al Hartgraves, CPA, CMA, Ph.D.**, is associate professor of accounting at Emory University. He is a member of AICPA, NAA, and American Accounting Association.

**Fred A. Jacobs, CPA, CMA, Ph.D.**, is associate professor in the School of Accountancy at Georgia State University. He has published widely in professional accounting journals.