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Market value methods for intercorporate investments in stock; Accounting research monograph 2

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ACCOUNTING
RESEARCH
MONOGRAPH

**Market Value
Methods
for Intercorporate
Investments
in Stock**

by **Reed K. Storey, Ph.D., CPA**
Maurice Moonitz, Ph.D., CPA

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Individuals and groups are invited to express their views with supporting reasons on the matters in this monograph. Comments, which should be sent to the Institute's Technical Research Division, will be treated as public information unless a writer requests that his comments be confidential.

**Market Value
Methods
for Intercorporate
Investments
in Stock**

Market Value Methods for Intercorporate Investments in Stock

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Foreword

This is the second in the series of accounting research monographs that the Institute publishes to stimulate study and discussion of significant accounting problems. This monograph is being published at a time of ferment over basic accounting principles. The Sandilands Report in the United Kingdom recommending substitution of financial statements based on current costs for those based on historical costs and SEC Accounting Series Release No. 190 requiring disclosure of certain replacement cost data apparently are only the beginning of rapid evolution. The Financial Accounting Standards Board's project on the conceptual framework for accounting and reporting, incorporating evaluation of alternatives to historical cost accounting, promises to contribute to that development.

There is, thus, a new climate for consideration of proposals for change in accounting principles for marketable equity securities. All interested parties should now engage in serious debate of those proposals. This study clarifies a number of issues concerning principles of accounting for marketable equity securities that have been proposed to replace present principles. As such, it is a welcome contribution to the needed debate.

PAUL ROSENFELD, *Director*
Technical Research

Preface

Investments in marketable equity securities is a logical starting place to consider whether current market values are a preferable alternative to historical acquisition price to account for assets and measure periodic net income. The reason is that the accounting for marketable securities is straightforward, not complicated by factors such as the effects of conversion processes, joint results from various inputs, and allocation problems. Thus, attention can be focused on basic principles which can then be applied to, or tested in, more complicated situations.

Furthermore, market values are already used in accounting for investments in marketable equity securities by a significant sector of business; so, the method is known to be practical. Nevertheless, accounting practice for investments in marketable equity securities has not appreciably changed (except for FASB Statement No. 12) in more than a generation.

The resistance to change stems from the effect of the market value methods on reported net income, not from their effect on asset measurement. And that resistance comes in spite of widely recognized opportunities for, and practice of, "management of earnings" under existing methods. When the Accounting Principles Board attempted to adopt a market value method a few years ago, the stiffest resistance came from companies that already used market price to account for their investment assets. Their resistance was a result of the effect of the proposed changes on reported net income.

This study is concerned with both the asset and income characteristics of the cost method and the various market value methods that have been used or proposed. The concepts and principles developed in the study extend beyond investments in marketable equity securities. Indeed, they apply to inventories, property, plant, equipment, and every other asset that might be accounted for on the basis of current market value rather than historical acquisition price. For example, the detailed analysis of "realized" and "unrealized" capital gains and losses in chapter 4 can be applied to any situation in which "holding gains" are significant.

The analysis in chapter 4 shows that gains and losses from changes in market values do not mix well with notions of gains and losses "realized" by sale. Briefly, gains and losses from current price changes reflect only events of the current period, while gains and losses "realized" by sale contain the effects of price changes of earlier periods. To add "realized" and "unrealized" gains and losses (in whole or in part), as is sometimes done at the present time, is to mix unlike things and to make the resulting amount difficult to interpret. In other words, there are better ways than current practice to disclose what present financial statements using market values purport to show.

We are grateful to Paul Rosenfield, Director of Technical Research of the American Institute of Certified Public Accountants, and members of the staff of the technical research division for numerous criticisms, comments, and suggestions to improve the study. We especially appreciate the careful work of Thomas W. McRae, research administrator in the technical research division, for his editing, reorganizing, and strengthening of the manuscript. The assistance and contributions of these staff members should not be construed as concurrence with the conclusions, either by them or by the Institute.

REED K. STOREY
MAURICE MOONITZ

At the time of publication, Mr. Storey is on leave from Baruch College to serve as FASB Academic Fellow. However, the research and writing of the study were substantially completed while he was associated with the American Institute of Certified Public Accountants and at Baruch College. (The Financial Accounting Standards Board, as a matter of policy, disclaims responsibility for any publication by any of its individual members or staff. Accordingly, the views expressed in this publication are those of the authors and do not necessarily reflect the views of the Financial Accounting Standards Board.)

Scope and Purpose of Study

Statement of Problem

Recent developments in accounting for intercorporate investments have generated a great deal of interest and discussion. The Accounting Principles Board in March 1971 issued Opinion No. 18, "The Equity Method of Accounting for Investments in Common Stock." That opinion established the use of the "equity method" for all investments in common stock in which the investor has "the ability to exercise significant influence over operating and financial policies of an investee. . . ." The board stated that a holding of 20 percent or more of the common stock of an investee leads to a "presumption that in the absence of evidence to the contrary an investor has the ability to exercise significant influence over an investee" (par. 17).

At about the same time the board announced its intention to consider issuing an opinion requiring the use of market value in "accounting for investments in equity securities other than by the equity method" and held an open hearing on the subject on May 25 and 26, 1971. At that hearing many organizations submitted position papers on the proposal setting forth almost every conceivable attitude and point of view. One result of the open hearing and the board's subsequent consideration of the subject was to show that the problem had dimensions not explicitly considered by the board to that date. Accordingly, the Accounting Principles Board deferred final action on the proposed opinion and included the topic in matters it referred to the new Financial Accounting Standards Board

for disposition. The FASB has been immersed in other matters and has not yet added the topic to its active agenda, although it did consider a narrow aspect of the problem—applying the rule of lower of cost and market—as a response through its “emerging problems” procedures and issued Statement of Financial Accounting Standards No. 12, “Accounting for Certain Marketable Securities,” in December 1975. This study is concerned primarily with the matters left unresolved by the Accounting Principles Board, namely, whether market value is generally appropriate to account for investments in marketable equity securities.

Investor-Investee Relationships. In accounting for investments in equity securities, especially in common stock, three types of investor-investee relationships have been distinguished: (1) the investor controls the investee, (2) the investor does not control but exercises significant influence over the investee, and (3) the investor neither controls nor significantly influences the investee. The first is the parent-subsidary relationship, for which consolidated financial statements are generally considered appropriate. Consolidated statements report the financial position and results of operations of the related companies as a single enterprise. The second type of relationship is the special province of the equity method. APB Opinion No. 18 specifies the areas of application of that method and that pronouncement should be definitive for the foreseeable future.

Major Issues. The general acceptance of consolidated financial statements and the equity method in their respective spheres leaves the third type of relationship—neither control nor significant influence of investee by investor—as a problem area. That is the type of investment in equity securities for which the Accounting Principles Board contemplated market values. The major issues for investments in marketable equity securities that are not accounted for by the equity method are the choice between the cost method and market value methods and, if market value methods are chosen over the cost method, the choice of a specific market value method.

Method of Analysis

Much heat was generated and a good deal of light shed on the subject of market value for marketable equity securities in the open hearing and in recent issues of the professional journals. At this

juncture, a dispassionate analysis of some of the basic issues revealed in the debate would be helpful to all concerned in resolving this important problem.

We are concerned in the study with the characteristics and accounting results of various methods that have been used or proposed to account for intercorporate investments. We particularly call attention to two parts of the study that treat matters that to our knowledge have not been explicitly dealt with in the accounting literature. The first is the discussion in chapter 2 of the peculiar nature of an investment in the securities of another entity. That discussion lays the foundation for much of the discussion and analysis in the remainder of the study. The second is the discussion in chapter 4 of "realized" and "unrealized" changes in market values. That material is pertinent not only to discussion of market value methods of accounting for marketable securities but also has broader implications because of the current widespread interest in using market value methods to account for inventories, property, plant, and equipment, and other assets traditionally accounted for at acquisition cost or amortized acquisition cost.

Our primary goal is to analyze accounting methods and their results, not to support a particular method. Thus, although we do not hesitate to point to conclusions that we think are reasonably clear, drawing conclusions is not a principal purpose of the study.

Organization of Study

Some general background for the study is presented in chapter 2. That chapter includes a brief consideration of the nature of an investment in equity securities and some implications for accounting, a summary of the features of the two competing accounting methods—the cost method (and its variation, the lower of cost or market) and the market value method—and an explanation of the problem of "managed earnings" and its relation to accounting for intercorporate investments in equity securities by the two major methods that are evaluated in this study.

Some of the questions raised about measuring and reporting investments at market are discussed in chapter 3. That chapter contains a discussion of problems in measuring investments at market, the nature and rationale for modified market value methods, and implications of uniting or separating the reporting of dividends and so-called capital gains and losses, including the possibility of show-

ing the results of investment activities in a statement separate from the income statement.

The features of the various market value methods that have been used or proposed are described and compared with the features of the cost method in chapters 4 and 5. Chapter 4 covers the method we call the “pure” market value method and also discusses modified market value methods that are designed to obtain the advantages of both the market value and cost methods. In that chapter, the complications introduced by attempts to separate “realized” and “unrealized” changes in market value are explored in detail. Modified market value methods that are designed to allocate changes in market value to two or more accounting periods—the yield or average methods—are described and evaluated in chapter 5.

2

General Background

This chapter presents some general background information on accounting for equity investments. Since the study is concerned with investments that do not involve control or significant influence by the investor over the investee, the appropriateness of consolidation for investments that involve control and the equity method for investments that involve significant influence is assumed without examining the merits of those methods in those circumstances.

Nature of an Investment

Investments in the equity securities of other corporations are “economic resources of an enterprise” that are clearly assets. They are obtained by exchanging resources of the enterprise or by issuing its shares of stock and are acquired in anticipation of some kind of return to the investing enterprise.

Differences Between Investments and Other Assets. However, a striking difference emerges as investments are compared with other types of assets. Investments represent an interest in someone else’s operations—in operations of an entity other than the entity owning the investment. All other significant classes of assets represent aspects of the entity’s own operations under its direct control.

For example, assets in the form of raw materials, work-in-process,

and finished goods are in the center of a manufacturer's operations and are subject to its control within limits imposed by the nature of the materials, the technical processes involved, legal constraints, market conditions, and so forth. But within those limits the manufacturer can control the assets directly, and benefits flowing from them flow directly to it. Similarly, land, buildings, and equipment are under the direct control of the entity whose assets they are, subject to the same types of limits.

Investments are also under the control of the entity whose assets they are, but often only in a passive sense. The investor holds the legal instruments that define the incidents of the interest in the other entity and can decide to sell (disinvest), to hold, or to buy more (invest). But the benefits that attach to or flow from the investment are the result in large part of the success or failure of the way in which someone else manages the operations underlying the investment.

In the United States today, the power of the majority of stockholders to control the operations of the corporations whose stock they hold is effectively limited to voting for the members of boards of directors who have broad powers to manage the investee companies. Unless an investor owns enough shares to control or significantly influence an investee, the fate of the investment depends in large part on the management of the investee, not on the investor. A principal task of a manager of a portfolio that includes common stocks is to assess continually the state of financial health of the investee, the one in which an interest is held, not of the investor, the one that holds the investment as an asset.

As an investment increases in proportion to the total equity in voting stock, however, "investment" is gradually replaced by "control." The passive position of the investor gives way to influence and ultimately to control. As the proportion of stock held by the investor increases, the investee becomes more and more subordinated to the investor. Further, the investor does in fact know what is happening to the investment, at least to the same extent that it knows what is happening to the other assets under its control.

And the larger the proportion of outstanding voting stock of an investee held by one investor, the less significant becomes the market price of the stock as a measure of its value because that market price can clearly be influenced by the single large stockholder. Market price as an index of value or worth declines in importance while book value or equity of the investment becomes at least as impor-

tant to the principal stockholder (investor corporation) as the book value or equity of its own stock is to its own stockholders.

Implications of the Differences. Differences between investments and other types of assets are not always significant. The distinctive characteristics of "investments" are generally of no special importance for securities that are held essentially as inventory, for example, by investment bankers or other middlemen who, in essence, buy securities at wholesale and sell them at retail. Such middlemen make their profit primarily through commissions on the sale or on the "spread" between the wholesale and retail prices of the securities and have little or no interest in the securities as sources of income from dividends, interest, or capital appreciation.

Similarly, an entity may invest otherwise idle funds in highly liquid securities, just as it may invest those same funds in savings accounts, certificates of deposits, or other short-term paper. The distinctive characteristics of "investments" are still present, but, again, those characteristics are overshadowed by other concerns, such as liquidity.

The remaining comments in this section relate to circumstances in which the distinctive characteristics of investments are of some importance.

Need for separate disclosure. One obvious implication of the distinctive nature of investments is that investments and the related revenue or income should be classified separately in financial statements. That practice is now followed to some extent for material items in published financial statements. In the typical balance sheet of a commercial or industrial enterprise, for example, short-term investments are classed with the current assets, and long-term investments with the noncurrent assets. However, the discussion of the distinctive characteristics of investments strongly suggests that investments are so different from other classes of assets that they should occupy a separate section of the balance sheet, probably below and apart from the assets related to the main operations of the entity. Similarly, revenue and expense from those investments belong in a section of the income statement distinct and apart from the revenue and expenses related to the entity's own operations.

Need for information about investee corporation. Another implication of the distinctive nature of investments is that a reader of

financial statements needs something more than data on the owner's financial position and operations to be able to assess the significance of an investment to its owner. Since the investment depends entirely on factors outside the owner's entity, a reader needs information about the financial position and operations of the investee company or the market's evaluation of that company.

Consolidated financial statements and the equity method are both responsive to that need. The assets, liabilities, revenue, and expenses of the investee that underlie the investment are accounted for in consolidated financial statements the same as the assets, liabilities, revenue, and expenses of the investor. The distinction between the investor's operations and "someone else's" operations is mostly erased because the investor controls all of the operations. The equity method continues to account for the investment as an interest in "someone else's" operations; the accounting is based on the investee's transactions, however, not primarily or solely on those of the investor. The investment is like a mirror that reflects part of the entity in which the investment is held.

The market value method also gives information about the entity in which the investment is held but does not depend directly on the investee's accounting and financial statements. Rather, it reflects the market's evaluation of the stock as an investment. The cost method accounts only for the investor's purchases and sales of the stock comprising the investment and for dividends received. Consistent use of the lower of cost and market accounts only for purchases, sales, and dividends as long as the market price exceeds cost but reflects the market's evaluation of the stock if the market price is below the acquisition cost. Information about current market prices that is not accounted for by the cost or cost and market methods can, of course, be disclosed in notes or schedules.

Measurement Methods

The cost method and the market value method are the two major methods that seem to encompass the reasonable alternatives presently open for carrying as an element of financial position an intercorporate investment that does not qualify for consolidation or the equity method and for showing as elements of results of operations the related revenue, expenses, gains, and losses. The lower of cost and market method, as described in FASB Statement of Financial Accounting Standards No. 12, is a combination of those two meth-

ods but can for convenience be identified as a third method. It is described briefly in this chapter but is discussed in the other chapters only if its peculiar characteristics (especially its lack of symmetry) are pertinent to the topic under consideration. A fourth method—"discounted cash flow" or "present value" (in the compound interest sense)—is also described in the literature. However, the method applies most directly to debt instruments and is not included in this discussion of investments in marketable equity securities.

The committee on accounting for marketable securities of the Accounting Principles Board circulated a memorandum in March 1971, "Accounting for Investments in Equity Securities Other Than by the Equity Method," to assist those who wished to take part in the open hearing on the subject on May 25 and 26, 1971. It is reprinted as an Appendix to this study. The following relies heavily on the definitions and descriptions included in that document.

Cost Method. The cost method is the prevailing general practice of accounting for investments in marketable equity securities among commercial and industrial companies. However, it is not the prevailing practice among entities in the financial sector, such as insurance companies, securities brokers and dealers, investment companies, common trust funds, pension funds, and endowment and other funds of not-for-profit organizations. Those entities typically use some form of the market value method.

Asset characteristics. Under the cost method, an investment in an equity security is carried in a balance sheet at acquisition cost, or at the lower-of-acquisition cost and market value if the price decline is judged to be other than temporary. The cost of an investment is a measure from an exchange transaction in which the accounting entity participated at some date in the past, a direct measure of the accountability of management for the amount of funds entrusted to it in the sense of "Here is what we did with the money you gave us, and we still hold the security for which we paid that money." The recorded cost of an investment tends to remain constant, changing only for purchases, sales, or write-downs.

The cost method gives no hint, except by coincidence, of the current value or worth of an investment. For most investments that are held for some time, the cost per share differs significantly from both the equity in net assets and the market value represented by a

share of stock. A significant characteristic of the cost method is that the valuation reflected is out of date and not directly of much use to anyone except in a report on stewardship, narrowly conceived.

Many companies, however, disclose the current market value of their investments in a note or other supplement to the formal financial statements. That disclosure mostly cures one obvious defect of the cost method.

Another characteristic of the cost method is that identical securities (for example, two blocks of common stock of XYZ Company) purchased at different times are carried at the different market prices prevailing on those dates. The accounting does not recognize the fact that the individual shares are indistinguishable from each other and can be substituted for one another freely without changing any of the rights they confer, the obligations they carry, or the price they command in the market.

Income characteristics. Under the cost method, the income statement shows dividends received or accrued, gains and losses from sales of investments, and losses from write-downs of investments. Dividends are reported when declared or earned, and changes in market prices (capital gains and losses) are reported when realized by sale. In effect the method defers or postpones the recognition of gain or loss on principal until the entire sequence of investment-holding-disinvestment is completed. The method recognizes dividends received but otherwise suspends judgment whether an investment is profitable or not—all gains from increases in market prices are reported in the period of disinvestment; none are reported during the holding periods when the increase in value occurs. Thus gains tend to appear erratically. Sales of securities result in significant fluctuations of investment income in periods of sale compared to periods in which no significant sales are reported. The fluctuations may show in varying degrees in the earnings per share of the investor corporation.

The feature of the cost method of reporting all gains in periods of disinvestment affects the indicated rate of return on an investment in at least two ways. First, the rate of return tends to be erratic. The rate is relatively constant in periods in which dividends are included but no capital gains or losses are realized; it may fluctuate significantly in periods in which capital gains or losses are included. Erratic rates of return are an unavoidable feature of the cost method because its related rule for realization calls for erratic recognition of gain or loss.

Second, the cost on which the rate of return is based may be so out of date that the result is meaningless. The cost method ignores the profitability of the investment, its market value, the effect of inflation, and other factors that affect dividends paid. As time passes, dividends often grow relative to the cost of the investment, and rates of return of 30 percent, 50 percent, 70 percent, and higher may be common under the cost method. Dividends exceeding cost may be common on investments made many years ago. Rate of return ceases to be a reasonable indicator of success long before the point of 100 percent return is reached, however, and the percentages begin to resemble baseball players' batting or fielding averages. The problem is that as cost recedes into history it becomes less and less useful to anyone for any purpose.

Market Value Method. The market value method is used extensively in the financial sector of U.S. business but not by commercial and industrial companies, which, for all practical purposes, are effectively barred from using the method under generally accepted accounting principles. The Accounting Principles Board, as already noted, announced its intention to consider extending the use of the method to all entities (that is, "all marketable securities to be carried at market") but was unable to issue an opinion.

Under the market value method, an investment in an equity security is initially recorded at acquisition cost but is afterwards carried in a balance sheet at current market value. Dividends are reflected as elements of current net income when declared or received. Changes in current market value and gains and losses from sales of securities may be accounted for in one of the following ways:

1. Changes in market value are reported as gains and losses in current net income. "Realized" and "unrealized" elements may be reported separately.
2. Gains and losses from changes in market value are attributed to several accounting periods by the use of a "long-term yield" formula or moving average amortization procedure.
3. "Realized" gains and losses are reflected in current income, as they now are under the cost method. "Unrealized" gains and losses are carried in a special account in the balance

sheet. One proposal is to include that account as a separate element of stockholders' equity.

4. All so-called capital gains and losses, whether "realized" or "unrealized," are reported in a statement separate from the income statement. Again, two variants are possible: (a) the net capital gain or loss is carried to retained earnings as an element of net income or (b) it is carried directly to a separate stockholders' equity account, an account other than retained earnings.

Under all variations of the market value method, deferred income taxes on "unrealized" gains or losses are recorded.

Asset characteristics. The market value method reports the amount that could currently be obtained by selling the securities that comprise an investment. Accordingly, the data reported are up to date and may be directly compared with other similar data. All units of a given security (for example, the common stock of XYZ Company) are carried at the same unit value. They are interchangeable in the records as well as in fact.

The market value method also provides a more current measure of accountability and stewardship of management. It shows the effect of a decision to hold rather than sell an investment. Moreover, current data always has an appeal; in fact, it is essential as a basis for sound decision making.

But the type of current data produced by the market value method has some characteristics that generally lessen its appeal to accountants and businessmen. For instance, it introduces data from transactions in which the accounting entity did not take part—the market values used are those in transactions engaged in by others or those in offers-to-purchase if no transactions occur. Those market values may fluctuate significantly. Also, the market value of a security is often not definite and unequivocal. Is market value measured by the last quoted price? The average of the high and low for the day? The average of actual prices over some period, perhaps as short as two weeks or as long as two years? How representative is the market price generated in actual transactions? Was the price generated in a sale of a single block of 100 shares or of 10,000 blocks of 100 shares each? Does quoted market price measure the value of blocks of stock that are larger than the total number of shares bought and sold during a year? What should be made of a suspicion that

the price is being supported artificially? The doubts behind those questions need to be resolved satisfactorily before market values are introduced in a given situation.

Income characteristics. The market value method in its "pure" form divorces the recognition of income completely from the timing of sales (disinvestments). If a security is carried consistently at current market value, the related income or loss is measured directly by the change in market price during the period plus dividends declared during the period. Gain or loss can emerge at point of sale only if the market used to value the security in the records is inaccurate or out of date. In other words, change in market value is essentially an element of current income, not distinguishable in nature from the income recognized on the same securities in previous periods. The gain or loss may tend to fluctuate (sometimes violently) from period to period.

The rate of return on the investments that is indicated by the financial statements will be identical with the rate of return that is calculated from market quotations on the securities held in a portfolio. Therefore, the rate of return may fluctuate under the market value method, but the fluctuations result from changes in the market rather than from management decisions to dispose of securities whose value has changed in earlier periods.

In summary, the market value method introduces events in the outside world into the detailed record keeping and reporting for marketable securities to a greater extent than transaction-based, historical cost accounting. The data at point of purchase and of sale (both market prices by definition) serve merely to mark the beginning and end of a particular venture in a specific security and to determine the overall profit or loss from that venture. The profit or loss on that venture is recognized in the periods between those points in accordance with the behavior of the market price of that security, not with the results of operations either of the investor or the investee.

The earlier description of the market value method described four variants of reporting its effect on earnings, including the "pure" one just discussed. The others are to attribute a change in market price to several periods by a yield formula or a moving average procedure; to separate "realized" and "unrealized" changes, reporting only the former as an element of earnings; and to report all changes apart from earnings. Each of the other three modifies the pure form in

some significant fashion. Understanding those modifications is essential to a clear understanding of the characteristics in operation of a market value method of accounting for marketable securities. Much of the remainder of the study is devoted to an exploration of the nuances among the variations on the theme of market value accounting.

Lower of Cost and Market Method. Significant declines in stock prices during 1973 and 1974 followed by a partial recovery of the market in 1975 led to controversies about (a) the circumstances that required write-downs below cost of investments in marketable equity securities accounted for at cost and (b) whether securities that had been written down to market values below cost should be written up based on market recoveries or other criteria. The Financial Accounting Standards Board was asked to consider the matter as a current accounting problem needing early resolution. After consulting with its newly established Screening Committee on Emerging Problems, the board decided to undertake a relatively narrow effort to resolve these issues.

The board's effort was not a study of the applicability of market value methods to investments in marketable equity securities but only of the application of the method of lower of cost and market to investments accounted for by the cost method. The board concluded that (a) all portfolios of marketable equity securities formerly carried at cost should be accounted for at the lower of aggregate cost and aggregate market value and (b) increases in aggregate market values should be recognized to the extent that decreases had previously been recognized.¹

To apply the statement, investments in marketable equity securities are divided into current and noncurrent portfolios (investments in nonclassified balance sheets are to be considered noncurrent), and the aggregate cost and aggregate market value of each portfolio are compared. No changes in the carrying amount are required as long as the aggregate market value exceeds the aggregate cost. If, however, the aggregate market value of a portfolio falls below its cost, the investment portfolio is reduced by a "valuation allowance"

¹ Financial Accounting Standards Board (FASB), Statement No. 12, "Accounting for Certain Marketable Securities," (Stamford, Conn.: FASB, 1975). The brief history of the statement was digested from the statement itself and the board's *Status Report*, No. 28, September 9, 1975.

equal to the “unrealized loss”—the amount by which aggregate cost exceeds aggregate market value of that portfolio. Increases and later decreases in the valuation allowance for a current portfolio are included in measuring net income for the period of the market value change; those for a noncurrent portfolio are included directly in stockholders’ equity and the accumulated amount is shown separately. If a decrease in market value of a portfolio, either current or noncurrent, is judged to be other than temporary, the amount of the decline is recognized as a loss in determining net income for the period of decline, and the lower market value becomes the new “cost” basis of the investment—further temporary declines are reflected in a valuation allowance deducted from that new cost and “realized” gains and losses from disposition of securities are measured from that cost.

Asset characteristics. This method has the asset characteristics of the cost method as long as the aggregate market value of a portfolio exceeds aggregate cost; otherwise it has the asset characteristics of a market value method. However, if the lower market value is ascribed to other than temporary conditions, the method has the characteristics of the cost method rather than a market value method.

Income characteristics. The income characteristics of a current asset investment portfolio are the same as its asset characteristics. As long as the aggregate market value continues to exceed aggregate cost, it has the income characteristics of the cost method. Gains are recognized only from dividends and from sale of securities, and losses are recognized only from sale of securities.² If the aggregate market price falls below aggregate cost, the portfolio is accounted for by the market value method. Losses and later recoveries of losses are included in measuring net income of the period of the market

² Since the aggregate market values and costs of portfolios are compared to apply the method, the sale of some securities at a gain may cause aggregate market value of remaining securities to fall below their aggregate cost, thus requiring a change in carrying amount even though market prices do not change. In other words, a change from cost to market value may be required by either a decline in aggregate market value or sale of securities whose market value exceeds cost.

value change. The board is specific about the nature of the item that results from recording increases in market value:

The Board does not regard the reversal of the write-down as representing recognition of an unrealized gain. Rather, the Board views the write-down as establishing a valuation allowance representing the estimated reduction in the realizable value of the portfolio, and it views a subsequent market increase as having reduced or eliminated the requirement for such an allowance. In the Board's view, the reversal of the write-down represents a change in an accounting estimate of an unrealized loss. [citation omitted] (Par. 29(c))

A noncurrent investment portfolio apparently continues to be accounted for by the cost method in the income statement even though aggregate market value falls below aggregate cost. Increases in the valuation allowance, as well as later decreases, if any, are not included in measuring net income until securities are sold, and apparently "realized" gains or losses are then measured from cost rather than from market value in measuring income for the period.

Managed Earnings

Much of the recent interest in, and support for, market value methods has stemmed from widespread dissatisfaction with the cost method, particularly as it applies to investments in equity securities. We have noted some sources of that dissatisfaction in describing the asset and income characteristics of the method. The most important source of dissatisfaction is, however, that the cost method is especially subject to "management of earnings."

"Managed earnings" is an unfavorable term that has been used in recent years to describe the result in a circumstance in which management is thought to exercise undue influence or control over the amount or timing of reported earnings. The feature of the cost method of reporting all gains in periods of disinvestment lays the groundwork for managed earnings. An investor can, within broad limits, control the reporting of gains in its income statement by controlling the time of sale (disinvestment). An investor corporation with a sizeable portfolio of marketable securities that has appreciated in value may recognize a desired amount of earnings in strict conformity with present generally accepted accounting principles merely by selling enough of the appreciated securities to obtain that

result. It may then reinvest the proceeds in other securities of substantially the same type as those sold. Thus, substituting Security *B* for Security *A* has the twin advantages of reporting earnings while at the same time maintaining substantially intact the portfolio of security holdings. Conversely, an investor corporation can defer recognizing a gain merely by holding the securities for sale in some later period.

The cost method thus is subject to managed earnings and erratic patterns of return on investment because of the overriding significance to that method of the sale transaction. A thoroughgoing market value method of accounting for investments in securities would eliminate that type of managed earnings because the sale of securities carried at or near market value would generate no sizeable amount of reportable earnings in the period of sale. The market value method is based on prices that are beyond the control of management. Adopting a market value method would, however, create other problems, and its adoption has met significant resistance. The remaining three chapters of the study analyze the "pure" market value method and several of its variations in detail.

3

Measuring and Reporting Investments at Market Value

Accounting at market value for investments in equity securities has been proposed not only as a solution to the problem of managed earnings but also as an appropriate, objective accounting basis for assets that are readily marketable at quoted market prices. The market value method (as noted in chapter 2) is not within the framework of historical cost accounting because it relies on market prices of an investee's stock in addition to transactions to which the investor is a party. Accounting for investments at market value is not now generally accepted for commercial and industrial companies but is accepted practice for several kinds of enterprises in the financial sector. Some of the problems involved in measuring and reporting investments at market value are discussed in this chapter, including the implications of uniting or separating the reporting of dividend income and so-called capital gains and losses and of reporting the results of investment activities in a statement separate from the income statement.

Measuring Market Value

Much of the heat in discussions of the use of market values in accounting turns on the extent to which quoted prices may be relied on as bases for normal recording of changes in accounting records. Reading some of those discussions leads one to believe that measurement is the crucial issue—if accountants could be sure of the

measurement, almost all would favor market values in financial statements.

Reliability of Quoted Prices. Difficulty of measurement is a curious argument to apply to investments in marketable securities. Insurance companies have accounted for investments in equity securities at market value for decades. Mutual funds and some other investment companies are able to do the same thing daily. Brokers and dealers in securities account not only for market value of marketable securities but also for fair value of securities that are not readily marketable.

A common characteristic of types of enterprises that already account for investments in marketable securities at market value is that the portfolio of securities is a significant part of total assets and the gain or loss from change in market value is normally significant in relation to reported net income. If quoted prices can be used for those investments with no observable ill effects, why are they not used in commercial and industrial companies whose investments in securities are much less significant relative to total assets and to total revenue and net income?

We suspect that the curious state of affairs in which relatively significant investments are carried at market value, while relatively small ones are carried at cost, is due more to habit, tradition, or inertia than to difficulties of measurement. Commercial and industrial companies have a strong tradition of using acquisition cost for their principal earnings assets—inventories and plant and equipment—and the tradition carries over to investments. Market value is used without significant measurement problems for investments of those companies if it is below cost. The problem then is more one of overcoming customary, habitual thought than of finding a reliable measure of the current value of a quoted security.

Adjusted Quoted Prices. If using quoted market prices directly is too unpalatable to a majority of the interested parties, the market value method could be based on a conservative technique of determining market value. For example, market value could be an average of prices in transactions for the last ten trading days of a period instead of the quoted closing price on the last trading day. That figure might be considered more representative of market value, a better measure of “central tendency” of prices in *current* transactions in a security. Or, a quoted closing price or an average price could

be scaled down by some arbitrary, but announced or agreed on, percent—a procedure often described as a “haircut” of quoted prices—to provide a “cushion” or safety factor. Both of those formulas use quoted market price at or near the end of a period to estimate market value, and their use would still constitute a “market value” method.

Market Value and Large Blocks of Stock. A single investor may hold a large block of the equity securities issued by a single investee. Quoted market prices are often said to be unreliable for “large” blocks. If large means over 50 percent of the outstanding stock, ARB No. 51 already indicates consolidated financial statements as the preferred method of reporting the relation between the two corporations. Moreover, APB Opinion No. 18 specifies the equity method for investments in nonconsolidated subsidiaries in consolidated statements and for investments in all subsidiaries in parent company financial statements “prepared for issuance to stockholders as the financial statements of the primary reporting entity.” Similarly, if large means holdings of between 20 percent and 50 percent of the outstanding stock, APB Opinion No. 18 already requires use of the equity method because “significant influence” is presumed to be present. Since market values of investments do not affect the accounting in consolidated statements or under the equity method, we may assume for present purposes that the problem of market prices and large blocks of stock arises principally in investments of less than 20 percent of the outstanding stock.

Specifically, a single investor who holds a large block of stock is in a position to influence its price by moving in and out of the market. The investor can choose, at its discretion, to let the stock find its own level in the market, support it at some designated level, push its price up by buying, or push it down by selling.

This situation causes concern. Market value as a reliable indicator of value or worth of any commodity implies a market in which no single buyer or seller can significantly affect the price. In that kind of market, each unit of a homogeneous commodity (such as a share of stock of XYZ Company) is freely interchangeable with every other unit of the same commodity. Accordingly, the price tag on one unit is equally applicable to any other unit of the same homogeneous commodity. The characteristic of interchangeability is the heart of the case for using market price of transactions of other parties to obtain current value of assets held by an entity. If inter-

changeability is indeed lacking, the reliability of market value as a measure of assets held is weakened considerably.

The use of market value also implies an orderly market in which numerous traders make sales, each dealing in a small portion of the total visible supply. Market value is then a good predictor of short-term realizable value—the price another trader could expect if he offered his supply of the same commodity in the near future. The “dumping” of a large portion of the total supply is not contemplated. If a single trader is capable of dumping a large portion of the total supply, quoted market price may lose its qualities both as a measure of value of his holding today and as a predictor of value of his holding tomorrow.

Evidence of the validity of quoted market to measure the value of a large holding of stock is mixed. Traditional analysis holds that large blocks of stock cannot usually be sold without adversely affecting the market because of the delicate balances referred to in the preceding paragraphs. Some transactions seem to bear out that analysis. On the other hand, some extremely large blocks of stock have been sold over short periods without appreciably affecting the market.

Modifying Market Value

The public hearing showed that accountants, businessmen, and others are generally aware of the weaknesses of the cost method of accounting for investments in marketable equity securities. Further, APB Opinion No. 18, which prescribes the equity method for many investments that were formerly accounted for by the cost method, has been well received and generally applauded. That opinion leaves the cost method applicable only to investments of less than 20 percent of the outstanding voting stock and those are specifically the investments to which the market value method is most easily applied because problems of reliability of quoted prices and large blocks are less than those for larger investments.

The hearings also showed that many, if not most, of those who have spoken on accounting for investments in marketable equity securities find market value appealing for the investment in the balance sheet. Many of them also support the “pure” market value method for reporting net income. However, a large number are uneasy about or unalterably opposed to including the effects of periodic changes of market value in reported net income. Therefore,

some existing "market value" methods and some that have been proposed modify the "pure" market value method to attempt to retain the advantages of market value in the balance sheet but to avoid its purported disadvantages in the income statement.

Standing alone, an argument that a given method is unacceptable because it results in reporting fluctuating gains and losses is wholly without merit. Producing smooth results is not now an objective of accounting. Reasons that the fluctuations are unacceptable must be forthcoming, for example, reasons at least as compelling as the argument that the pattern of fluctuations resulting from the cost method may be the consequence of "managed earnings."

Much of the opposition to recognizing fluctuating market values in financial statements is probably habitual and psychological. Gains and losses reported by the cost method can, and often do, fluctuate as much as or more than those reported by the market value method. However, although both methods can produce erratic results, the fluctuations under the cost method have some comforting characteristics. To the extent the fluctuations under the cost method are relatively large, they tend to be less frequent than under the market value method; fluctuations under the cost method tend to be from small losses to large gains if the portfolio is large and many of the securities were acquired long ago, while those of the market value method may show large losses as well as large gains; and fluctuations under the cost method are significantly under control of management, while those of the market value method are significantly beyond management's control except through astute investment decisions.³

³ FASB Statement No. 12 requires recognition of fluctuations from market value changes for current asset portfolios if aggregate market price is less than aggregate cost. The exposure draft of the proposed statement required all changes in valuation allowances to be included in measuring net income for the period of market value change, but many respondents to the exposure draft argued "that fluctuations in the market value of long-term investments should not be reflected in income and to do so would cause distortions which would not be understood by investors" (paragraph 30 of the final statement). Although "not necessarily accepting" those arguments, the board noted that they had considerable support in practice and separated the accounting for current and noncurrent portfolios (paragraph 29(b)). Thus, changes in market values of certain noncurrent portfolios are disclosed in the face of balance sheets but are not included in measuring net income until securities are sold. (See chapter 4 for a detailed analysis of that method.)

Strong influences are also found in the traditional attitude that "what goes up may come down," implying that not recognizing a gain that might be followed by a loss is safer, and that changes in market values of securities are "unrealized." Manifestations of those attitudes pervade the modifications of market value that have been used or proposed, for example, attempts to inject the notions of "realized" and "unrealized" into market value and an argument underlying the yield or spreading method that relative certainty of realization of price is a prerequisite to recognizing changes in asset values.

In general, modifications of market value have followed either of two paths: (1) to attempt to report "realized" and "unrealized" elements of changes in market values separately, sometimes excluding one or both from net income, and (2) to recognize changes in market values that occur during a period in two or more accounting periods. The first group of those modified market value methods are discussed in chapter 4 and the second group in chapter 5.

Reporting Investment Results

We observed in chapter 2 that the nature of an investment points to the desirability of reporting the results of investment activities separately from other activities. Some advocate segregating the results in a single income statement that includes the results of the other activities of the enterprise. Others advocate reporting at least some investment results in a separate statement. This section considers the implications of uniting or separating dividend income and capital gains and losses and of reporting the results of investment activities in a separate section of the income statement or in a statement separate from the income statement.

Sectionalized Income Statement. Portfolio managers commonly look on dividends and capital gains as coordinate elements in the return on investments. Dividends are one form of income; appreciation through market price increases is another. The fact that one without the other is considered incomplete information strongly suggests that they should be reported together in an income statement. A reader of the financial statements can then compare the combined return with the investment in the balance sheet as one means of evaluating the relative success of the enterprise in managing its investments. The present practice, which is widely ob-

served, of reporting dividend income apart from capital gains (whether “realized” or “unrealized”) is not conducive to that type of evaluation.

To put dividend income and capital gains and losses together to show their total as “investment income” or “investment revenue” (or other descriptive caption) in effect sectionalizes an income statement. A special section for results of investment activities is compatible with the nature of an investment as an interest in someone else’s operations. Separating the results of investment activities from the results of operations that are under more direct control of the management of the reporting entity provides the more informative reporting.

To segregate results of investment activities from those of other operations raises questions about allocating income taxes and operating expenses between revenue from investments and revenue from other sources. The difficulties of allocation (if any) are the same as in any attempt to departmentalize or segment an income statement. Taxes should be relatively easy to assign—that kind of intraperiod tax allocation is already fairly common. To allocate operating expenses might be more difficult, but direct costs are likely to be either readily identifiable or immaterial. Significant investments with significant expenses year in and year out are likely to be managed by a separate portfolio manager with staff so that the direct costs of managing the portfolio are easy to calculate and assign. Indirect costs are unlikely to be significant because management of a portfolio does not require elaborate housing or other significant joint services. Occasionally costs that are not usually significant may become significant in a given period. For example, an industrial company may incur unusual costs to sell a sizeable part of its portfolio of appreciated securities. But, as already noted, if the costs become significant, they tend to become identifiable.

Separate Statement for Investments. The fourth method described by the APB committee in its booklet for the public hearings is to

Report realized and unrealized gains and losses from market value changes in a statement separate from the income statement or as direct charges and credits to a stockholders’ equity account. (Appendix, par. 17.)

The step from an income statement with a separate section for investments to a separate statement of investment gains and losses is

relatively short in terms of technique but may be a long one in terms of concept.

Physical separation is not the crucial issue. The physical separation of two different types of data, in and of itself, is commendable and is consistent with the nature of an investment as an interest in someone else's operations. A major problem with the method as practiced, however, is that dividend income is now usually included in net income rather than in the separate statement relating to investments.

Bypassing of income statement. The critical issue raised by a separate statement for investment gains and losses is whether the method results in bypassing the income statement—that is, in including items directly in retained earnings that should be included in the measurement of income for a period. For many years, official pronouncements of the AICPA have held that all items of revenue and expense of a period must be included in measuring net income for the period. Only items that pertain to earlier periods—corrections of retained earnings at the beginning of the reporting period—may be included directly in retained earnings.⁴

Presenting capital gains and losses “in a statement separate from the income statement or as direct charges and credits to a stockholder's equity account” clearly does bypass the income statement. No other conclusion is possible if an income statement is presented showing net income as its “bottom line,” with computations of earnings per share based on that amount, while at the same time a separate statement shows gains and losses from investments and transfers them directly to retained earnings.⁵ Elements of revenue of the period, as well as expense if income taxes or other expenses

⁴ Accounting Principles Board (APB) Opinion No. 20, “Accounting Changes,” requires that some items formerly treated as prior period adjustments now be included in the income statement, labeled as to their nature. However, since that opinion is primarily concerned with retroactive restatement of income of prior periods, it does not affect the question of this section, which is concerned with the current period.

⁵ If part of the gains and losses—namely, the change in “unrealized” gains—is not included in retained earnings, the method is partly or wholly a cost method, not a market value method (discussed in chapter 4).

are allocated to investment gains and losses, are excluded from the measurement of net income for the period.

Coordinate statements. At least part of the difficulty with a separate statement for investment results is labeling—since one statement is called “income statement,” the other is implied to be some kind of second-class relative. However, the first is, at best, a partial income statement because it omits significant elements of revenue and expense, and the second contains revenue and expense items that belong in an income statement and are of as much consequence as those in the first statement. Some faults of the method can be remedied, therefore, by making the statements coordinate and labeling them accurately. Both statements should be labeled as income statements or neither should; both “bottom lines” should be labeled net income or neither should; and earnings per share should be computed on both or on neither.

Then, since the two statements purport to show different types of data, the data should indeed be separated on the basis of the distinction involved. The statement that shows results of investment activities should show all results of investment activities, including both dividends received and capital gains and losses on investments in marketable securities accounted for at market value.

Finally, since the statement of investment activities shows the results of the market value method, it should be presented on that basis, with disclosures of cost of securities held and securities sold but without formally trying to incorporate the distinction between “realized” and “unrealized” into the statement. (The reason for that recommendation is developed in chapter 4.)

If the two statements are made coordinate as described and are labeled accurately, the result is two income statements reporting on two different income-producing activities of the same enterprise. Or perhaps a better description is that they are coordinate segments of a single income statement that are not added together. The question then is whether those coordinate statements have a place in accounting for marketable securities under a market value method.

For transition. Under existing conventions, to show two parts of an income statement without combining them is clearly less satisfactory than to show a single income statement with a special section for investment activities. At best, that presentation can be con-

sidered as a compromise transitional development toward a single statement that includes all results of operations. But as a compromise transitional arrangement, it has certain advantages over other possibilities.

The coordinate statements described do constitute a market value method and, if market value is the goal, they do represent a step toward the goal from present practice. They show the investment at market value in the balance sheet and changes in market value of all securities held during the period as the gain or loss from investments. They disclose costs and proceeds. And most significant, they show all results of investment activities together. If a transitional step from present practice to market value is needed, separate coordinate statements that bring together dividends received and gains and losses from changes in market value are a step toward that goal. To pretend that statements show market values but to adopt a transitional method that in reality converts the financial statements to cost is not progress toward market value from present practice (discussed in chapter 4).

The separate, coordinate statements have all of the desirable characteristics, save one, of the most desirable presentation of the results of a market value method. And, if for a time, management cannot bring itself to add the two statements together, it has at least provided all the information needed for a reader who desires to do it. The second step in transition will be much easier if it is merely to add together two parts of income that are already at market value than if it is to convert an income statement, and perhaps a balance sheet, from cost to market value.

4

Features of Market Value Methods

Accounting practices of financial enterprises and proposals for applying market value to investments of financial, industrial, and commercial companies add up not to a single market value method but to several methods or a method with several variations. The discussions and illustrations in this and the next chapter compare and contrast the market value method and several of its existing or proposed variations with each other and with the cost method.

In this chapter, the method we call the “pure” market value method (to distinguish it from other market value methods) is described and compared with the cost method. The complications introduced by modified market value methods that attempt to separate “realized” and “unrealized” changes in market value are explored in detail. Chapter 5 includes an analysis of market value methods that allocate changes in market value to two or more accounting periods. These two chapters discuss all four methods described by the APB committee but in a different order.

Data and Symbols for Analysis and Discussion

The examples in chapters 4 and 5 are based on a simple invest-hold-disinvest situation in which the market price of the securities held advances at a steady rate of 10 percent each period. The total gain is \$36,000 exclusive of dividends received, which are omitted

because they are accounted for the same by the market value and cost methods. The following figures are the basis for discussion and illustration.

<i>Date</i>	<i>Particulars</i>	<i>No. of shares</i>	<i>Per share</i>	
			<i>Cost</i>	<i>Market</i>
t_0	Acquire 1,000 shares (\$100,000)	1,000	\$100	\$100
t_1	End of first period.....			110
t_2	Sell 400 shares48,400	(400)	100	121
t_3	End of third period.....			133
t_4	Sell 600 shares.....87,600	(600)	100	146
	Total Gain <u>\$36,000</u>			

The examples ignore commission and other costs of buying and selling securities.

Concepts and relations are sometimes described in the chapters in simple symbols and equations. The relations described are all simple algebra. The capital letters represent items that do or might appear in financial statements—balance sheets, income statements, statements of retained earnings, and statements of changes in financial position (funds statements). The lower case letters are used as subscripts to identify the securities to which certain of the capital letters refer. The symbols needed to discuss the “pure” market value and cost methods are—

M —market value of securities held	b —securities held at beginning of period
C —cost of securities acquired, held, or sold	e —securities held at end of period
P —proceeds (cash received) from sale of securities	a —securities acquired during period
G —gain or loss, market value method	s —securities sold during period
R —gain or loss, cost method	

A few other symbols are introduced as needed in the discussion.

“Pure” Market Value Method

Under a “pure” market value method, securities acquired are recorded at the price paid—acquisition cost—and are thereafter accounted for at market value. Market value is usually measured by the quoted market price of securities held, the price at which they could be sold currently.

Income from investments in marketable securities accounted for at market value comes from two sources: dividends received and increases or decreases in market value. A sale of securities is not a basis for recognizing gain or loss but is like a purchase—merely a conversion of an asset from one form to another without change in value.

Elements of Financial Statements. A set of financial statements that use market value as the basis of accounting for investments in marketable securities should show the elements indicated in the following discussion.

Income statement. The income statement would show dividend income and the net effect of all changes during the period in the market value of all securities held at any time during the period. The latter—a gain or loss—is G and is measured as the sum of changes in market value of four mutually exclusive classes of securities held, as follows:

1. Change from beginning of period to end of period for securities held throughout (neither bought nor sold) the period— G_w .
2. Change from time of acquisition to time of sale for securities bought and sold during the period— G_x .
3. Change from beginning of period to time of sale for securities sold this period but bought in an earlier period— G_y .
4. Change from time of acquisition to end of period for securities bought this period and still held at the end of the period— G_z .

How that gain is calculated—that is, whether it is accrued continuously or computed indirectly by a shortcut—is a matter of technical procedure, not of accounting principle.

Statement of changes in financial position. The statement of changes in financial position (funds statement) would show the total proceeds from sale or other conversion of securities disposed of during the period— P_s —and the cost of securities acquired during the period— C_a . P_s is a source of funds; C_a is an application or use of funds.

Comparative balance sheets. Comparative balance sheets would show the portfolio of securities held at the beginning and end of the period priced at market price— M_b and M_e . They would show as additional *disclosure*—the acquisition cost of securities on hand— C_b and C_e either parenthetically or in a note.

Contrast With Cost Method. Although both methods may use the same financial statement captions—for example, investment in marketable equity securities, gain or loss on marketable securities—the market value method has little in common with the cost method. The market value method gives the same results as the cost method in the funds statement because both methods account for cash receipts and payments as they occur. Otherwise, the market value method is a distinctive basis of accounting, accounting for market value rather than for acquisition cost. The elements in both balance sheet and income statement are almost entirely different in the two methods—

<i>Market value</i>	<i>Cost</i>
Balance Sheet	
$M_b + C_a + G - P_s = M_e$	$C_b + C_a - C_s = C_e$
Income Statement	
$G = G_w + G_x + G_y + G_z$	$R = P_s - C_s$
Funds Statement	
$P_s - C_a = F$	$P_s - C_a = F$

(F is the net funds provided by or used in investments in marketable equity securities.)

The cost of securities acquired during the period increases the asset under both methods, but even that similarity is somewhat misleading. Technically, all changes are in market values under the market value method—the market value of the asset is increased by the market value of securities acquired (which is also called cost), is

increased or decreased by all changes in market value of all securities held at any time during the period, and is decreased by the market value of securities sold during the period (which equals the proceeds). The cost of the asset is increased by the cost of the securities acquired and decreased by the cost of securities sold during the period—all changes are in costs under the cost method. But the gain under the market value method is measured entirely by changes in market value during the period; the gain under the cost method is the difference between the proceeds and the cost of securities sold. The gains differ because of two potentially significant elements: changes during the period in market values of securities remaining unsold at the end of the period (G_w and G_z) and changes that occurred before the beginning of the period in market values of securities sold during the period (G_y).

Table 1 shows how the differences between the methods affect the assignment to the four periods of the \$36,000 gain in our example.

Table 1

Assignment of Gain on Investment by Cost and
"Pure" Market Value Methods

<u>Period ended</u>	<u>Particulars</u>	<u>Gain reported</u>		<u>Rate of return*</u>	
		<u>Cost</u>	<u>Market value</u>	<u>Cost</u>	<u>Market value</u>
t ₁	Acquired 1,000 shares; none sold; price increased from \$100 to \$110	\$ -0-	\$10,000	0.0%	10.0%
t ₂	Price increased from \$110 to \$121; sold 400 shares for \$48,400	8,400	11,000	8.4%	10.0%
t ₃	Price increased from \$121 to \$133; no sales or acquisitions; held 600 shares	-0-	7,200	0.0%	10.0%
t ₄	Price increased from \$133 to \$146; sold 600 shares for \$87,600	\$27,600	7,800	46.0%	10.0%
	Total gain	<u>\$36,000</u>	<u>\$36,000</u>		

*Rate of return is computed on cost or market value, as appropriate, at the beginning of the period.

The cost method allocates the gain among the four periods erratically, producing an erratic rate of return. The reasons are obvious. Events that resulted in recognizing gain, i.e., sales of 400 shares at the end of the second period and of 600 shares at the end of the fourth period, occurred in some periods but not in others, and market price changes that occurred in some periods are recognized in others.

The market value method, in contrast, allocates the gain in accord with the known history of the market price of the investment, producing a constant rate of return. Again, the reasons are obvious. Events that resulted in recognizing gain, i.e., changes in market value, occurred at a constant rate, and changes in value are recognized in the periods in which they occurred. The erratic events in the example—the sales of securities—do not, in and of themselves, result in reporting gains because the gain assigned to each period is a function of the number of shares held during the period and the behavior of the market price of a share while the shares were held. The gains reported by the two methods can be reconciled by introducing the elements of difference already mentioned, as in Table 2.

Table 2

Reconciliation of Gains Reported by
Cost and Market Value Methods

	<i>Period ended</i>			
	<i>t₁</i>	<i>t₂</i>	<i>t₃</i>	<i>t₄</i>
Gain under cost method -R	\$ -0-	\$ 8,400	\$ -0-	\$27,600
Less changes that occurred before beginning of period in market value of securities sold		4,000		19,800
Changes during period in market value of securities sold		4,400		7,800
Plus changes during the period in market value of securities remaining unsold at end of period	10,000	6,600	7,200	-0-
Gain under market value method—G	\$10,000	\$11,000	\$7,200	\$ 7,800

Effect of Fluctuating Market Prices. The “pure” market value method works well in this simple illustrated case because the sequence of events from investment to complete disinvestment proceeds smoothly. If, more realistically, the market prices themselves move erratically—up for a while, then reversing direction to move down, then back up again, and so on—the “pure” market value method produces fluctuating results. Both investment income (dividends received plus gain or loss) and rate of return on investment in securities move up and down erratically. Sometimes the fluctuations from period to period are greater than those produced by the cost method and sometimes less, depending on factors such as the relative margin between market price and acquisition cost, the relative size of the change in market price, and the proportion of the investment sold.

“Realized” and “Unrealized” Changes in Market Value

Accountants have always been wary of quotations of market prices without sales, usually preferring to base measures of income on prices that an enterprise actually receives or pays. As they contemplate in that context the advantages of using market value in the balance sheet and the disadvantages of using it in the income statement, the question naturally comes to mind: Is there a way to combine the cost and market value methods, retaining the best features of each?

Thoughts and questions of that sort must underlie attempts to report both “realized” and “unrealized” elements of changes in market values of investments in marketable securities. Three of the four “market value” methods described by the APB committee on accounting for marketable securities contain that distinction. For example, the first method is described as follows:

Recognize changes in market value as gains and losses in income when the changes occur. Realized and unrealized gains and losses for a period may be combined or reported separately. (Appendix, par. 17.)

The first sentence describes the “pure” market value method; but the second sentence modifies the description to cling to “realization,” a by-product of historical cost accounting.

However, attempts to combine the cost and market value methods

have not been, and are not likely to be, notably successful. The notion of realization through sale is basically incompatible with a market value method, and attempts to combine the methods inevitably end up either as market value with disclosure of "realized" gains and losses or as cost with disclosure of market value changes. To pin down those observations and assertions, we analyze the concepts of "realized" and "unrealized" gains and losses on investments in marketable securities.

Some Concepts and Relations. The concepts and relations pertaining to "realized" and "unrealized" gains and losses apparently are not well understood despite the fact that all of them stem from present generally accepted accounting principles.

Under generally accepted accounting principles, the term "realized" in a statement of income or retained earnings refers to gains and losses on securities *sold during a period*.⁶ "Realized" gain or loss on a security sold reports the aggregate effect of all changes in market price from date of acquisition to date of sale. It is essentially an income statement concept.

The term "unrealized," by contrast, refers to gain or loss on securities *unsold at the end of the period*. "Unrealized" gain or loss is the difference between current market value and acquisition cost of unsold securities. It is essentially a balance sheet notion.

Basic relations. The elements of "unrealized" gain or loss, "realized" gain or loss, and changes in market value and the relations among them are set out using the symbols on page 30. A new symbol U is needed.

U — "Unrealized" gain or loss at a specified time, which is the difference between market value and acquisition cost of securities held at that time. (If a loss, U is the valuation allowance of FASB Statement No. 12.)

⁶ It may also include dividend income on all securities held, sold or unsold, during the period. Since dividends are accounted for the same by both cost and market value methods, however, they are ignored in the discussion of "realized" and "unrealized" gains and losses in this chapter.

U_b —"Unrealized" gain or loss at beginning of period, which is the difference between market value and acquisition cost of securities held at the end of the preceding period—
 $U_b = M_b - C_b$.

G —Change in market value of securities held during the period, which is the sum of four kinds of changes (as explained on page 31). G is the gain or loss in the "pure" market value method.

R —"Realized" gain or loss of period, which is the decrease in "unrealized" gain or loss during the period from sale or conversion of securities and is measured by the difference between the selling price and acquisition cost of securities sold during the period— $R = P_s - C_s$. R is the gain or loss in the cost method.

U_e —"Unrealized" gain or loss at end of period, which is the difference between market value and acquisition cost of securities held at the end of the period— $U_e = M_e - C_e$.

The basic algebraic relation among the last four elements is—

$$U_b + G - R = U_e \text{ or } U_b + G = R + U_e$$

The illustrative figures in the form $U_b + G - R = U_e$ are shown in Table 3 for each of the four periods. A column is added for the change in "unrealized" gain or loss over a period— $D = U_e - U_b$ —which is a vital element in all methods that attempt to separate "realized" and "unrealized" gains and losses from changes in market values of investments in equity securities.

Table 3

Period ended	Elements of "Unrealized" Gain or Loss					
	U_b	G	R	U_e	$D=U_e-U_b$	
t_1	\$ -0- +	\$10,000 -	\$ -0- =	\$10,000	\$10,000	
t_2	10,000 +	11,000 -	8,400 =	12,600	2,600	
t_3	12,600 +	7,200 -	-0- =	19,800	7,200	
t_4	19,800 +	7,800 -	27,600 =	-0-	(19,800)	

Shortcut calculation. Since U_b and U_e are balances at the end of two periods, their magnitudes may be obtained by valuing the

securities held at the two points of time at their market values and deducting acquisition cost. Element R is the excess of sales proceeds over acquisition cost of securities sold and is usually available in the detailed records of securities holdings and transactions. Therefore G usually need not be calculated directly—by accruing changes in the market values of all securities held during the period—but can be calculated indirectly by the formula—

$$R + U_e - U_b = G \text{ or } R + D = G \text{ (because } U_e - U_b = D)$$

Incompatibility of “realized” and “unrealized” gains and losses. The implications of the concepts and relations pertaining to “realized” and “unrealized” gains and losses have largely been ignored in discussing methods that attempt to report both “realized” and “unrealized” gains and losses in the same system of accounts. Those discussions usually imply that adding “realized” and “unrealized” gains and losses produces G , the gain or loss from changes in market values of all securities held during the period. That, of course, is impossible because G and R (“realized” gain or loss for a period) are incompatible concepts.

None of the above elements is an “unrealized” gain or loss for a period comparable to R , “realized” gain or loss for a period. G does not fit that description because all or part of it may have been realized, and D is merely a change in balance that means nothing until analyzed. “Unrealized” gain or loss for a period is the part of the “unrealized” gain or loss at the end of the period (U_e) that results from changes in market value during the period— $G_w + G_z$ on page 31. The amounts of “unrealized” gain or loss for periods ended t_1 , t_2 , t_3 , and t_4 in the illustrative data are \$10,000, \$6,600, \$7,200, and \$-0-, respectively. They show in Table 2 (p. 34), but are not otherwise used in the illustrations because they have no real significance except to reconcile R and G . For example, adding those amounts to R for each period (as the discussions often imply) produces nonsense results, double counting the total gain or loss of \$36,000 over the four periods.

Showing “Realized” and “Unrealized” Gains. We now attempt to apply the first method described by the APB committee as follows:

Recognize changes in market value as gains and losses in income when the changes occur. Realized and unrealized gains and losses for a period may be combined or reported separately. (Appendix, par. 17.)

Combining “realized” and “unrealized” gains and losses is the “pure” market value method, which is illustrated in Table 1 (p. 33). The real challenge is to report them separately.

The only “unrealized” amount that can be added to “realized” gain or loss for a period to produce the change in market value of all securities held during a period is the change in “unrealized” gain or loss from beginning to end of the period.⁷ That is essentially what some insurance companies do in presenting “Investment Gains and Losses” or “Capital Gains and Losses” if they show the following:

Realized Gain (Loss) on Sales of Investments . . .	\$— R
Increase (Decrease) in Unrealized Appreciation of Investments	— D
Net Investment Gain (Loss)	\$— <u>G</u>

(It is also what FASB Statement No. 12 requires for current asset portfolios with aggregate market value less than aggregate costs—the “unrealized” element in measuring net income is the change in the valuation allowance $U_e - U_b = D$.)

The two elements are often shown net of taxes, but the algebraic relation still holds. “Investment gains and losses” are also often shown in a statement separate from net income. Sectionalized income statements or separate statements to disclose investment gains or losses are discussed in chapter 3. For purposes of the immediate discussion, we are concerned with the particular method of combining “realized” and “unrealized” gains and losses.

Table 4 shows the results of applying the method to the illustrative data. Several columns for different rates of return are included in the table because the method has several existing or proposed variations.

The three rates of return are computed for three different ways of showing “realized” and “unrealized” gains from changes in market values of investments in marketable equity securities. The first adds “realized” gain and change in “unrealized” gain to obtain the gain from investments for the period. It is therefore the market value method that is described by the APB committee in the quo-

⁷ $G = R + D$ (p. 38).

Table 4

**Assignment of Gain on Investment Separating
"Realized" and "Unrealized" Elements**

<i>Period ended</i>	<i>Particulars</i>	<i>Reported gain or loss</i>		<i>Rate of return</i>		
		<i>"Realized"</i>	<i>Change in "unrealized"</i>	<i>Computed in three ways (note)</i>		
				<i>1</i>	<i>2</i>	<i>3</i>
t ₁	Acquired 1,000 shares; none sold; price increased from \$100 to \$110	\$ -0-	\$10,000	10.0%	0.0%	0.0%
t ₂	Price increased from \$110 to \$121; sold 400 shares for \$48,400	8,400	2,600	10.0%	8.4%	7.6%
t ₃	Price increased from \$121 to \$133; no sales or purchases; held 600 shares	-0-	7,200	10.0%	0.0%	0.0%
t ₄	Price increased from \$133 to \$146; sold 600 shares for \$87,600	27,600	(19,800)	10.0%	46.0%	34.6%
		<u>\$36,000</u>				

NOTE: The three different rates of return are computed as (1) sum of "realized" and change in "unrealized" gain as a percent of market value of securities held at the beginning of the period, (2) "realized" gain as a percent of acquisition cost of securities held at the beginning of the period, and (3) "realized" gain as a percent of market value of securities held at the beginning of the period.

tation on page 35. The other two are the variations in the third of the methods described by the committee, but in the opposite order.

Recognize realized gains and losses from changes in market value in income and report unrealized gains and losses in a special balance sheet account. One proposal is to include the spe-

cial account in stockholders' equity. Another proposal is to exclude the special account from stockholders' equity account. (Appendix, par. 17.)

The three ways of showing "realized" and "unrealized" gains are discussed below.

Adding "realized" and change in "unrealized" gains. To add "realized" gain and change in "unrealized" gain for a period gives the same reported gain and rate of return as the "pure" market value method (Table 1, p. 33 and Table 4, opposite). Essentially, the method ignores the distinction between "realized" and "unrealized" changes in market values in calculating gain or loss. Gain or loss is the change in market value of shares held during the period (G), and the rate of return is computed on the market value of securities held at the beginning of the period. That is the "pure" market value method.

Adding R and D to obtain G is therefore at best a means of disclosure and not a means of assigning gains and losses to accounting periods. That is, it is the "pure" market value method with a variation that attempts to disclose "realized" gains and losses and changes in "unrealized" gains and losses as coordinate elements of income.

But R and D are not coordinate elements of the gain reported by the method. First, the "realized" gain or loss (R) can never be part of the gain for the period (G) because it relates to a different period—one of the elements needed to reconcile the two is the changes in market value of earlier periods that are included in R (Table 2, p. 34). Second, the change in "unrealized" gain or loss (D) is essentially a meaningless number. It is a change in balance ($U_e - U_b$) that analysis shows to be nothing more than $G - R$. Deducting the gain or loss under the cost method (R) from the gain or loss under the "pure" market value method (G) does not result in a number that can be given a clear, unequivocal meaning. Furthermore, to divide G into two parts, R and D , does not constitute a valid disclosure.

The method does have a valid use, however. We have already noted that G , the gain or loss from changes in market value for the period under the method, need not be determined directly by accruing all changes in market values of individual securities held but can be determined indirectly from more readily available data

by the formula $G = R + D$ (p. 38). In other words, adding “realized” gain or loss and the change in “unrealized” gain or loss is a practical shortcut to calculate the gain or loss for a period. But that kind of adding together of separate bits of data from the accounts is a work sheet procedure, which should not be reproduced in financial statements intended primarily for nonaccountants since there is no independent reason for reproducing it.

If “realized” gain or loss and change in “unrealized” appreciation are thought to be useful information, they can be disclosed without conveying the misleading implication that they are the coordinate sources of the reported gain or loss (G), as shown in Table 5.

Table 5

Investment Asset and Assignment of Gain Under
“Pure” Market Value Method With Disclosures

<i>Period ended</i>	<i>Particulars</i>	<i>Investment at end</i>	<i>Gain or loss</i>	<i>Rate of return</i>
t_1	Price increased from \$100 to \$110 on 1,000 shares held	\$110,000 ^a	\$10,000	10%
t_2	Price increased from \$110 to \$121 on 1,000 shares held; sold 400 shares at t_2	72,600 ^b	11,000 ^c	10%
t_3	Price increased from \$121 to \$133 on 600 shares held	79,800 ^b	7,200	10%
t_4	Price increased from \$133 to \$146 on 600 shares held; sold 600 shares at t_4	-0-	7,800 ^d	10%

^a Cost \$100,000.

^b Cost \$60,000.

^c 400 shares with a cost of \$40,000 were sold during the period for \$48,400.

^d 600 shares with a cost of \$60,000 were sold during the period for \$87,600.

The investment is stated at market value, but its cost is disclosed. Changes in market value of securities held are recognized as gains and losses when the changes occur, but the gain on sale is easily computed from the information disclosed. In short, all information that is available in Table 4 is disclosed in Table 5 without the

anomalies and confusion that are inherent in the use of "realized" and "unrealized."

Excluding "unrealized" gains or losses from income and stockholders' equity. To include only "realized" gain or loss in net income converts the income statement from the market value to the cost method. The "realized" gain column in Table 4 (p. 40) is the same as the cost method column in Table 1 (p. 33).

To exclude "unrealized" appreciation from stockholders' equity also changes the balance sheet from the market value to the cost method. If "unrealized" gain or loss (U_b and U_e) is excluded from stockholders' equity, it may be shown in a balance sheet either as a valuation of the investment asset or as a "deferred credit" between liabilities and stockholders' equity. Either way the result is $M - U = C$ —the balance sheet is effectively converted from market value to acquisition cost. The effect of market value on both the balance sheet and reported net income is nil, and the rate of return is the same as under the cost method.

Under the method, "unrealized" gain or loss serves merely as a formal vehicle to incorporate market values into financial statements without affecting the traditional mode of calculating net income, retained earnings, or investments in securities. Except for its way of disclosing market value, the method is the traditional practice of commercial and industrial companies of accounting for investments in marketable securities at cost and disclosing market values in notes or parenthetically. If the cost method is in fact to be used, the traditional practice is more economical and does not convey the misleading implication that the enterprise is actually using a market value method.

Including "unrealized" gains or losses in stockholders' equity but not income. To exclude the change in "unrealized" appreciation from net income while including the "unrealized" appreciation in stockholders' equity is a cross between the other two methods just described. It is in fact the only method considered in this chapter that truly combines features of both the cost and market value methods. The gain or loss reported in income is "realized" gain (R), the gain or loss under the cost method, but the investment in securities is stated at market value (M_b and M_e) in the balance sheet. Therefore the rate of return in Table 4 (p. 40) is the ratio of R to M_b .

Two variations of the method are possible. The first includes “unrealized” appreciation in retained earnings. That is, although only “realized” gain or loss (R) is included in income, both R and D (change in “unrealized” appreciation) are carried to retained earnings so that U_e is included in retained earnings and not shown separately in the balance sheet. The balance sheet is in every respect the same as under the “pure” market value method, but part of the change in the investment asset (D) has bypassed the income statement directly into retained earnings. “Realized” gain or loss (R) is a highly questionable measure of gain or loss if everything else about the method is market value. Management should make up its mind: if “realized” gain or loss is the appropriate element of net income, cost should be the basis for reporting the asset and retained earnings. Conversely, if market value is appropriate for the asset and retained earnings, changes in market value should be reported as gain or loss.

The second variation includes R in net income and carries it to retained earnings and excludes D from net income and carries it to an “unrealized” appreciation account (U_e) that is included in stockholders’ equity apart from retained earnings. That is apparently the method prescribed by FASB Statement No. 12 for non-current asset portfolios with aggregate market values less than aggregate costs.

That kind of accounting is unusual but not unknown in generally accepted accounting principles. A precedent, which was not exactly parallel but had significant features in common with the method, was described in ARB No. 5, “Depreciation on Appreciation” (1940), and is presumably still acceptable to account for appraisals of depreciable assets that were formally recorded before APB Opinion No. 6 terminated that possibility. The method was not popular in depreciation accounting and had some important differences from the related method proposed for accounting for marketable securities. However, if the method is to be seriously considered for marketable securities, the logic of, and experience with, the depreciation precedent should not be overlooked or ignored.

The pertinent question is whether the method should be seriously considered for marketable securities. It may have some promise as a method of transition from cost to market value for those who find the change in a single step too drastic. But the method is ambivalent and essentially begs the crucial question—why should one use market value for the asset if changes in that market value are not in-

come? The method is more cost than market value—assuming that net income is more interesting to most users of financial statements than are asset values—which may account for most of its appeal.

Some Observations on “Realized” and “Unrealized.” Analyses of proposed or actual attempts to introduce “realized” and “unrealized” gains and losses, which are essentially cost notions, into accounting at market value for investments in marketable securities show the basic incompatibility of the market value and cost methods. If market value is to be the basis of the accounting, adherence to the “pure” market value method with disclosure of cost and other relevant information, as illustrated in Table 5, is straightforward financial reporting. If, on the other hand, the accounting is to be so hedged with cost notions that cost is in fact the basis of the reporting, the financial statements should not pretend or even imply that market values affect the reported results; market values should be shown parenthetically or in the notes. To introduce “realized” and “unrealized” at best confuses, at worst misleads.

5

Reporting Investment Income on a Yield or Average Basis

Gains and losses from investment activities as measured by the market value method tend to fluctuate with market prices that are generally beyond the control of the investing corporation. The frequency and magnitude of those fluctuations are considered by many to be major disadvantages of the market value method. Chapter 4 illustrates and discusses various attempts to mitigate the effects of those fluctuations by introducing aspects of the cost method into market value calculations. However, those methods either (1) do not affect the measurement of periodic income but are restricted to various modes of disclosing the gain or loss resulting from the market value method or (2) convert the measurement of gain or loss, and often the measurement of the investment asset as well, from market value to the cost method. The yield or average method, however, is not a cost method, a true market value method, or a combination of the two. According to its supporters, it can be distinguished as a third major basis of accounting for investments in marketable securities.

Yield or Average Method

The second method described by the APB committee on accounting for marketable securities generally produces results that fluctuate less than those of the methods already discussed. The committee describes it as follows:

Recognize gains and losses from changes in market value in income based on long-term yield. Several methods are possible, including (1) using the past performance of the enterprise over a number of years (a ten-year period has been suggested) to determine an average annual rate of yield due to increase in value and (2) using long-term yield from dividends and appreciation combined. Each of the methods requires a valuation account in the balance sheet for changes in market value that are recognized in the balance sheet but not in income. The methods may be used with the limitation that a debit balance valuation account will not be carried forward in the balance sheet. (Appendix, par. 17.)

The mechanics of the method are relatively simple to understand. The investment is maintained at market values of securities held (M_b and M_e). The changes in market values of all securities held during a period (G) are computed, either directly or indirectly, as in the "pure" market value method and are combined with similar amounts of prior periods that have not yet been recognized in income (V_b). A portion (Y) of the cumulative unrecognized gain⁸ calculated by a yield or averaging formula is included in income of the period as investment gain or loss. The remaining balance of cumulative unrecognized gain (V_e) is deducted from the investment in the balance sheet ($V_e = V_b + G - Y$).

The investment asset is thus not shown in the balance sheet at market value, but to deduct the valuation account obviously does not reduce it to acquisition cost. Rather $M_e - V_e$ is an average of market prices over a long period (as opposed to the short-term averages described in chapter 3 to estimate market value). It can be verified only by repeating the operations performed to apply the yield or averaging formula. Similarly, the gain or loss reported is neither a change in market price nor "realized" gain or loss but an

⁸ Most proponents of the method would not carry forward cumulative losses.

average of changes in market prices of the securities in the portfolio over a long period.

Unless that kind of procedure is merely a device for smoothing periodic income, the rationale for it must rest on a belief that a market price averaged over a long period is a better measure of something than either acquisition cost or quoted market price at or near the date of the balance sheet. What is the "something" that is being measured? Two kinds of explanations have been given, one that emphasizes the income statement and one that emphasizes the balance sheet.

A Method of Computing Gains

One line of support for the yield or averaging method emphasizes that portfolio investments are essentially long-term and that short-term market fluctuations are of little or no consequence in the success of portfolio management. Portfolio managers do not intend to sell all of their securities at the current price and probably could not do so even if that were their intent. Rather, long-term appreciation and dividends are the major sources of income, and long-term appreciation occurs gradually. Though long-term appreciation cannot be measured precisely, the reasoning continues, a yield or long-term moving average procedure is the best approximation of the way long-term appreciation actually occurs. Long-term appreciation does not occur as the difference between quoted market prices over a specific short period any more than it occurs at the moment of sale. The success or failure of portfolio management should be measured by the long-term yield through dividends and appreciation rather than by period-to-period fluctuations in market price.

Critics of the method respond that investors do in fact turn over a significant part of their total investments each period and that the decision to hold some securities is as significant to success as the decision to dispose of others. A fact of life is that the values of marketable securities go up and down, and using a long-term yield or average artificially smooths a variable that actually fluctuates. Long-term changes in value of securities do not follow a smooth path over time but follow a fluctuating path over time, and accounting should show it.

That line of discussion is not particularly fruitful because it is too abstract. Each group adheres to its own view of how income is earned. The argument is essentially a difference of opinion about

the usefulness and propriety of smooth vs. fluctuating income, and to date neither side has had notable success in converting the other to its point of view.

A Method of Estimating Realizable Value

In contrast, explanations emphasizing balance sheet notions have been quite specific as to what the "something" is that is being measured. According to the committee on insurance accounting and auditing of the AICPA at the public hearing held by the Accounting Principles Board,

A defensible answer to the dilemma of reporting investment gains and losses should require that it is consistent with the presentation of realizable value on the balance sheet. . . .

The problem is to judge what *will* be realized in the ordinary course of business. . . .⁹

That is, the yield or average method is a method for estimating expected realizable value of investments held, a way to estimate what the securities will bring when sold in the future. The Institute committee has given a plausible conceptual basis for the yield or average method, and a recent exchange in *The Journal of Accountancy* between William H. Beaver of Stanford University and William J. Morris and Bernard A. Coda of North Texas State University presents the two sides if that concept is accepted.

Market Value Is Best Measure of Realizable Value. The headnote to Beaver's first article,¹⁰ which began the exchange, states that "in forming policy for reporting the value of marketable securities, the APB should note the available research that supports the cur-

⁹ "Accounting for Investments in Equity Securities (for Insurance Companies)," Statement of the Majority View of the AICPA Committee on Insurance Accounting and Auditing, in *Proceedings: Public Hearing on Accounting for Equity Securities, Accounting Principles Board, May 25 and 26, 1971*, pp. 261-262.

The chairman of the committee emphasized the same point at the hearings. Testimony of J. T. Arenberg, Jr., *ibid.*, p. 66.

¹⁰ "Reporting Rules for Marketable Equity Securities," *The Journal of Accountancy*, October 1971, pp. 57-61.

rent market value rule and reveals serious deficiencies in the moving average method.” The purpose of the article is to demonstrate that both theory and empirical evidence support current market value as the best measure of realizable value “compared with *any* other measure” and that the moving average method produces a distinctly inferior measure of realizable value compared with market value. Deficiencies in the moving average method stem from its conservative bias due to its lag in capturing the general upward drift in securities prices and, much more seriously, from its dependence on a trend of prices.

To illustrate the theory involved, Beaver appeals to the kind of market behavior implied by a moving average valuation rule. Basically, a moving average implies that prices behave according to some form of trend process. Given a trend, a drop in price will later be offset by a rise, and vice versa. Since abnormal (greater than average) price increases would follow abnormal price decreases, an investor could obtain abnormal returns by the simple strategy of investing in securities that had experienced abnormal price decreases. But,

The logic of the situation tells us that security prices do not behave in this manner, because in general the world does not offer “something for nothing” and the securities market is no exception in this respect. Furthermore . . . there is extensive empirical evidence. . . . (pp. 58-59)

According to Beaver, empirical evidence is available both on the relative success of the kind of trading rule implied by the moving average method and on whether abnormal price decreases are followed by abnormal price increases. “Both classes of evidence contradict the theory that there is any tendency [of future prices] to revert to a trend implied by past prices” (p. 59). Instead, market prices seem to move according to the random-walk theory—

the evidence supports the view that the expected future price is the current market value compounded by the expected normal rate of increase in prices . . . regardless of the past sequence of prices. If prices behaved in this fashion, there would be no “patterns” in price changes and hence no opportunities to earn abnormal profits from naive trading strategies. This theory is popularly known as the random-walk theory of security prices,

and . . . the empirical evidence supports this theory extremely well.¹¹

Since the evidence supports the random-walk theory, “the moving average number . . . is completely irrelevant, because it is an average of past prices which are irrelevant in determining future expected prices” (p. 61). Beaver’s valuation rule is that “the present value of the future expected realizable value of a security will always be equal to its currently observed market price” (p. 60, entire quoted matter is italicized in the original).

Moving Average Is Best Measure of Realizable Value. The headnote of the first article by Morris and Coda¹² is the leading sentence of the final paragraph: “The five-year moving average method offers promise of being better than either the historical cost or current market value methods.” An objective of the authors is to show that a five-year moving average is more consistent than market value with traditional accounting criteria for recognizing increments in asset values, but defending that specific method is clearly less important to them than their arguments against current market value. A major purpose of the article is specifically to rebut Beaver, and the authors specifically challenge Beaver’s conclusion that current market price is the “best measure” of realizable value.

To identify the traditional accounting criteria for recognizing increments in asset values, Morris and Coda quote several sources, including APB Statement No. 4, to show that “. . . the degree of certainty regarding the net cash to be realized is a major consideration. . . .” (p. 49). Actuaries use a similar concept—“credi-

¹¹ *Ibid.*, p. 59. The article contains a bibliography in which Beaver cites the sources of the empirical evidence on which he relies. They include: Cootner, Paul H. (editor) *The Random Character of Stock Market Prices*. Cambridge: MIT Press, 1964; Fama, Eugene. “The Behavior of Stock Market Prices.” *Journal of Business*, (January 1965), pp. 34-105; Fama, Eugene. “Random Walks in Stock Market Prices.” *Financial Analysts Journal*, (September-October 1965), pp. 55-59; Fama, Eugene. “Efficient Capital Markets: A Review of Theory and Empirical Work.” *Journal of Finance*, (May 1970), pp. 383-417; Fama, Eugene and Blume, Marshall. “Filter Rules and Stock Market Trading.” *Journal of Business*, (January 1966), pp. 226-241; Fisher, Lawrence. “Some New Stock Market Indexes.” *Journal of Business*, (January 1966), pp. 191-225.

¹² “Valuation of Equity Securities,” *The Journal of Accountancy*, January 1973, pp. 48-54.

bility”— to express relative certainty of realization of cash for experience ratings. For example, market appreciation that has existed for a long time is given more “credibility”—a higher probability of ultimate realization—than recent appreciation. Thus, by using the length of the period of existence to assign “certainty equivalents” to each segment of market appreciation, a large percent of old and relatively certain appreciation is recognized, but only a small percent of recent and uncertain appreciation is recognized.

According to Morris and Coda, conservative bias does not necessarily make a moving average inferior to market value—

net realizable value of marketable securities held at any point in time is unknown. Assigning a net realizable value involves an attempt to estimate future net cash proceeds.

Current market value may be viewed as one estimator of the present value of future net cash proceeds . . . and moving average as another. One concept frequently used to compare two estimators is the mean square error (MSE) of each estimator. The MSE is the sum of the variance plus the square of the bias . . . The best estimator is defined as the estimator with the smallest MSE. . . .

A biased estimator may still be the best estimator if its variance is small . . . an unbiased estimator with a large variance is inferior to a biased estimator with a small variance. . . . (p. 51)

Given that realizable value of marketable securities is a highly uncertain value, a conservative bias is held to be desirable in an accounting method.

Morris and Coda also question Beaver’s interpretation of the random-walk theory. A source cited by Beaver [Fama] refers to the randomness of securities prices “about their intrinsic values,” and Beaver himself refers to a “secular upward drift in the price series.” Both are consistent with the notion of a long-run trend—

The random-walk theory has a great deal of intuitive appeal and also has empirical support as a short-run theory of price changes in the stock market. . . . Use of the random-walk theory to support the notion that there is no long-run secular trend in the value of a stock does not have the same intuitive appeal. . . .

If market value makes any sense at all it must in some way be related to . . . the underlying factors of which it is a function. . . . If prices over time are correlated with the economic well-being of our society and an individual company, then they must be correlated with each other. Again, we point to . . . “secular upward drift” and . . . “unknown intrinsic value.” (pp. 52-53)

Morris and Coda note that major market declines over the prior ten years were followed by major price appreciations. "It does seem unrealistic to expect this type of appreciation and yet this is exactly what has happened repeatedly" (p. 53). They conclude that the current market value method would be likely to have a high mean square error (MSE) if the market alternates between major declines and major appreciations. Therefore, the method would fail both as a good estimator of net realizable value and as an acceptable method under the traditional accounting criterion of reasonable certainty of realization in cash. A moving average would have been a better predictor in recent years (pp. 53-54).

The Minimum Mean Square Error Test. Beaver's second article is a direct response to Morris and Coda.¹³ Beaver recapitulates the arguments and conclusions of his earlier article, accepts Morris and Coda's suggestion to compare the mean square error of the results of the market value rule and the five-year moving average rule, and "clarifies" several "misconceptions of the random-walk hypothesis" in Morris and Coda's article. Among some eight "misconceptions" that Beaver "clarifies" are (a) the misconception that references in the literature on random-walks to "intrinsic value" and "upward secular drift" imply the sort of negative correlation between securities prices required to posit the existence of a trend that could usefully predict future prices and (b) the misconception that the random-walk theory implies that stock prices are capricious in the short run. The evidence is that stock price cycles and trends do not exist except in after-the-fact interpretations and that market prices react quickly and without bias to "new" or "unexpected" information, which explains why the current market rule works so well as a measure of net realizable value.

The major new conclusions of the article relate to the mean square error test (p. 60)—

It can be easily demonstrated that the measure that minimizes the expected mean square error is the expected net realizable value.⁶ However, . . . in a random-walk world the current market value is the expected net realizable value. Therefore, the current market value rule is superior to the five-year moving average (or any moving average for that matter), even according to the criterion suggested by Morris and Coda.

¹³ "Accounting for Marketable Equity Securities," *The Journal of Accountancy*, December 1973, pp. 58-64.

To demonstrate this empirically, I compared the performance of the current market value rule and a five-year moving average rule using the criterion of minimum mean square error. The series used is a stock price index which includes all New York Stock Exchange firms and is computed on a monthly basis from January 1926 through June 1970.* For each month, the value of the index 12 months ahead is forecasted. This can be viewed as the actual realizable value of holding the "market" portfolio (that is a portfolio consisting of all stocks on the New York Stock Exchange) for the next 12 months and then selling it at the end of the 12-month period. The first forecast was made for January 1932. The current market value rule used the value of the index for January 1931, while the five-year moving average rule used an average of the index for the 60-month period from February 1926 through January 1931, inclusive. A similar forecast was made for February 1932, and for each successive month ending with the final forecast, as of June 1969, for June 1970. The result is 462 forecasts of net realizable value. The average squared error was computed for the overall period and for successive five-year subperiods. . . . The superiority of the current market value rule is readily apparent. The average square error for the moving average method is 28.6 percent, which is almost three times as large as that of the current market value* [9.8 percent]. Moreover, in the 462 monthly forecasts, the current market value has a lower error in 389 of the months in contrast to only 73 months for the moving average. [A table in the article shows the overall results and the results for each of the five-year subperiods as well as total results for a one-year, a three-year, and a 10-year moving average.]

*footnote omitted

Beaver found only one five-year subperiod (1936-1940) in which the performance of the five-year moving average exceeded that of the current market value. He attributes the result to a substantial decline in the index during 1931-1935 followed by a "reversal" during 1936-1941:

We must be careful in interpreting this finding. Does this evidence contradict the random-walk hypotheses? Not at all. This reversal occurred after the fact. Even a sequence where the expected correlation is zero before the fact will occasionally produce a sequence that after the fact contains correlation. The important point is that reversals are not sufficiently frequent to overturn the overall superiority of the current market value rule, nor are such reversals predictable in advance. In other words, on any given financial statement date, the accountant has no basis to expect that a "reversal" will occur. (p. 61)

Beaver stresses the generality of his results because they merely confirm other research on the behavior of security prices and could have been predicted. Moreover, moving averages of more than five years will perform worse and moving averages of less than five years will perform better than a five-year moving average, but no moving average will outperform current market value (p. 61).

Morris and Coda's response to Beaver's second article is a letter in the same issue of *The Journal of Accountancy* (December 1973, pp. 36-38). They reaffirm their earlier article, despite Beaver's findings, and continue to rely on certain accepted accounting notions. They distinguish between net realizable value in accounting (Accounting NRV) and net realizable value in financial decisions (Finance NRV) and hold that the difference is not only important but often overlooked. Net realizable value of an asset is the net cash proceeds in the future from holding the asset. The discount rate in determining Accounting NRV is the rate that equates purchase price with net cash proceeds, "the rate actually earned," which remains unchanged while the asset is held. The current rate of interest, not the rate that equates net proceeds with purchase price, is the discount rate in Finance NRV.

Accounting NRV is consistent with a realization, cost allocation, matching framework wherein the statement of financial position and income statement interlock. Realization is based on a reasonable certainty criterion, which is the underlying requirement of the contemporary matching framework. Finance NRV is a complete departure from this framework in favor of a current exit value.

By extending the definition of NRV in the existing framework to the problem of valuing equity securities, we do not intend to imply that the current framework is unchallengeable. We do believe, however, that a piecemeal departure relating only to equity securities is ill-advised. An alternative framework should be evaluated against the current framework on all counts.

Morris and Coda disparage Beaver's evidence in two ways. First, they are still skeptical about the random-walk theory—

We confess a bias in our belief that long-run trends (prevailing tendencies or inclinations) in stock values are correlated with the economic conditions of a firm and the nation. We reiterate that secular upward drift and random variations around intrinsic values are at least consistent with this belief, if they do not in fact support it.

We are not persuaded that random-walk studies establish the efficient market hypothesis. Statistics do not establish causality. Stock prices could vary randomly about their intrinsic values whether information, rational or irrational, is efficiently processed by the market or not. We do not expect market prices to have memories, but there is some reason to believe that participants in a market who observe these prices and then try to outguess one another do have memories. . . .

Second, they fault Beaver's test using mean square error—

Empirical evidence to establish the superiority of some accounting measure should be based on Accounting NRV, not Finance NRV. The subject matter at issue is long-term investments in equity securities. Therefore, empirical data to determine the best measure of NRV for long-term investments should be long-term holdings in order to obtain valid results. Data that projects 12 months into the future, irrespective of how the data is grouped, is inappropriate to test valuation methods for long-term investments.

They claim that an unpublished empirical study¹⁴ using an accounting definition of net realizable value and a ten-year holding period finds the five-year moving average method “clearly superior to the current market value method in estimating Accounting NRV.”

Some Observations on Yield and Realizable Value

Realizable value may or may not be the proper basis for recording investments in marketable securities. Current market value can be defended as relevant information in its own right rather than as a measure of expected future realizable value. Perhaps the yield or average method can also be defended on other grounds. However, if realizable value is accepted as the proper accounting basis, the issue of whether market value, moving average or some other yield formula, or some other method is the “best measure” of realizable value is an empirical question, and the empirical evidence cannot be ignored.

Beaver's argument is therefore a serious challenge to the yield or averaging method of accounting for investments in marketable equity securities because that method has been most specifically

¹⁴ William J. Morris and Benny R. Copeland, “Valuation of Marketable Equity Securities—An Empirical Investigation.”

defended as an attempt to estimate realizable values of securities held. Beaver does not say that securities prices do not move up and down. He asserts something more important; that those movements up and down are random rather than in a pattern and are not describable (or predictable) by a function or rule based on past prices. Consequently, to assume that the movement of stock prices in the future will respond to an average of prices actually quoted in the past is not supported in logic or by the evidence. He contends that prices move up and down in response to changes in expectations of future realization, not to past price movements. If his contentions are true, the yield or averaging method is not a valid way to estimate realizable value. Stripped of that reason for its existence, it may be nothing more than a way to artificially smooth the effects of market volatility.¹⁵

Morris and Coda have so far presented little empirical evidence to challenge that referred to by Beaver. They refer to unpublished work that supports their view, but their published work primarily proposes a competing theory to Beaver's and challenges Beaver's interpretation of the meaning of his own evidence. Their view that prediction should be tested over a holding period other than twelve months may have merit, but the evidence is not yet in.

Morris and Coda are on unsound ground in trying to limit the acceptable accounting methods to those that are "consistent with a realization, cost allocation, matching framework." That limit begs the issue because, as earlier chapters of this study show, all true market value methods are incompatible with that framework if "the statement of financial position and income statement interlock." Since the yield or average method is not a cost method (it spreads the effects of market value changes but involves no "realized"- "un-realized" distinction), no reason exists to inhibit it with the strictures of the cost method. The issue in accounting for marketable

¹⁵ The random-walk argument used by Beaver is part of the theory known as the efficient capital markets hypothesis. Nontechnical summaries of the hypothesis and the empirical evidence on it can be found in James H. Lorie and Mary T. Hamilton, *The Stock Market: Theories and Evidence*, (Homewood, Ill.: Richard D. Irwin, 1973), pp. 70-110; and Thomas R. Dyckman, David H. Downes, and Robert P. Magee, *Efficient Capital Markets and Accounting: A Critical Analysis*, (Englewood Cliffs, N.J.: Prentice-Hall, 1975).

securities is precisely whether the strictures of the cost method should be abandoned to make the results more useful to those who rely on financial statements.

Clearly, people may disagree about the merits of market value, yield or average, or other methods to measure investments in marketable securities. But mere disagreement is no longer enough because the issue has now moved from the range of personal opinion to empirical evidence and its meaning. As long as the problem is defined as one of estimating realizable value of securities held, empirical evidence speaks louder than opinion, no matter how authoritative.

We again caution, however, that the problems may validly be defined in terms other than those of estimating net realizable value. In this issue, as in most other accounting issues, conceptual matters must be resolved before empirical research can provide lasting answers.

Concluding Observations

Despite the interest in, and apparent wide support for, a market value method for accounting for investments in marketable equity securities when the Accounting Principles Board was weighing various market value variations in 1971, market value methods are no more widely used today than they were then. Although FASB Statement No. 12 may have far-reaching implications, it was intended to answer the narrow question of whether temporary reductions in market value of marketable equity securities should be recognized as losses in measuring net income.

Some of the enthusiasm for market value cooled noticeably when it became known that the Accounting Principles Board was contemplating an exposure draft specifying adoption of essentially the "pure" market value method.¹⁶ Many companies preferred the status quo to that.

¹⁶ The APB's experience with the proposed exposure draft is described by Charles T. Horngren, "The Marketing of Accounting Principles," *Institutional Issues in Public Accounting Papers and Responses from Accounting Colloquium III*, edited by Robert R. Sterling (Lawrence, Kansas: Scholars' Book Co., 1974) pp. 291-303, especially pp. 294-297. Reprinted in *The Journal of Accountancy*, October 1973, pp. 61-66.

The behavior of stock prices in recent years may have dampened enthusiasm for using market values to account for marketable equity securities. Although one strength of the market value method is that it is unbiased—it shows profits and losses at the time the market price changes and not when management chooses to sell—the psychology of falling prices differs from the psychology of rising prices. When stock prices actually fell significantly in the past few years, many managements that favored some variations of the market value method in 1971 may well have breathed sighs of relief that it had not been adopted. FASB Statement No. 12 will, of course, govern accounting for future market declines.

We think it unfortunate that efforts to adopt market values for marketable equity securities have been allowed to lapse. The issue has not decreased in importance. If anything, accountants' recent difficulties in attempting to apply the cost method and its companion, the lower of cost and market, should have stimulated interest in finding something better than existing practice.

Recent experience indicates that the major advantage usually claimed for the cost method—its "objectivity" or verifiability of results—tends to evaporate when stock prices fall. The authoritative literature on write-downs of costs of securities is vague at best. For example:

[if] market value is less than cost by a substantial amount and it is evident that the decline in market value is not due to a mere temporary condition, the amount to be included as a current asset should not exceed the market value. (ARB No. 43, ch. 3A, par. 9)

A loss in value of an investment which is other than a temporary decline should be recognized the same as a loss in value of other long-term assets. . . . However, a decline in the quoted market price below the carrying amount or the existence of operating losses is not necessarily indicative of a loss in value that is other than temporary. . . . (APB Opinion No. 18, par.19h)

Noncurrent assets whose market prices have declined are generally retained in accounting records at their recorded amounts until they are disposed of or have become worthless.

Discussion. In unusual circumstances a reduction in the market price of securities classified as noncurrent assets may provide persuasive evidence of an inability to recover cost although the securities have not become worthless. The amount at which those securities are carried is sometimes reduced and a loss recognized prior to disposition of the securities. (APB Statement No. 4, par. 183, M-5E.)

Since accountants sharply disagreed whether any recent decreases in prices of marketable securities require write-downs of securities (shown as either current assets or noncurrent assets) under existing literature, the staff of the AICPA auditing standards division issued an interpretation to provide guidance.¹⁷

A side effect, perhaps unintentional, of the interpretation was that it made abundantly clear just how subjective and unverifiable are notions such as “declines due to mere temporary conditions” and “persuasive evidence of an inability to recover cost.” Among the things the interpretation suggested that an auditor do in accumulating “evidential matter” were to “. . . ascertain management’s investment objectives to determine whether the securities are properly classified in the financial statements” and “. . . consider the ability to ultimately recover the carrying amount of the investments.” The interpretation tended toward conservative advice, but the procedures it described are not objective and the results are not verifiable. It asked the auditor to predict the future course of securities prices. Thus, it turns out that the market value method is not only less biased than the cost method but is also more objective with more verifiable results.

FASB Statement No. 12 solves the problem for temporary market value declines but does not affect the cost method if market values exceed costs or market value declines are “other than temporary.”

Objections are sometimes raised to considering the market value method for marketable equity securities on the grounds that it raises questions that pervade accounting. In other words, market value should not be considered for investments in stock without also considering market value for inventories, property, plant, and equipment. However, investments in stock are an interest in someone else’s operations and to the investor are fundamentally different from its own inventories, property, plant, and equipment. Investments in stock are a logical place to begin to consider the market value method, especially since it is already used by enterprises that continue to account for other assets at cost.

It is suggested, therefore, that now is an opportune time to revive consideration of the market value methods as an alternative to the cost method to account for investments in marketable equity securities.

¹⁷ “Evidential Matter for the Carrying Amount of Marketable Securities,” *The Journal of Accountancy*, April 1975, pp. 69-70.

**Accounting for Investments in
Equity Securities Other Than
by the Equity Method**

March 1971

Prepared by the
Committee on Accounting for Marketable Securities
of the
Accounting Principles Board

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Accounting for Investments in Equity Securities Other Than by the Equity Method

Current APB Study

1. The Accounting Principles Board of the American Institute of Certified Public Accountants is studying accounting for investments in equity securities as part of its program to determine appropriate practice and to narrow the areas of difference and inconsistency in practice. The study covers both business enterprises and not-for-profit organizations. The Board committee on accounting for marketable securities will hold an open hearing on the subject of accounting for equity securities on May 25 and 26, 1971. This memorandum is intended to familiarize individuals and groups who may wish to attend the hearing with the issues before the Board.

2. *Methods of Accounting.* The Board is reexamining present practice and considering a proposal that investments in equity securities be measured at current market value in balance sheets. The Board is also considering alternative methods of accounting for changes in market value if the securities are measured at current market value. In brief, the accounting methods being studied are:

- a. *The Present General Practice.* Investments in equity securities are measured at historical cost or at the lower of historical cost and market value in balance sheets. Dividends accrued, gains and losses from sales of investments, and losses from write-downs of investments are reported as investment income of a period.
- b. *The Proposed General Practice.* Investments in equity securities are measured at current market value in balance sheets. Dividends accrued are included in income. Gains and losses may be accounted for by one of the following methods:
 - (1) Realized and unrealized gains and losses are included in income as they occur.
 - (2) Gains and losses are included in income by a long-term yield method.
 - (3) Realized gains and losses are included in income; unrealized gains and losses are charged or credited to a special balance sheet account. One proposal is to include the special account in stockholders' equity. Another proposal is to exclude the special account from stockholders' equity.
 - (4) Realized and unrealized gains and losses are reported in a separate statement or charged and credited directly to a stockholders' equity account.

Deferred income taxes would be provided for unrealized gains and losses.

3. The Board will, of course, consider other methods that are brought to its attention.

4. The Board's deliberations on accounting for equity securities include the questions whether special circumstances require special methods and, if so, the methods that apply in various circumstances.

5. *Types of Securities.* The present study of the Board is limited to equity securities—corporate stocks and rights to acquire corporate stocks, such as warrants. The study excludes investments in securities with fixed maturities, including convertible debt. The study also excludes investments in common stocks that are accounted for by the equity method. The Board is considering a proposal to apply the equity method to investments in common stocks if an investor's holdings of the outstanding voting stock of an issuing corporation enables the investor to exercise significant influence over the investee's financial and operating policy decisions. The proposal considers that in the absence of contrary evidence the ability to exercise significant control is present for holdings of 20 percent or more of the voting stock and is absent for holdings of less than 20 percent.

6. *Types of Investors.* Commercial or industrial business enterprises frequently invest temporarily idle funds in equity securities. They also invest in equity securities on a relatively permanent basis. Present practices in accounting for investments by commercial or industrial enterprises are described as "the general practice." Special methods that differ from the general practice have become accepted in some industries and for some not-for-profit organizations, primarily those in which investment activity is a significant element of operations. The investment policy of enterprises that use special methods, their financial reporting, or both, are typically subject to some type of regulatory control. Included are—

- a. Life insurance companies
- b. Fire and casualty insurance companies
- c. Securities brokers and dealers
- d. Investment companies
- e. Common trust funds
- f. Pension funds
- g. Endowment and other funds of not-for-profit organizations

Accounting practices of those investors that differ from the general practice are described briefly in the Addendum (pars. 30-41).

The Present General Practice

7. Accounting for investments in equity securities encompasses measuring the assets and measuring and reporting the related income. In-

come from equity securities normally consists of two elements, dividends and gains and losses from changes in the market value of securities. Accordingly, practices are described for (a) classifying and measuring the assets, (b) reporting income from dividends, and (c) measuring and reporting the gains and losses.

8. *Classifying and Measuring Equity Securities in the Balance Sheet.* Investments in equity securities classified as current assets are now measured differently from those classified as noncurrent assets. Chapter 3A, paragraph 4, of Accounting Research Bulletin No. 43 states:

the term *current assets* . . . comprehends in general such resources as . . . (f) marketable securities representing the investment of cash available for current operations. . . .

Investments in equity securities classified as current assets are stated at historical cost or at market value if market value is less than cost by a substantial amount and evidence exists that the decline in market value is not due to a mere temporary condition. Disclosing the market value of equity securities stated at cost is considered good practice.

9. Other investments in equity securities are classified as noncurrent assets and are measured at historical cost. The investments may be written down to less than historical cost if a reduction in the market price or other circumstances provides persuasive evidence of an inability to recover cost, even though the investments have not become worthless. Investments that become worthless are written off.

10. *Accounting for Dividends.* Investors in equity securities recognize dividends receivable in cash or other property as a part of periodic net income. No significant changes have been proposed and, therefore, no further attention is given to that aspect of accounting for equity securities.

11. *Accounting for Gains and Losses.* Gains and losses from changes in the market value of equity securities are normally recognized when the securities are sold. The major exception is that losses from the write-down of securities from cost to a lower amount (usually market value) are recognized when the loss becomes evident. Both gains and losses from sales of securities and losses from writing down securities are reported as a part of net income of the period of sale or write-down, sometimes as extraordinary items.

Arguments For and Against the Present General Practice

12. *Basis of Practice.* The present general practice of accounting for investments in equity securities is based on present broad principles of asset and liability valuation and income measurement. Under those principles, assets are initially measured at historical cost, usually measured by money prices arising in exchanges. Increases in assets are

generally ignored until recorded assets are exchanged for cash or cash equivalents. Factors cited in support of the present general practice include the traditional view that financial statements are reports on management's stewardship of the resources of an enterprise, the assumption in financial accounting that the enterprise is a going concern, and the convention that net income is realized revenue less related costs. For example, the realization rule provides that an asset should not be carried at more than cost to avoid reporting "unrealized" income. Measuring periodic income by a process of matching effort (cost) with accomplishment (revenue) is emphasized. Furthermore achieving a proper measure of net income is considered to be of overriding importance, and amounts carried forward to future periods in the balance sheet are not measures of value but are primarily residual amounts from the process of determining income.

13. *Arguments For the Present General Practice.* Arguments for the present general practice of accounting for investments in equity securities are, in part at least, arguments for traditional realization and matching conventions and for the historical-cost basis. Among the arguments are that the present general practice—

- a. Shows dollars invested. The amount of money disbursed to obtain an asset is the amount for which management is accountable.
- b. Avoids subjective valuations. Assets should be stated at amounts determined in market exchanges in which the enterprise has participated.
- c. States assets at verifiable amounts. Assets should be stated at amounts that can readily be corroborated by independent measurers.
- d. Provides conservative measurements. Assets are measured in a context of significant uncertainties and possible errors in measurement should be in the direction of understatement rather than overstatement of net income and net assets.
- e. Reports only gains that have been realized in cash or its equivalent. Prices fall as well as rise and a present market price may change before the asset is sold.
- f. Matches effort (cost) with accomplishment (revenue). Recognizing gains and losses at the time of sale properly matches costs with related revenue.
- g. Reports gains when funds are available for dividends. Net income should be an index of funds currently available for dividends.

14. *Arguments Against the Present General Practice.* Critics of the present general practice argue that current value is usually the most important fact about investments in equity securities. They therefore generally reject both historical cost as the basis of measuring investments in equity securities and the traditional realization rule as the basis of

recognizing gains and losses from those investments. They contend that the present general practice:

- a. Fails to account for current value. Disclosing market values in financial statements is not a satisfactory substitute for accounting for those values.
- b. Delays reporting changes in realizable value. Changes during a period in the realizable value of investments in equity securities are relevant to investor decisions.
- c. Distorts return on investment calculations. The present general practice results in calculating return on investment based on irrelevant past prices.
- d. Permits manipulation of net income by timing sales of securities. Management can determine when gains and losses are recognized by determining when securities are sold.
- e. May adversely influence management's investment decisions. Management may be more concerned about the amount to be reported as gain or loss than about the economic merits of disposing of a particular security.
- f. Distorts profit trends. Gains are not reported when prices rise and losses are not reported when prices fall, yet every investor knows that he is better off when prices of the stocks he holds rise and worse off when the prices fall.
- g. May report gains in periods in which losses occur or vice versa. Gains and losses occur when the realizable value of investments change, not when the investments are sold.

Alternatives to the Present General Practice

15. *Market Value.* Measuring investments in equity securities at market value has been proposed as an alternative to measuring them at historical cost. Some industries already report those investments at market value (see the Addendum). Several methods of reporting gains and losses from changes in market value have been proposed, some of which are followed in industries that measure equity investments at market value.

16. *Market Value in the Balance Sheet.* The market value of an investment is its current selling price or fair value, that is, the amount that could be obtained in a current sale. The consensus among advocates of the market value basis of accounting for equity securities is that actively traded securities should be measured at quoted market prices or at an average of the quoted market prices for a number of days, and restricted securities (securities that cannot be offered to the public without first being registered) and securities not actively traded should be measured at "fair value." Fair value is determined by estimating the price that could be obtained on sale of the securities. Deferred income taxes on

unrealized gains are accounted for if investments in equity securities are measured at current market value.

17. *Reporting Changes in Market Value.* Four methods of reporting changes in market value have been proposed—

- a. Recognize changes in market value as gains and losses in income when the changes occur. Realized and unrealized gains and losses for a period may be combined or reported separately.
- b. Recognize gains and losses from changes in market value in income based on long-term yield. Several methods are possible, including (1) using the past performance of the enterprise over a number of years (a ten-year period has been suggested) to determine an average annual rate of yield due to increase in value and (2) using long-term yield from dividends and appreciation combined. Each of the methods requires a valuation account in the balance sheet for changes in market value that are recognized in the balance sheet but not in income. The methods may be used with the limitation that a debit balance valuation account will not be carried forward in the balance sheet.
- c. Recognize realized gains and losses from changes in market value in income and report unrealized gains and losses in a special balance sheet account. One proposal is to include the special account in stockholders' equity. Another proposal is to exclude the special account from stockholders' equity.
- d. Report realized and unrealized gains and losses from market value changes in a statement separate from the income statement or as direct charges and credits to a stockholders' equity account.

Arguments For and Against Market Value Methods

18. *Importance of Market Value.* Advocates of the market value basis hold that the market value of an equity security is the attribute of the asset that is of most current significance to the enterprise and to those interested in the enterprise. Stating equity securities at market value instead of historical cost gives stockholders a better indication of the current status and prospects of the enterprise. Stockholders are better able to evaluate managerial decisions regarding investments, creditors are better able to evaluate the solvency of the enterprise, and management is better able to evaluate the results of holding securities as well as the results of selling them.

19. *Market Value in the Balance Sheet.* Advocates of the practice of measuring equity securities at market value in the balance sheet contend that it:

- a. Presents objective information on the amount of cash that may be received on sale of the securities.

- b. Eliminates the anomaly of measuring identical and interchangeable securities at different amounts merely because they were acquired at different prices.
- c. Provides information for making calculations of return on investment that are comparable to calculations of return on alternative investment opportunities.

20. Opponents of the practice of measuring equity securities at market value in the balance sheet contend that it accounts for the assets on the basis of subjective valuations that are not verifiable, especially restricted securities or securities that are not actively traded. They also contend that it accounts for equity securities in a manner that is inconsistent with accounting for other nonmonetary assets.

21. *Immediate Recognition in Income of Gains and Losses From Changes in Market Value.* Advocates of immediate recognition in income of changes in market value of equity securities contend that the method follows logically from measuring those securities at market value in the balance sheet. Underlying this position is the idea that net income for a period is the change in net assets during the period from events other than transactions between the enterprise and its owners. Additional arguments advanced for the method are that it—

- a. Provides information on the results of management decisions to hold as well as to sell equity securities.
- b. Eliminates the opportunity for management to manipulate reported income by timing sales of securities.
- c. Provides information for making improved calculations of return on investment.
- d. Reports all income from equity securities in the same manner and in a timely fashion.
- e. Reports all gains and losses on investments in income as required by APB Opinion 9.
- f. Avoids anomalous valuation accounts in the balance sheet.

22. Opponents of this method believe that the effects of changes in market value should be excluded from income or that their impact on income should be moderated. They contend that immediate recognition in income of gains and losses from changes in market value—

- a. Distorts periodic net income by recognizing erratic short-term market fluctuations.
- b. Recognizes gains in periodic net income that may never be realized.

23. *Long-Term Yield Methods.* Advocates of long-term yield methods of reporting investment income generally agree that both realized and

unrealized gains and losses should be reported in income. They contend that the methods—

- a. Most realistically present the total investment yield from an equity security over an extended period of time.
- b. Result in avoiding distortion of periodic net income by short-term market fluctuations.
- c. Allow management to make investment decisions without having to consider their short-term effect on reported net income.
- d. Average out cyclical fluctuations and reflect in periodic income the long-term investment performance of the reporting enterprise.

24. Opponents of long-term yield methods contend that the methods—

- a. Tend to normalize income that by nature fluctuates.
- b. Fail to reflect realized and unrealized gains and losses in income as they occur.
- c. Require anomalous balance sheet valuation accounts that leave the investments stated neither at market nor at cost but at an undescribable amount in between.

25. *Recognizing Realized Gains and Losses in Income and Excluding Unrealized Gains and Losses.* The only difference between the present general practice and recognizing realized gains and losses in income and excluding unrealized gains and losses is that market value is formally recognized in the balance sheet by this proposed method. Advocates of this method support the balance sheet treatment with the arguments for market value in the balance sheet. They support the income statement treatment with the arguments for the present general practice.

26. Many of the arguments against this method are also the same as those advanced against the present general practice. In addition, opponents contend that the method—

- a. Reports income on the basis of an irrelevant distinction between realized and unrealized gains and losses.
- b. Reports unrealized changes in market value in the balance sheet but excludes them from income.
- c. Requires anomalous balance sheet valuation accounts or direct charges and credits to stockholders' equity.
- d. Reports as income realized gains and losses previously included in stockholders' equity as unrealized gains and losses.

27. *Excluding Both Realized and Unrealized Gains and Losses From Income.* Advocates of excluding from income both realized and unrealized gains and losses on investments in equity securities generally contend that the characteristics of these gains and losses are so different from income derived from operations (including dividends) that they

should not be combined with operating results in a company's income statement. They should be presented separately so that profits and comparable profitability can be readily analyzed.

28. Opponents of the method contend that it excludes part of the results of operations from net income and violates the reporting requirements of APB Opinion 9. They contend that gains and losses from changes in the market value of equity investments are frequently a significant element of the results of operations and that reporting realized and unrealized gains and losses as separate items in the income statement provides investors adequate information.

Summary of the Major Questions

29. The major questions concerning accounting for investments in equity securities which the Accounting Principles Board is considering are—

1. Is a market value or fair value basis of accounting for equity investments for general practice desirable and feasible?
2. If general practice shifts to a market value basis, how should changes in market value be reported in determining net income?
3. Should all companies follow a single general practice or do differences in circumstances justify special practices for special circumstances?

Addendum Special Methods Used by Specific Industries

30. Insurance companies, securities brokers and dealers, investment companies, common trust funds, pension funds, and endowment funds use special methods based on market value to account for investments in equity securities.

Life Insurance Companies

31. Life insurance companies measure investments in common stocks and preferred stocks that are "not in good standing," as determined by the National Association of Insurance Commissioners (NAIC), at market value in financial statements prepared on a regulatory basis. Common stocks are reported at values published by the NAIC which are generally market quotations but include dividends payable on stocks quoted ex-dividend on the valuation date. Preferred stocks "in good standing," as determined by the NAIC, are reported at cost.

32. Regulatory authorities require life insurance companies to report realized and unrealized gains and losses on investments in equity securities as direct charges and credits to a stockholders' equity account (method *d*, paragraph 17). No deferred income taxes are provided on the unrealized gains and losses. Life insurance companies also charge the stockholders' equity account on a formula basis to create a mandatory security valuation reserve (MSVR), treated for regulatory purposes as a liability.

33. Financial statements prepared on a regulatory basis are primarily designed to show whether resources are adequate to meet obligations to policyholders. Although life insurance companies report on a regulatory basis in annual reports to stockholders, that basis is not generally accepted for general-purpose financial statements. The difference between statements prepared on a regulatory basis and statements prepared in conformity with generally accepted accounting principles may be disclosed. Life insurance companies that are subsidiaries of companies which are not insurance companies generally use the present general practice to account for equity investments for inclusion in consolidated statements.

Fire and Casualty Insurance Companies

34. Fire and casualty insurance companies measure all investments in equity securities in their balance sheets at market values published by the NAIC. Those companies that are subsidiaries of parent companies which are not insurance companies generally use the present general practice to account for equity investments for inclusion in consolidated statements.

35. Statements of fire and casualty insurance companies prepared on a regulatory basis report realized gains and losses on investments in equity securities in income and report unrealized gains and losses as direct charges and credits to a stockholders' equity account (method *c*, paragraph 17). No deferred income taxes are provided on the unrealized gains and losses. In present reports to stockholders gains and losses are reported by one of the following methods: (1) realized and unrealized gains and losses are charged or credited directly to stockholders' equity; (2) realized gains and losses are included in income and unrealized gains and losses are charged or credited directly to stockholders' equity; (3) realized and unrealized gains and losses are reported in a separate statement. The AICPA Audit Guide for fire and casualty insurance companies recommends that those companies combine realized and unrealized gains and losses on investments and report them in a supplementary statement (a version of method *d*, paragraph 17) for financial reporting purposes and that they provide deferred income taxes for unrealized gains and losses.

Securities Brokers and Dealers

36. The AICPA Committee on Stock Brokerage Accounting and Auditing and the Accounting Principles Board in consultation with the Securities and Exchange Commission developed tentative guides for securities brokers and dealers to follow in accounting for investments in equity securities. The guides provide that companies in the industry should measure marketable securities at current market value and securities not readily marketable at fair value if objective measures of value are available. They also provide that these companies should report realized and unrealized gains and losses in income as the market values change (method *a*, paragraph 17).

Investment Companies

37. Open-end investment companies measure investments in equity securities in the balance sheet at current market price or at fair value as determined by management and disclose historical cost parenthetically. Closed-end investment companies may, and sometimes do, follow the same practice. Both open-end and closed-end investment companies exclude realized and unrealized gains and losses from income and report them in a separate statement of changes in net assets (method *d*, paragraph 17).

Common Trust Funds

38. Common trust funds periodically determine the value of a unit of interest in the funds. Investments in equity securities are measured at market value for the determinations.

Pension Funds

39. Pension funds use several market value methods to recognize unrealized appreciation on equity investments in actuarial cost determinations including long-term yield methods (method *b*, paragraph 17), though equity investments are generally carried at historical cost in the financial statements of the funds.

Endowment Funds

40. Endowment funds generally attribute realized gains and losses from sales of investments in equity securities to principal. Some unrestricted endowment funds recognized realized and unrealized gains and losses using a long-term yield method (method *b*, paragraph 17).

41. Endowment funds of some organizations are pooled. The value of a unit of interest in a pooled endowment fund is determined periodically. Investments in equity securities are measured at market value for the determinations.

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