Accounting Historians Journal

Volume 12
Issue 2 *Fall 1985*

Article 4

1985

Role of stock dividends in defining income, developing capital market research and exploring the economic consequences of accounting policy decisions

James Joseph Tucker

Follow this and additional works at: https://egrove.olemiss.edu/aah_journal

Part of the Accounting Commons, and the Taxation Commons

Recommended Citation

Tucker, James Joseph (1985) "Role of stock dividends in defining income, developing capital market research and exploring the economic consequences of accounting policy decisions," *Accounting Historians Journal*: Vol. 12 : Iss. 2 , Article 4.
Available at: https://egrove.olemiss.edu/aah_journal/vol12/iss2/4

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Accounting Historians Journal by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

The Accounting Historians Journal
Vol. 12, No. 2
Fall 1985

James J. Tucker, III
DREXEL UNIVERSITY

THE ROLE OF STOCK DIVIDENDS IN DEFINING INCOME, DEVELOPING CAPITAL MARKET RESEARCH AND EXPLORING THE ECONOMIC CONSEQUENCES OF ACCOUNTING POLICY DECISIONS

Abstract: Allegations that stock dividends serve as a vehicle for deceptive financing, evasion of taxes, misleading financial reporting, and stock market manipulation resulted in legislation that prohibited their use in the United States in the latter part of the 19th century. In the 20th century, efforts of the Supreme Court to determine the economic substance and taxability of stock dividends catalyzed a pioneering effort by the Court to define income within the 16th Amendment. As early as 1930 market reactions to stock dividends were investigated; this may have been one of the earliest forms of capital market research. This paper examines the effects of stock dividends on the development of accounting.

Current accounting standards require all pro rata free stock distributions of less than 20-25% of outstanding shares to be characterized as stock dividends and a transfer of retained earnings to the paid-in capital accounts.[1] The amount of the transfer (capitalization) should be the market value of shares issued, but legal requirements (usually par or stated value) represent the minimum amount to be capitalized. Stock distributions in excess of 20-25% should be characterized as stock split-ups (splits), with no transfer of retained earnings to paid-in capital accounts. However, in cases where legal regulations require capitalization of retained earnings for distributions in excess of 20-25%, the standard recommends only the legal minimum be capitalized (usually par or stated value) and that the distribution be characterized as a "split-up effected in the form of a dividend".[2]

English Law

Stock dividends have been a controversial issue for over 100 years though they date back to at least 1690, when the Hudson Bay

The author gratefully acknowledges the useful comments of Stephen Zeff on an earlier version of this paper, as well as his assistance in obtaining the letters of George O. May.

Company declared "that the stock should be trebled — each interestent shall (according to his stock) have his credit trebled in the company's books. . . ."[3]

Since England was first to experiment extensively with the corporate form of organization, it was first to grapple with the phenomenon of stock dividends. The economic substance issue was initially debated in the English courts in litigation concerning life-tenant and remainderman. The following is a typical scenario of such a dispute: A man dies, leaving an estate to a trustee who is to pay to the widow (life-tenant) all earnings from the estate for the duration of the widow's life. Upon the death of the widow the estate is to pass to another heir (remainderman). Only the income from the estate is to be paid to the widow, the "corpus" or capital of the property is to be preserved for the subsequent heir. The question arose as to whether a stock dividend received by the estate was income derived from the assets of the estate, or merely a splitting of the "corpus".

Prior to 1800, English Court decisions were often conflicting. However, early in the nineteenth century, the Court of Chancery and the House of Lords determined that stock dividends were not income to the life-tenant but an accretion of capital.[4] Although the English courts finally agreed on this issue, the same could not be said for their American counterparts.

American Law

Considerable securities fraud is associated with the early American corporate experience, especially in the railroad industry.[5] George Soulê's textbook, *New Science and Practice of Accounts,* originally published in 1881, describes events and practices that were common at the turn of the century. In his 1906 edition, he defines the following terms:

> CLANDESTINE STOCK, is first, a new edition of stock issued without public notice and placed on the market to raise money to cover losses or expenses of which the public have no knowledge.
>
> Note. Clandestine Stock has also been issued under the following circumstances:
>
> The market value of stock is very high, and the company issues and distributes pro rata, at par, to the stockholders of the company, a certain amount of new stock. This new stock is placed on the market, and the full

ds in defining income, developing capital market research and exploring the economic consequences o

> market value of the original stock is realized before the fact is known that it is Clandestine.
>
> WATERED STOCK is that which has been increased above the authorized capital by the issuance and distribution among the stockholders of new stock, for which no payment is or will be made.
>
> When these Watered Shares are made transferable, the act of watering is violative of every principle of ethics, and should secure for the parties thereto the judgment of a Criminal Court.
>
> A STOCK DIVIDEND is a certain amount of the profits of a company apportioned to the stockholders and retained by the company, for which new paid-up stock is issued to the stockholders. Or, in the absence of a profit, it may be additional stock, to be paid out of the capital or the future profits of the company, in which latter case it is equivalent to the operation of "watering" stock.

From the above, it appears that stock dividends had a characteristic in common with both "Watered Stock" and "Clandestine Stock," i.e., a pro rata distribution of additional shares *without receipt of consideration from the stockholders.* Much of the suspicion and criticism of stock dividends may well have its roots in the similarity between stock dividends and "Watered" and "Clandestine" stock, and opposition to these practices. For example, on the first page of an entire chapter devoted to stock watering, Ripley (1915) appears to use the terms stock dividend and watered stock almost synonymously.

> Stock-Watering — a much abused term — may be defined as an increase of nominal capitalization of a corporation without a commensurate additional investment of funds. The baldest and simplest form — probably the one primarily responsible for the odium attached to the term by the general public — is the outright declaration of a stock or bond dividend. In this case no new capital whatever is put into the company. The new stocks or bonds are a gift to shareholders.[7]

Not surprisingly, these abuses led to statutes widely adopted by the states in the latter half of the nineteenth century in order to halt the watering of stock. These laws forbade the issuance of stock unless the stock was exchanged "for money or money's

worth in property and labor".[8] Many states enforced these laws literally, which effectively outlawed stock dividends. The legislation appears to have been successful in reducing such distributions. During the period 1871 to 1910, only 12 stock dividends were reported by all firms listed on the New York Stock Exchange (NYSE). Dewing (1941) presents these additional data:[9]

1871 to 1914	23
1915	4
1916	7
1917	13

Many corporations attempted to evade this prohibition. The most common practice was the declaration of a cash dividend with the understanding that the cash would be applied to a stock subscription. However, the courts gradually evolved the doctrine that capitalization of retained earnings constitutes consideration of value passing to the corporation. In this manner, stock dividends eventually regained legality.[10]

The suspicion and criticism may also have been the result of confusion regarding the economic substance of this phenomenon. The states initially encountered the same life-tenant and remainderman issues previously addressed by the English courts.

In the eighteenth and early nineteenth centuries, state courts were often in disagreement in their arguments and conclusions. By the mid-1800's, three influential state rulings had emerged; however, since these rulings spanned the spectrum of possible alternatives, little was achieved in terms of consensus. The Kentucky and Massachusetts rules were characterized as "simple'" for being "all or nothing" propositions. The Kentucky Rule declared that all dividends, whether in cash or stock, were income allocable to the life-tenant. In Massachusetts, the opposite position was enforced; all stock dividends were considered capital and not distributable to the life-tenant. The Pennsylvania rule attempted a more discriminating approach but eventually became so complicated as to be inoperable.[11]

The economic significance of a stock dividend in the law of life-tenant and remainderman was finally addressed by the U.S. Supreme Court in 1890. In *Gibbons v. Mahon* (1890), the Court agreed with the Massachusetts rule, declaring that "The resolution is clearly an apportionment of the new shares as representing capital, and not a distribution or division of income".[12] The Court added that:

ls in defining income, developing capital market research and exploring the economic consequences c

> A stock dividend really takes nothing from the property of the corporation, and adds nothing to the interests of the shareholders. Its property is not diminished, and their interests are not increased. After such a dividend, as before, the corporation has the title in all the corporate property; the aggregate interests therein of all the shareholders are represented by the whole number of shares; and the proportional interest of each shareholder remains the same. The only change is in the evidence which represents that interest, the new shares and the original shares together representing the same proportional interest that the original shares represented before the issue of new ones.[13]

The above statement has been frequently quoted, and the Supreme Court incorporated it into two subsequent decisions concerning the taxability of stock dividends as income.[14] The authoritative accounting pronouncement on stock dividends incorporated the statement into its text;[15] however, the pronouncement referenced the statement to the *Eisner v. Macomber* decision (1920), rather than the original source *(Gibbons v. Mahon,* 1890).

Defining Income — The Taxability Debate

The constitution of the United States originally provided Congress with power to impose direct taxes only if the tax was apportioned among the states in accordance with population. Income taxes could therefore not be imposed until ratification of the 16th Amendment (1913) which gave Congress the power to tax incomes from whatever source derived without apportionment among the states. Under the 1913 Revenue Act, federal taxes were levied on individual and corporate incomes. Since the Act did not expressly address the taxability of stock dividends, a question concerning their tax status arose immediately.

The lower federal courts upheld the taxability of stock dividends as income under the 1913 Revenue Act, but were later overruled by the U.S. Supreme Court in *Towne v. Eisner* (1918). The Court leaned heavily on its earlier remainderman decision in *Gibbons v. Mahon* (1890) stating "we cannot doubt that the dividend was capital as well for the purposes of the Income Tax Law as for distribution between tenant for life and remainderman . . . what was said by this Court upon the latter question is equally true for the former. In short, the corporation is no poorer and the stockholder is no

richer than they were before".[16] However, Congress appeared determined to tax stock dividends. As the courts were deliberating *Towne v. Eisner,* Congress passed the Revenue Act of 1916 which expressly called for the taxation of stock dividends, but did not assert that stock dividends were income.

To no one's surprise, the taxability of stock dividends under the Revenue Act of 1916 was soon challenged, in the case of *Eisner v. Macomber* (1920). The U.S. Supreme Court confirmed its earlier decision that stock dividends were not income, but merely the splitting of the evidences of ownership into smaller portions. However, of the nine member Court, four justices dissented.

This rather lengthy opinion proved to be a landmark decision on stock dividends, and a pioneering effort to define income under the Sixteenth Amendment. Justice Pitney presented the majority opinion, a synthesis:

> The fundamental relation of "capital" to "income" has been much discussed by economists, the former being likened to the tree or the land, the latter to the fruit or the crop; the former depicted as a reservoir supplied from springs, the latter as the outlet stream, to be measured by its flow during a period of time.
>
> Income may be defined as the gain derived from capital, from labor, or from both combined, provided it be understood to include profit gained through a sale or conversion of capital assets, ...
>
> Here we have the essential matter: not a gain accruing to capital; not a growth or increment of value in the investment; but a gain, a profit, something of exchangeable value, proceeding from the property, severed from the capital, however invested or employed, and coming in, being "derived" — that is, received or drawn by the recipient (the taxpayer) for his separate use, benefit and disposal — that is income derived from property.[17]

(This opinion clearly embraces the accounting concepts of recognition, realization and periodicity.)

Justice Brandeis delivered a dissenting opinion, observing:

> Financiers, with the aid of lawyers, devised long ago two different methods by which a corporation can, without increasing its indebtedness, keep for corporate pur-

ds in defining income, developing capital market research and exploring the economic consequences o

> poses accumulated profits, and yet, in effect, distribute these profits among its stockholders.
>
> . . . If stock dividends representing profits are held exempt from taxation under the Sixteenth Amendment, the owners of the most successful businesses in America will, as the facts in this case illustrate, be able to escape taxation on a large part of what is actually their income. So far as their profits are represented by stock received as dividends they will pay these taxes not upon their income, but only upon the income of their income. That such a result was intended by the people of the United States when adopting the Sixteenth Amendment is inconceivable. . . .[18]

Although English courts had long ago resolved the income issue and the United States Supreme Court consistently ruled that stock dividends did not constitute income, the controversy continued unabated.

On March 26, 1920, only 18 days after the *Eisner v. Macomber* decision, Senator Nelson of Minnesota proposed a constitutional amendment subjecting stock dividends to income tax.[19] Other legislative efforts included a proposal to tax stock dividends under the guise of a stock-transfer tax.[20]

On December 22, 1926, seven years after the High Court ruling in *Eisner v. Macomber* (1920), the U.S. Senate passed Resolution 304:

> Whereas it has become the usual practice of corporations, in order to protect stockholders from the payment of income taxes, to declare stock dividends; and
>
> Whereas this procedure enables corporations to acquire competing plants, and in this way avoid the provisions of the antitrust law; and
>
> Whereas in order to legislate upon the subject, the Senate should be fully informed as to the extent of this practice: Therefore be it
>
> Resolved, That the Federal Trade Commission be, and it is hereby, directed to ascertain and report to the Senate the names and the capitalization of corporations that have issued stock dividends, together with the amount of such stock dividends, since the decision of the Supreme Court holding that stock dividends were not taxable. . .[21]

In December, 1927, Federal Trade Commission (FTC) chairman, W. E. Humphrey, delivered to the first session of the 70th Congress

Accounting Historians Journal, Vol. 12 [1985], Iss. 2, Art. 4

a 280 page document which addressed the extent of the practice of stock dividends.[22] As the Senate Resolution had requested, the commission compared the magnitude of stock dividends in the seven year period before the *Eisner v. Macomber* (1920) decision (pre-period) and the seven year period after the decision (post-period). The study included firms that were traded on the NYSE as well as many smaller firms that were not members of the Exchange.

One of the studies undertaken examined 2,971 corporations described as "strictly comparable not only for dividends but also for capitalization and surplus for fourteen years".[23] The study disclosed that the dollar amount of stock dividends in the post-period was 476% greater than in the pre-period while cash dividends of the post-period were only 73% greater than those of the pre-period. In the pre-period, stock dividends totaled $408,000,000 which was 8% of total surplus available for dividends. The post-period total of stock dividends was approximately $2,350,000,000 which was 28% of total surplus available for dividends.

Another study listed all firms that had at any time declared a stock dividend during the fourteen year period under review. From this population a sample of 1,000 firms was randomly selected. The results of this study are presented in Table 1.

The report contains numerous other compilations of data including the names and capitalization of the 10,245 corporations that declared stock dividends in the post-period. Chairman Humphrey concluded, "After fully considering the foregoing computations, the conclusion that there has been an enormous increase in stock dividends since the decision in *Eisner v. Macomber* seems inevitable".[25]

The Characterization of Stock Dividends as "Dividends"

After the proliferation of stock dividends in the 1920's, Burtchett (1933) observed, "the term stock dividend has been roundly abused by corporation management; and it is thoroughly misunderstood by the average man of the street".[26] In a business context, the vast majority of dividends have been a distribution of assets. The term "dividends" used alone usually refers to cash dividends. The characterization of a pro rata free distribution of shares as a "dividend" has been widely criticized,[27] as an early writer noted in the *American Economic Review:*

> That the dilution of the stock by passing out new shares free of charge, shall be called a "dividend," is now a fixed

Table 1

Cash, stock, and other dividends paid for the seven years 1913-1919 and the seven years 1920-1926 by 1,000 corporations which paid one or more stock dividends in the 14-year period 1913-1926

Kind of dividend	First 7 years		Second 7 years		Increase (+) or decrease (−) in second period	
	Amount	Per cent of total	Amount	Per cent of total	Amount	Per cent
Cash	$2,908,797,623	79.66	$5,035,334,937	58.24	+$2,126,537,314	+ 73.11
Stock	659,856,048	18.07	3,554,343,758	41.11	+ 2,894,457,710	+438.65
Other	82,677,880	2.27	55,933,730	.65	−26,744,150	− 32.35
Total ...	$3,651,331,551	100.00	$8,645,582,425	100.00	+$4,994,250,874	+136.78

> usage; but this usage is in truth a terminological blunder of the first magnitude, and one which has virtually precluded clear thinking about the subject on the part of the general public . . . (a stock dividend is) an almost ineradicable popular illusion . . . a complete fallacy, but one which is likely to live forever.[28]

In the first half of this century large stock dividends were often referred to as "melons"; the issue of a large stock dividend was referred to as "cutting the melon".[29] Since large stock dividends were perceived as analogous to stock splits, the use of the term "melon" may have been an effort to reinforce the notion that large stock dividends were essentially stock splits, i.e., the melon is split into smaller pieces but the size of the "melon" (equity) remains unchanged. However, even large stock dividends could not escape criticism; as the title of one business article observed: "Stock Dividends are Lemons, Not Melons".[30]

Ambiguity of Terminology

A manifestation of the confusion which has surrounded stock dividends is the lack of a clear terminology to describe stock dividends and stock-splits. While attempting to examine the price effect of stock splits in 1933, Dolley observed that, "Some difficulty was experienced in distinguishing between stock dividend and stock split-ups because the manuals often reported a stock dividend as as stock split-up and vice versa. Much greater difficulty was encountered in attempting to separate the true split-ups from the numerous recapitalization plans involving a multiplication of shares outstanding".[31] Although many accountants use the two terms almost synonymously, differentiation has usually been based upon two criteria: size of the distribution and the effects of the distribution upon the equity accounts.

Size of Distribution

Agreement as to what size distribution constitutes a stock dividend (versus a split) has never been reached. In 1934, A. S. Dewing observed, "When there is a 100% distribution, it is sometimes called a 100% stock dividend and sometimes a split. And there are borderline cases".[32] Dewing later noted that two other writers made a distinction based on the effect of a stock distribution on the surplus account. He then stated, "This distinction, however, is not observed

in financial parlance. . . . Ordinarily, a free distribution of new stock equivalent to one or more shares for each share held is spoken of as a split, irrespective to the accountants treatment of the capital and surplus accounts".[33] The current authoritative pronouncement requires that when the additional shares issued as a stock dividend is so great as to materially reduce market value, the distribution be characterized as a split-up. However, if legal requirements necessitate such a distribution to be characterized as a dividend, then the distribution should be described as a "split-up effected in the form of a dividend".[34]

Effect Upon Equity

The most objective criterion to differentiate between the two types of distribution is the effect upon the equity accounts. Stock dividends have always been associated with transfer of surplus (retained earnings), to the paid-in capital accounts, while stock-splits usually leave the equity balances unchanged. Indeed, the activity of splitting is common to both stock dividends and stock-splits; consequently, both have been frequently referred to as 'split-ups'. However, since the capitalization of retained earnings is limited to stock dividends, stock splits are rarely referred to as stock dividends.

Small Recurring Stock Dividends as Income

By the latter half of the 1920's, there appears to have been a consensus among accountants and reporting authorities that investors were much more likely to perceive stock dividends as income, i.e., analogous to a cash dividend, if the stock dividends were small, and recurring (periodic). As Montgomery (1928) commented:

> The unsophisticated stockholder of a corporation who receives an extraordinary stock dividend may be assumed to be on notice that he is receiving something which may not be treated as ordinary income, but when stockholders regularly receive quarterly stock dividends in an amount which does not strike them as being extraordinary, they are not to be blamed for assuming that the cash equivalent of the quarterly dividend represents a distribution of earnings equal in the aggregate to the cash value of the quarterly dividends.[35]

Montgomery also complained about the extant practice of reporting dividends in cash and stock, which in aggregate were in excess of current earnings. Other writers criticized the payment of stock dividends from "unrealized appreciation surplus."[36]

The belief of reporting authorities that unsophisticated investors regarded small, periodic stock dividends as income was bolstered when a supposedly sophisticated NYSE official made a public statement supporting the concept. In an address to the American Institute of Accountants (AIA) in September, 1930, J. M. Hoxsey, executive assistant to the Committee on Stock List, took the position that small stock dividends declared period by period and based on current equivalent periodic earnings were income to the recipient. Hoxsey clearly differentiated between small periodic, and large "extraordinary" stock dividends:

> Bear in mind that only small or periodical Stock Dividends are under discussion. No one contends that a Stock Dividend representing a split-up, pure and simple, with no charge against earnings or Earned Surplus is income. . . . We are concerned here with small regular stock dividends based on current earnings.[37]

Since they held that many investors agreed with Hoxsey's perception of small stock dividends, it is easy to understand the desire of authorities to restrict such distributions. As early as 1928, Montgomery offered the following solution:

> The matter is quite important from the standpoint of public accountants and I hope that if there is another side to it some of your readers will set me right. One solution which has occurred to me is that if the auditors of the company were to insist that there be charged against earned surplus the market value of the shares distributed as stock dividends, the whole plan would come to an abrupt end.[38]

Montgomery's views proved prophetic. In September 1941, the Committee on Accounting Procedure (CAP) issued its first pronouncement concerning stock dividends, *Accounting Research Bulletin No. 11* (ARB #11). Two of the more salient requirements of the statement were the restriction of stock dividends to current earnings and the capitalization of shares at market value when market value is significantly above par value or the legal requirement.

ds in defining income, developing capital market research and exploring the economic consequences o

Zeff contends that the Committee's pronouncement on stock dividends (ARB #11) is among the earliest intrusions of economic consequences into accounting policy debates.[39] A letter written by George O. May, Vice-Chairman of the CAP, to J. S. Seidman (also a member of the CAP) lends insight into the intent of the committee. In a letter dated July 14, 1941, just six weeks prior to the issue date, May stated:

> . . . .the points you raised were extensively discussed. It was then frankly recognized that they were not purely accounting points but it was the general feeling that they should be dealt with in any report. . . .
>
> I think those present generally were of the opinion that periodic stock dividends were objectionable and I believe this view is shared by the Listing Committee of the Stock Exchange. Neither the Institute nor the Exchange can say that they are not permissible as long as the law allows them. . . .the conclusions reached were that in general, *the effort should be to restrict the possibilities of declaring stock dividends* in such a way as to create false impressions in the minds of stockholders such as those created, for instance, by the periodical stock dividends of some of the public utility holding companies in the past. I think the practical result of our issuing a bulletin such as the committee has prepared would be that the Stock Exchange Committee would immediately adopt regulations with regard to the listing of stock issued as dividends that would be in harmony therewith. This, I think, would have a *very discouraging effect* on those corporations which continue to pay stock dividends. . . .[40] (Emphasis supplied.)

J. S. Seidman officially dissented from the recommendation of ARB #11. One might speculate that May's letter was principally a defense of the Committee's newly adopted commitment to the resolution of other than "strictly accounting" issues of corporate policy, i.e., the consideration of economic consequences.

In 1941, the CAP had been in existence for only 5 years; it is likely that the Committee may have been attempting to establish its influence and credibility. In a letter written eleven years later, May (1952) reflected upon the issues surrounding ARB #11. His comments suggest the CAP was fully aware that its decision to alter corporate financial policy would effectively broaden the scope of its influence and that acquiescence by the SEC and the NYSE would

significantly enhance the stature of the CAP in the financial community. With reference to the accounting policy decision to restrict the alleged abuses of stock dividends (ARB # 11, 1941) May stated:

> . . . .The phrase "proper accounting and corporate policy" indicates that the committee went beyond consideration of purely accounting questions. In the early stage of discussion such a step was not contemplated but as the study progressed, the committee came to feel strongly that it had an opportunity, in conjunction with the Stock Exchange, to take a step in the interest of financial morality and to safeguard against recurrence of abuses such as took place in and immediately prior to 1929 in connection with the issue of periodical stock dividends.
>
> Some members of the Committee took the view that the bulletin went beyond the proper province of the committee; that the committee had no responsibility for financial morality but only for accounting procedure. The majority disagreed with this view and felt so strongly that there was an opportunity to bring the influence of the profession to bear. . . .
>
> It was the view of Walter Staub and myself that the action of the committee would constitute a great advance in the status of the profession if the proposal were implemented by the Stock Exchange. . . .[41]

In 1952, ARB # 11 was superseded by the current authoritative pronouncement, *Accounting Research Bulletin No. 11 (Revised),* which is an effort to define and clarify the criteria used in valuation of stock dividends. The accounting implications of the current pronouncement are basically unchanged from its predecessor.

An Antecedent of Capital Market Research

Stock dividends were the catalyst for one of the earliest efforts in the area of capital market research. As noted previously, many viewed stock dividends as income to the recipient. This belief was supported by the contention that stock prices do not fully adjust to stock dividends, i.e., after a stock dividend is issued, stock prices do not decrease pro rata; in this situation, the market value of shareholders' holding is increased. The amount of increase was typically viewed as income to the recipients.

In a study published in the *American Economic Review* in 1930, Shaw Livermore attempted empirically to determine the effect of

stock dividends on share prices. As his methodology demonstrates, Livermore fully recognized the critical need to control for the effects of confounding events in his effort to establish causality between stock dividends and changes in stock prices. He was equally aware of the inherent limitations on his ability to establish conclusive results: "Two methods were used to eliminate other influences and measure the effect on market price of the stock dividend in each case. . . .The method outlined illustrates as much as anything else the difficulty that would be met in trying to determine the exact effect of a given stock dividend on market value. . . . Neither can be said to have mathematical exactness."[42]

Methodology

Livermore selected 100 firms that declared a stock dividend of 10% during 1928 and 1929. He desired to obtain "a diversified group of stocks representing many industries, subject to varying degrees of market popularity, each having nevertheless a sufficiently wide market so that changes in valuation would be easily and quickly reflected."[43] Sixty-two firms were eliminated for one or more of the following reasons: "(1) No adequate market prices could be obtained for specific dates. (2) No earnings figures were available. (3) The company was about to enter a merger."[44] Consequently, the study focused on the remaining 38 firms.

The "Checking Method"

The first research design (described as the "checking method") was constructed to facilitate the comparison of stock price movement of stock dividend declaring firms (treatment firms) versus stock price movement for *comparable* firms that did not declare stock dividends (control group). Each of the 38 stock dividend declaring firms (treatment firms) was matched to a control group (described as "checking groups"). Each control group was composed of two or three non-stock dividend paying firms that were "similar in nature of business, record and prospects".[44] Livermore then measured the percentage change in the market price for each of the 38 firms. The percentage change was computed by using the "base price" (market price of the stock 3 months prior to the date of payment) and the "new price" (market price 6 weeks after the date of payment). The percentage change for each of the 38 firms was then compared to its control group for which a similar calculation was made. All calculations were adjusted for the pro

rata increase in outstanding shares for the 38 stock dividend paying firms. The results of a comparison of the percentage change in stock prices for each of the 38 stock dividend declaring firms and the *average percentage change* of the control groups ("checking groups") were:[45]

> For ten of the thirty-eight, the spread in percentage gain was more than 20, as compared with the gain in the checking group.
>
> For thirteen others, the spread was greater than 0, but less than 20.
>
> For one, the gain was exactly correct, i.e., a spread of 0.
>
> For twelve, the percentage of loss compared to the "measuring stick" was more than 0 and less than 20.
>
> For two, the percentage loss showed a spread of more than 20.

Livermore described his use of "checking groups" as a "crude way" to control for "other factors" (confounding events) and noted, "These results are valuable chiefly for comparison with the results obtained by the second method."[46] (It is interesting to note Livermore's methodological use of triangulation in this early study.)

"Second Method"

In his second test design, Livermore started with the actual base price, then computed a "theoretically correct" "new price", i.e., the theoretical price of the stock after the stock dividend. With reference to the construction of a theoretical price, he states, ". . .direct adjustment was made in the new price after each stock dividend for (1) earnings, (2) higher dividends if earnings were unchanged, otherwise no adjustment, and (3) for changes in market valuation of stocks of that general type."[47] He then compared the actual "new price" of the stock to the theoretical price with the following results:[48]

> Twenty-five prices were higher than warranted;
> Two were exactly correct;
> Eleven were lower than warranted.
>
> After making adjustments for the price-earnings ratio (the adjustment varying from 3 to 20 per cent), the results were as follows:

ls in defining income, developing capital market research and exploring the economic consequences o

> Nineteen prices were higher than warranted;
> Two were exactly correct;
> Seventeen were lower than warranted.

(Since Livermore did not disclose the details of his stock price adjustment processes, a discussion of these adjustments is not presented.) In his conclusion, Livermore alludes to the rationality and efficiency of the market:

> It would appear that there is no net effect of stock dividends upon market price, judging by this small sample. This confounds those wise in the market who see such an effect. It would be possible, if an extension of this study showed similar results, for analysts like Mr. Whitaker to dismiss confidently any true market effect as non-existent rather than "irrational."[49]

Conclusion

This paper has attempted to lend insight into the evolution of stock dividends and their role in the development of accounting. However, the effort to produce an economic impact on corporate financial policies by restricting stock dividends resulted in reporting requirements that appear to be based on assumptions that are inconsistent with empirical observations.

FOOTNOTES

[1]American Institute of Certified Public Accountants (AICPA), 1980, AC 5561.
[2]AICPA, 1980, AC 5561.11.
[3]Scott, 1910, p. 232.
[4]Gibbons v. Mahon, 1890, p. 561.
[5]Ripley, 1915.
[6]Soulé, 1906, pp. 375-377.
[7]Ripley, 1915, p. 227.
[8]York, 1941, p. 25.
[9]Dewing, 1941, p. 816.
[10]York, 1941, p. 25. Dewing, 1941, p. 816.
[11]Sussman, 1962, p. 18.
[12]Gibbons v. Mahon, 1890, p. 569.
[13]Gibbons v. Mahon, 1890, p. 559.
[14]Towne v. Eisner, 1918, p. 159. Eisner v. Macomber, 1920, p. 191.
[15]AICPA, 1980, AC 5561.08.
[16]Towne v. Eisner, 1918, p. 159.
[17]Eisner v. Macomber, 1920, p. 193.
[18]Eisner v. Macomber, 1920, pp. 198, 204.
[19]Senate Joint Resolution 177, 1920, p. 4845.
[20]Zukerman, 1920, p. 591.

[21]Senate Resolution 304, 1926, p. 921.
[22]Senate Document No. 26, 1927.
[23]Whitaker, 1929, pp. 22 & 34. 1931, p. 179.
[24]Senate Document No. 26, 1927, p. 10.
[25]Senate Document No. 26, 1927, p. 14.
[26]Burtchett, 1933, p. 34.
[27]Burke, 1962, p. 283. Burtchett, 1933, p. 344. Chang, 1969, p. 83. Horngren, 1957, p. 384. Siegel, 1932, p. 76. Sussman, 1962, p. 37. Vatter, 1955, p. 408. York, 1941, p. 24.
[28]Whataker, 1929, pp. 22 & 34. 1931, p. 179.
[29]Dolley, 1933, p. 77. Guthmann, 1940, p. 546. Siegel, 1932, p. 76. Sosnick, 1961, p. 61.
[30]Sosnick, 1961, p. 61.
[31]Dolley, 1933, p. 317.
[32]Dewing, 1934, p. 98.
[33]Dewing, 1934, p. 99.
[34]AICPA, 1980, AC 5561.11.
[35]Montgomery, 1928, p. 43.
[36]Kerrigan, 1937, p. 244. York, 1941, p. 26.
[37]Whitaker, 1931, p. 276.
[38]Montgomery, 1928, p. 43.
[39]Zeff, 1978, p. 12.
[40]May, 1941.
[41]May, 1952.
[42]Livermore, 1930, p. 688.
[43]Livermore, 1930, p. 688.
[44]Livermore, 1930, p. 689.
[45]Livermore, 1930, p. 690.
[46]Livermore, 1930, p. 690.
[47]Livermore, 1930, p. 690.
[48]Livermore, 1930, p. 691.
[49]Livermore, 1930, p. 691.

BIBLIOGRAPHY

American Institute of Accountants. Corporate Accounting for Ordinary Stock Dividends. *Accounting Research Bulletin No. 11.* New York: American Institute of Accountants, 1941.

American Institute of Accountants. Accounting for Stock Dividends and Stock Split-ups. *Accounting Research Bulletin No. 11 (Revised).* New York: American Institute of Accountants, 1952.

American Institute of Certified Public Accountants (AICPA). *Professional Standards, 3.* Chicago: Commerce Clearinghouse, Inc., 1980.

Barker, C. A. "Effective Stock Splits." *Harvard Business Review* (January 1956) pp. 101-106.

Barker, C. A. "Evaluation of Stock Dividends." *Harvard Business Review* (June 1957) pp. 99-114.

Barker, C. A. "Are Accounting Requirements for Stock Dividends Obsolete?" *Analyst Journal* (November 1958), pp. 69-71.

Barker, C. A. "Price Changes of Stock-Dividend Shares at Ex-Dividend Dates." *Journal of Finance* (1959), pp. 373-378.

ds in defining income, developing capital market research and exploring the economic consequences o

Benninger, L. J. "State Law in Regard to Paid in Surplus" *Accounting Review* (January 1946), pp. 57-60.

Bird, F., Davidson, L., and Smith, C. "Perceptions of External Transfers Under Entity and Proprietary Theory". *Accounting Review* (1974), pp. 233-244.

Blough, C. G. "Payment of Stock Dividends Out of Reappraisal Surplus". *Journal of Accountancy* (March 1951), pp. 462-464.

Bonbright, J. C., and Weiner, J. L. "Anglo-American Dividend Law: Surplus and Profit". *Columbia Law Review 30,* (1930), pp. 954-985.

Burke, J. T. "Stock Dividends-Suggestions for Clarification". *Accounting Review* (April 1962), pp. 283-288.

Burrell, O. K. "Price Effects of Stock Dividends and Split-ups". *Commercial and Financial Chronicle* (December, 1948), p. 10.

Burtchett, F. L. "Substitute Terminology for Stock Dividends." *Accounting Review* (December 1933), p. 344.

Campbell, J. A., and Beranek, W. "Stock Price Behavior on Ex-Dividend Dates". *Journal of Finance* (December 1955), pp. 425-429.

Carothers, D. "The Stock Dividend Mumpsimus." *Commercial and Financial Chronicle* (December 1953), p. 3.

Chang, E. C. "Accounting for Stock Splits." *Financial Executive* (March 1969), pp. 79-84.

Chottiner, S. and Young, A. "A Test of the AICPA Differentiation Between Stock Dividends and Stock Splits." *Journal of Accounting Research* (Autumn 1971), pp. 367-374.

Conrads, P. E. "Midwestern Dealer Defends Stock Split-Ups and Stock Dividends". *Commercial and Financial Chronicle* (January 1954), p. 13.

Copeland, T. E. "Liquidity Changes Following Stock Splits". *Journal of Finance* (March 1979), pp. 115-141.

Dewing, A. S. *A Study of Corporation Securities* (third edition). New York: The Ronald Press Company, 1934.

Dewing, A. S. *The Financial Policy of Corporations* (Volumes 1 and 2). New York: The Ronald Press Company, 1941.

Dolley, J. C. "Characteristics and Procedure of Common-Stock Split-Ups." *Harvard Business Review* (April 1933), pp. 316-326.

Dolley, J. C. "Common Stock Split-Ups — Motives and Effectives". *Harvard Business Review* (December 1933), pp. 70-81.

Eiseman, P. C., and Moses, E. A. "Stock Dividends: Management's View." *Financial Analysts Journal* (July-August 1978), pp. 77-80.

Eisner v. Macomber. *United States Supreme Court Report,* 252. (1920), pp. 189-204.

Eiteman, D. S. "Are There Two Kinds of Stock Dividends?" *NAA Bulletin* (October 1963), pp. 53-58.

Fama, E., Fisher, L., Jensen, M., and Roll, R. "The Adjustment of Stock Prices to New Information." *International Economic Review* 10 (February 1969) pp. 1-21.

"Financing by Stock Dividends". (Letter to the editor). *Journal of Accountancy* (May 1928), pp. 361-371.

Foster, T. W., and Vickery, D. "The Information Content of Stock Dividend Announcements". *Accounting Review* (April 1978) pp. 360-370.

Freeman, H. C. "Stock Dividends and the New York Exchange". *American Economic Review* (December 1931), pp. 658-671.

Gibbons v. Mahon. *United States Supreme Court Reports, 136* (1890), pp. 549-569.

Graham, B. "Stock Dividends: An Analysis of Some of the Major Obstacles". *Barron's* (August 1953), pp. 5-6.

Accounting Historians Journal, Vol. 12 [1985], Iss. 2, Art. 4

Graham, B. "Stock Dividends: They Can Save the Investor Many a Tax Dollar". *Barron's* (August 1953), p. 9.

Graham, B. "The Stock Dividend Defended." *Commercial and Financial Chronicle* (December 1953), p. 4.

Guthmann, H. *Corporate Financial Policy.* New York: Prentice-Hall, 1940.

Hatfield, H. R. *Surplus and Dividends.* Cambridge, MA: Harvard University Press, 1947.

Hausman, W. H., West, R. R., and Largay, J. A. "Stock Splits, Changes, and Trading Profits: A Synthesis". *Journal of Business* (January 1971), pp. 69-77.

Hayes, L. S. "The Myth of the Stock Split". *Fortune* (February 1979), pp. 101-102.

Horngren, C. T. "Stock Dividends and the Entity Theory". *Accounting Review* (July 1957), pp. 379-385.

Hunter, R. V. "Charge Stock Dividends at Par, Not Market: A dissent From ARB No. 11". *Journal of Accountancy* (May 1953), pp. 543-545.

Johnson, K. B. "Stock Splits and Price Changes". *Journal of Finance* (December 1966), pp. 675-686.

Kehl, D. *Corporate Dividends.* New York: The Ronald Press, 1941.

Kerrigan, H. D. "Limitations on Stock Dividends". *Accounting Review* (September 1937), pp. 238-255.

Kimball, P., and Papera, D. R. "Effect of Stock Splits on Short-Term Market Prices". *Financial Analysts Journal* (May-June 1964), pp. 75-80.

Livermore, S. "Value of Stock Dividends". *American Economic Review* (December 1930), pp. 687-691.

Madden, J. T. "Present Financial Situation Calls for Reversal of Stock Split-Up Movement". *The Annalist* (August 1931), p. 262.

May, G. O., Letter to J. S. Seidman, Dated July 14, (deposited in the National Office Library of Price Waterhouse and Company in New York), 1941.

May, G. O., Letter to John B. Inglis, Dated August 5, (deposited in the National Office Library of Price Waterhouse and Company in New York), 1952.

May, G. O. "Stock Dividends and Concepts of Income". *Journal of Accountancy* (October 1953), pp. 427-431.

Millar, J. A., and Fielitz, B. D. "Stock-Split and Stock Dividend Decisions". *Financial Management* (Winter 1973), pp. 35-45.

Millar, J. A. "Split or Dividend: Do the Words Really Matter?" *Accounting Review* (January 1977), pp. 52-55.

Montgomery, R. H., and Freeman, H. C. "The North American Company's Dividend". (Letter to the Editor). *Journal of Accountancy,* (July 1928), pp. 42-47.

Myers, J. H., and Heath, L. C. "The Periodic Stock Dividend — Boom or Sop!" *Commercial and Financial Chronicle* (February 1958).

"New Rulings of New York Stock Exchange on Stock Dividends — Issuance of Latter with Insufficient Charge Regarded as Misleading". *Financial Chronicle* (May 1930), p. 3096.

"New York Stock Exchange Issues New Policy on Accounting for Stock Dividends". *Journal of Accountancy* (May 1953), p. 604.

"New York Stock Exchange Revises Policy on Stock Dividends", *Commercial* Financial Chronicle (October 1943), p. 1704.

Nichols, W., and Brown, S. "Assimilating Earnings and Split Information". *Journal of Financial Economics,* 9, (1981), pp. 310-315.

Nichols, W."Semantics and Capital Market Efficiency." *Journal of Business Research* II, (1983), pp. 11-20.

s in defining income, developing capital market research and exploring the economic consequences c

Parrish, M. E. *Securities Regulation and the New Deal.* New Haven: Yale University Press, 1970.

Paton, W. A. *Corporate Profits as Shown by Audit Reports.* New York: National Bureau of Economics Research Inc. #38.1819, 1935.

Paton, W. A. *Accountants' Handbook* (3rd ed.). New York: The Ronald Press Company, 1943.

Paton, W. A., and Paton, W. A., Jr. *Corporation Accounts and Statements.* New York: The MacMillan Co., 1955.

Porterfield, J. T. S. "Dividends, Dilution, and Delusion", *Harvard Business Review* (December 1959), pp. 56-61.

Preinreich, G. A. *The Nature of Dividends.* Lancaster, PA Lancaster Press, Inc., 1953.

Reed, H. L. "Stock Dividends in Large and Small Companies". *Quarterly Journal of Economics,* 45, (1931), pp. 352-364.

Ripley, W. Z. *Railroads, Finance and Organization.* New York: Longmans, Green and Company, 1915.

Schloss, W. "In Defense of Stock Dividends". *Commercial and Financial Chronicle,* 17, (December 1953).

Scott, W. R. *The Constitution and Finance of English, Scottish and Irish-Joint Stock Companies to 1720* (Volume 2). Cambridge: The University Press, 1910.

Scott, W. R. *The Constitution and Finance of English, Scottish and Irish-Joint Stock Companies to 1720* (Volume 3). Cambridge: The University Press, 1911.

Scott, W. R. *The Constitution and Finance of English, Scottish and Irish-Joint Stock Companies to 1720* (Volume 1). Cambridge: The University Press, 1912.

Senate Document No. 26. *Stock Dividends,* 70th Congress, First Session. Washington: United States Government Printing Office, 1927.

Senate Joint Resolution 177, *Congressional Record-Senate,* (1920), p. 4845.

Senate Resolution 304. *Congressional Record-Senate,* (1926), p. 921.

Siegel, S. "Stock Dividends". *Harvard Business Review,* (October 1932), pp. 76-87.

Sosnick, S. "Stock Dividends are Lemons, Not Melons." *California Management Review,* (Winter 1961), pp. 61-82.

Soulé, G. *Soulé's New Science and Practice of Accounts.* (Eighth Edition) (Revised Edition). New Orleans: Author, 1906.

Sussman, M. R. *The Stock Dividend.* Ann Arbor: The University of Michigan, Bureau of Business Research, 1962.

Thoine, J. W. "What Happens to Stocks After They are Split-Up?" *The Magazine of Wall Street* (Decembr 1926), p. 314.

Towne v. Eisner. *United States Supreme Court Reports,* 245, (1918), pp. 158-159.

Vatter, W. J. "Corporate Stock Equities," *Handbook of Modern Accounting Theory.* New York: Prentice Hall, 1955.

Weiner, J. L. "Theory of Anglo-American Dividend Law: The English Cases". *Columbia Law Review*, 28 (1928), pp. 1046-1060.

Weiner, J. L. "The Amount Available for Dividends Where No-Par Shares Have Been Issued." *Columbia Law Review,* 29 (1929), pp. 906-917.

Weiner, J. L. "Theory of Anglo-American Dividend Law: American Statutes and Cases". *Columbia Law Review,* 29 (1929), pp. 461-482.

Whitaker, A. C. "The Stock Dividend Question". *American Economic Review* (March 1929), pp. 20-42.

Whitaker, A. C. "Stock Dividends, Investment Trust, and The Exchange". *American Economic Review* (June 1931), pp. 275-280.

Wilcox, E. B. "Accounting for Stock Dividends: A Dissent From Current Recommended Practices". *Journal of Accountancy* (August 1953), pp. 176-181.

Woolridge, J. R. "Ex-Date Stock, Price Adjustment to Stock Dividends: A Note." *Journal of Finance* (March 1983), pp. 247-255.

York, T. "Stock and Other Dividends as Income". *Accounting Review* (September 1940), pp. 380-393.

York, T. "Stock Dividends From the Viewpoint of the Declaring Corporation". *Accounting Review* (March 1941), pp. 15-33.

Zeff, S. A. "The Rise of Economic Consequences". Stanford Lectures in Accounting, Graduate School of Business, Stanford University, 1978.

Zukerman, T. D. "Are Stock Dividends Income?" *Journal of Political Economy* (1920), pp. 591-600.