TALK GIVEN SEPT 1974 PLS RETURN WALTER

Dear Walter - Thanks for thinking about me and sending this. I had time to read it at leisure while on a trip to Texas last week. Graham continues to make sense to me, and I am especially interested in some of the changes in approach he suggests.

Don 2/6/75

cc: Dave
(return original to Walter)

THE DECADE 1965-1974; ITS SIGNIFICANCE FOR FINANCIAL ANALYSTS

Benjamin Graham

The title of this seminar—"The Renaissance of Value"—implies that the concept of value had previously been in eclipse in Wall Street. This eclipse may be identified with the virtual disappearance of the once well-established distinction between investment and speculation. In the last decade everyone became an investor—including buyers of stock options and odd-lot short-sellers. In my own thinking the concept of value, along with that of margin of safety, has always lain at the heart of true investment, while price expectations have been at the center of speculation.

Let me list some of the questions relating to the value approach that confront the financial analyst now in the light of the 1965-1974 experience:

1. Is the value approach a useful one in terms of
   (a) what it can accomplish on its own, and
   (b) by comparison of its results with those of other analytical methods and practices?
2. To what degree should the techniques of valuation—as presented, say, in Graham, Dodd and Cottle, 1962—be modified by more recent developments, including theoretical thinking?
3. What is the effect of institutional domination of the stock market on the valuation work of the security analyst and the decision-making procedures of the financial analyst?
4. To what extent does the sheer number of practicing analysts—some 14,000 F.A.F. members, including 3,800 C.F.A.s and over 2,000 active C.F.A. candidates—prevent the average or representative worker from achieving worthwhile results? This is indeed a delicate question.

The discussion that follows will not separate each of these questions from the others, but I will try to answer them as best I can.
The value approach has been founded on the premise that in many—but by no means in all—cases a dependable range of valuation can be established for a common stock by analytical techniques; that often this range differs substantially from the current price; and that

such differences offer rewarding opportunities for investment operations. The phrase "rewarding opportunities" implies that the stock market itself will vindicate the value-based operation, after an interval that averages not too long for human patience—say, three years or less.

Typically, the midpoint of the value range has been found by applying an appropriate multiplier to estimated future earnings. My present view is that this is not the best technique. Instead, the earnings figure taken should be what we call "normal current earnings", and all the future prospects—favorable or unfavorable, specific or general—should enter into the multiplier. This procedural change obviates the necessity of establishing a future value and then discounting same to its present worth.

Such a procedure would carry us very far from the method first suggested in 1938 in Dr. John Burr Williams' seminal book "The Theory of Investment Value". His technique required an estimate of the stream of dividends to be received over a very long future period, and the summation of the discounted worth of each dividend to arrive at present value. The various mathematical methods later developed for valuing growth stocks represent a sort of compromise between the Williams approach and what I now suggest. For they stop the estimated stream of dividends at a terminal year—say ten years hence—and then value the stock, usually on a conservative basis, in that terminal year. The resulting figures of dividends and terminal value would then be discounted at a uniform chosen rate to arrive at present value.

Those of you who have studied *Security Analysis* may recall that we tried to simplify the mathematical methods of several writers by suggesting a formula that employs a single variable G, representing the expected growth rate over the next seven to ten years. It read (at bottom of p. 537):

Value = current normal earnings times the sum of 8½ plus 2G.

This valuation formula—like those it purported to approximate—had the great defect of failing to allow for changes in the basic rate of interest. But the one development in the past decade that has had the greatest influence on stock values—and, somewhat belatedly, on stock prices—has been the phenomenal advance in interest rates. For the three years preceding the publication of our text the yield on AAA bonds averaged 4.4 percent, and that was also the figure just ten years ago. But for the three years 1971-1973 the average was 7.5 percent, and most recently 9½ percent.

It would seem logical to me to make common-stock valuations vary inversely with representative current interest rates corresponding to the analyst's use of representative current earnings. Suppose we restated our 1972 formula with that objective, making it reflect the then going AAA rate of 4.4 percent. The expression would then read:

Value = Earnings times the sum of 37½ plus 8.8 G., divided by the AAA rate.

Since analysts have a weakness for figures, you might like to hear two or three results based on this revised formula. For the DJIA, taking G as its historic 4½ percent and the AAA rate of its 3-year average of 7½ percent, we get a multiplier of 10.2. Applying this to the 1971-73 average earnings of the Dow, its central value would be about 750. If instead of three-year average figures you took the recent bond rate of 9½ percent and the most recent inflation-aided annual earnings of about $93 the indicated central value would be the same 750. (The higher earnings are offset by the higher interest divisor.)

These calculations, for what they are worth, suggest that the Dow at its recent low level of 627 was undervalued by about 15 percent. Whether this would presage a near or delayed end of the current bear market I leave to wiser or bolder heads than mine. However, this same method when applied to individual issues would indicate that many have been more significantly under-priced in the present market. Take Firestone as an example. Its earnings have grown at a better rate in the past decade than those of the Dow; the figures for 1971-73 show a 116 percent increase from 1961-63 for Firestone versus 66 percent for the DJIA. If we assume the same future G of 4½ percent for Firestone as for the Dow, and hence the same multiplier of 10.2 x 1971-73 earnings, our valuation would be 24 for the tire company shares, fully 90 percent above their 1974 low. Incidentally, this would just about equal the current book value of Firestone—a previously minor detail in the investment picture but one to which I am inclined to ascribe major importance under today's new conditions. Firestone is, of course, only one example of the discrepancy between the current level of the Dow—which includes several first-tier institutional favorites—and that of the current run-of-the-mine good sized company.

A multiplier based on expected growth and interest rates alone would imply that a company's financial structure and debt position do not enter into the valuation process. This might be the case if the formula were applied—as originally intended—only to high-growth companies, whose prospects are considered so good that they are assumed to face no financial problems. But if we seek to generalize our formula to apply to average-growth companies, we must recognize that many of these may be in unsatisfactory financial condition, caused in part by inflation pressures and in good part also by the over-expansion of corporate debt in the past decade. (I consider the total figure for corporate debt since 1968, published in the June 1974 issue of the *Survey of Current Business,* to be most disquieting. They show an overall increase of 74 percent in only five years, with more to come in 1974.)

I see no satisfactory way of reducing the multiplier to allow for a below-par debt position. My advice to analysts would be rather to avoid attempting a formal valuation of such companies. In other words, limit your appraisals to enterprises of investment quality, excluding from that category such as do not meet specific criteria of financial strength. This statement brings me back to our old position that speculative companies cannot be dealt with at all by the analyst with satisfactory overall results. By my own rather strict quantitative criteria, Firestone would pass the financial-strength test by a modest margin. Such tests might well exclude up to half of the NYSE list today from investment consideration, but there would remain enough qualifying issues to give the analysts and the investor an ample selection. It should be clear that I have faith in the valuation process as a guide to investment choices, but that I would limit this technique rather strictly to companies that meet criteria of financial soundness. Also, I should require that the buy-decisions based on this approach involve a margin-of-safety factor. This might well be a purchase price not over two-thirds of the central appraised value.

How would such a policy have worked out during the past decade? Several times the market price of Firestone fell below our formula value, but not by the one-third margin. (The indicated buying level in 1970 was 16 against its low of 17½, followed by the next year's high of 28½.) Other studies have led me to believe that a computer-type valuation job of this kind would have found a considerable number of cases where shares of sound companies could have been obtained for less than two-thirds of their formula-value. On the whole one would have done quite well over this period by buying on this basis and selling at a 50 percent profit when obtainable. I see no reason to think that a similar policy could not be followed with satisfactory results in the future. (It should be unnecessary for me to add that these results are not guaranteed.)

There are, of course, many other approaches of the valuation type, and different analysts may favor different formulas with different parameters than the two I have been using. I have myself been intrigued by the idea of choosing stocks among those that are obtainable at not more than one-half their former high quotation, provided that they meet criteria of value independent of the price record. A technique of this sort would have worked fine, according to my studies, up to and including the post-1970 market recovery. Under more recent conditions it would merely have added a price-decline criterion to the determination of buy points based on the valuation approach. For practically all issues of the Firestone type an acquisition price at two-thirds of analysts' valuation would be at less than half of the previous market high.

Let me pass on to a factor in the valuation process that in my thinking has taken on considerable importance under present conditions. This is the book value figure, to be viewed either as a point of departure for more refined calculations or as a practically usable measure of a common stock's value. For years we have all pretty well disregarded asset values, except for financial enterprises and some special cases. But in recent markets a large number—perhaps a majority—of NYSE commons have actually fluctuated in price both above and below their asset values. Even Polaroid was recently obtainable at less than book value! This fact would seem to establish a realistic relationship in many cases between net worth and intrinsic or analysts' value. One might well speak today of "The Renaissance of Book Value."

You are all intelligent enough to appreciate that I am not now saying that Avon Products is only worth its book figure of $7.70 per share or that Chicago Milwaukee common is to be valued at the $149 per share shown on the balance sheet. In a substantial percentage of issues the book value figures have no worthwhile connection with the investment value of the shares. But the analyst has today perhaps a thousand stocks or more to choose from in which the asset value may actually fall within his range of appraised value. In many of these cases he could then settle for the net worth as his preferred specific figure of value, and base his buy-and-sell points on this convenient measure.

This approach can put the choice of marketable common stocks on a basis corresponding to that of investment in a private, non-quoted enterprise. If the commitment would be attractive as an ordinary business venture it should be even more attractive as part of a publicly-held enterprise, with the added advantages of diversification and ready marketability.

However, in my experience marketability has proved of dubious overall advantage. It has led investors astray at least as much as it has helped them. It has made them stock-market minded instead of value-minded. I have a puritanic vision of the true investor as someone who is entirely disinterested in what the stock market does except on two sorts of occasions that meet his convenience. The first occasion is when the market obligingly permits him to buy a group of common stocks at less than their indicated value; the second is when with unusual courtesy it permits him to sell at not more than one-half their former high quotation those that are of no importance to him. True, he may sometimes dispose of an investment at a loss. But that should not be because the market price went down; it should be because things went badly for the company and the true value of the shares declined below the price he paid for them. (Of course the investor may also use the stock market to switch out of issues he owns into others that offer more value at ruling prices.)

(You are now hearing some of the "old-time religion". You may not be converted, but it shouldn't do you any harm.)

At this point let me consider briefly an approach with which we were closely identified when managing the Graham-Newman fund. This was the purchase of shares at less than their working-capital value. That gave such good results for us over a forty-year period of decision-making that we eventually renounced all other common-stock choices based on the usual valuation procedures, and concentrated on these "sub-asset stocks". The "renaissance of value," which we are talking about today, involves the reappearance of this kind of investment opportunity. A Value-Line publication last month listed 100 such issues in the non-financial category. Their compilation suggests that there must be at least twice as many sub-working-capital choices in the Standard & Poor's Monthly Stock Guide. (However, don't waste $25 in sending for an advertised list of "1000 Stocks Priced at Less Than Working Capital." Those responsible inexcusably omitted to deduct the debt and preferred stock liabilities from the working capital in arriving at the amount available for the common.)

It seems no more than ordinary sense to conclude that if one can make up, say a 30-stock portfolio of issues obtainable at less than working capital, and if these issues meet other value criteria including the analysts's belief that the enterprise has reasonably good long-term prospects, why not limit one's selection to such issues and forget the more standard valuation methods and choices we have previously discussed? I think the question is a logical one, but it raises various practical issues: How long will such "fire-sale stocks"—as Value Line called them—continue to be given away; what would be the consequences if a large number of decision-makers began as of tomorrow to concentrate on that group; what should the analyst do when these are no longer available?

Such questions are actually related to broader aspects of the value approach, involving the availability of attractive investment opportunities if and when most investors and their advisers followed this doctrine. I shall return to that problem later.

Some interesting questions relating to intrinsic value vs. market price are raised by the take-over bids that are now part of our daily financial fare. The most spectacular such event occurred a few weeks ago, when two large companies actively competed to buy a third, with the result that within a single month the price of ESB Inc. advanced from 17½ to over 41. We have always considered the value of the business to a private owner as a significant element in appraising a stock issue. We now have a parallel figure for security analysts to think about: the price that might be offered for a given company by a would-be acquirer. In that respect the ESB transaction and the Marcor one that followed it offer much encouragement to those who believe that the real value of most common stocks is well above their present market level.

There is another aspect of take-overs that I want to bring up here, on a somewhat personal basis, because it relates to an old and losing battle that I have long fought to make stockholders less sheeplike vis-a-vis their managements. You will recall that the first bid of INCO was termed a "hostile act" by the ESB management, who vowed to fight it tooth and nail. Several managements have recently asked stockholders to vote charter changes that would make such acquisitions more difficult to accomplish against their opposition—in other words, make it more difficult to deprive present officers of their jobs and more difficult for stockholders to obtain an attractive price for their shares. The stockholders, still sheeplike, generally approve such proposals. If this movement becomes widespread it could really harm investors' interests. I hope that financial analysts will form a sound judgment about what is involved here and do what they can to dissuade stockholders from cutting their own throats in such a foolish and reckless fashion. This might well be a subject for the FAF to discuss and take an official stand on.

There is at least a superficial similarity between the prices offered in takeovers and those formerly ruling in the market for the first-tier issues, as represented by "the favorite fifty". The large institutions have acted somewhat in the role of conglomerates extending their empires by extravagant acquisitions. The P/E ratio of Avon Products averaged 55 in 1972, and reached 65 at the high of 140. This multiplier could not have been justified by any conservative valuation formulae such as those we have been discussing. It was not made by speculators in a runaway bull market; it had the active or passive support of the institutions that have been large holders of Avon.

As I see it, institutions were persuaded to pay outlandish multipliers for shares of the Avon type by a combination of three influences: First, the huge amounts of money they have to administer, most of which they decided to place in equities. Second, the comparatively small number of issues to which their operations were confined, in part because they had to choose multi-million-share companies for their block transactions, and partly by their insistence on high-growth prospects. The third influence was the cult of performance, especially in pension-fund management. The arithmetic here is deceptively simple. If a company's earnings will increase 15 percent this year, and if the P/E ratio remains unchanged, then presto! the "investment" shows a 15 percent performance, plus the small dividend. If the P/E ratio advances—as it did for Avon in almost every year—the performance becomes that much better. These results are entirely independent of the price levels at which these issues are bought. Of course, in this fantasia the institutions were pulling themselves up by their own bootstraps—something not hard to do in Wall Street, but impossible to maintain forever.

These institutional policies raise two implications of importance for financial analysts. First, what should a conservative analyst have done in the heady area and era of high-growth, high-multiplier companies? I must say mournfully that he would have to do the near-impossible—namely, turn his back on them and let them alone. The institutions themselves had gradually transformed these investment-type *companies* into speculative *stocks*. I repeat that the ordinary analyst cannot expect long-term satisfactory results in the field of speculative issues, whether they are speculative by the company's circumstances or by the high price levels at which they habitually sell.

My second inference is a positive one for the investing public and for the analyst who may advise a non-institutional clientele. We have many complaints that institutional dominance of the stock market has put the small investor at a disadvantage because he can't compete with the trust companies' huge resources, etc. The facts are quite the opposite. It may be that the institutions are better equipped than the individual to speculate in the market; I'm not competent to pass on that. But I am convinced that an individual *investor* with sound principles, and soundly advised, can do distinctly better over the long pull than a large institution. Where the trust company may have to confine its operations to 300 concerns or less, the individual has up to 3000 issues for his investigations and choice. Most true bargains are not available in large blocks; by this very fact the institutions are well-nigh eliminated as competitors of the bargain hunter.

Assuming all this is true we must recur to the question we raised at the outset. How many financial analysts can earn a good living by locating undervalued issues and recommending them to individual investors? In all honesty I cannot say that there is room for 14,000 analysts, or a large proportion thereof, in this area of activity. But I can assert that the influx of analysts into the undervalued sphere in the past has never been so great as to cut down its profit possibilities through that kind of over-cultivation and over-competition. (The value-analyst was more likely to suffer from loneliness.) True, bargain issues have repeatedly become scarce in bull markets, but that was not because all the analysts became value-conscious, but because of the general upswing in prices. (Perhaps one could even have determined whether the market level was getting too high or too low by counting the number of issues selling below working-capital value. When such opportunities have virtually disappeared, past experience indicates that investors should have taken themselves out of the stock market and plunged up to their necks in U. S. Treasury bills.)

So far I have been talking about the virtues of the value approach as if I had never heard of such newer discoveries as "the random walk", "the efficient market", "efficient portfolios", the Beta coefficient, and others such. I have heard about them, and I want to talk first for a moment about Beta. This is a more or less useful measure of past price fluctuations of common stocks. What bothers me is that authorities now equate the Beta idea with the concept of "risk." Price variability yes; risk no. Real investment risk is measured not by the percent that a stock may decline in price in relation to the general market in a given period, but by the danger of a loss of quality and earning power through economic changes or deterioration in management. In the five editions of *The Intelligent Investor* I have used the example of A & P shares in 1936-1939 to illustrate the basic difference between fluctuations in price and changes in value. By contrast, in the last decade the price decline of A & P shares from 43 to 8 paralleled pretty well a corresponding loss of trade position profitability, and intrinsic value. The idea of measuring investment risks by price fluctuations is repugnant to me, for the very reason that it confuses what the stock market says with what actually happens to the owners' stake in the business.

Let me pass now to the doctrine of the efficient market. I am particularly interested in this because of its negative implications for the work of security analysts generally. The subject is dealt with briefly in my current article in the *Financial Analysts Journal*, but it has such potential importance for this audience that I shall try another crack at it here.

Let me shorten slightly the definition of an efficient market that appears on p. 97 of *The Stock Market* by Lorie and Hamilton. "An efficient market is one in which a large number of buyers and sellers cause the prices to reflect fully what is knowable about the prospects for the companies dealt in." The key phrase for me is "reflect fully." Let us assume first that it means only that the market has and uses all knowable information about every company's prospects, and hence that there is no point for analysts to spend their time trying to obtain additional information. I dissent from that statement to the extent that it would render meaningless the current controversy and concern on the use of "material information", particularly as obtained by security analysts from managements. If in all cases the market already knows and reflects all that is knowable about each enterprise then there should be no such thing as "material inside information."

But that is not my chief quarrel with the concept of the "efficient market." There is a strong implication in the Lorie and Hamilton book that because the market reflects fully all the knowable facts it thereby establishes correct or reasonably correct prices for common stocks. Hence, only the superior security analyst can successfully select the stocks that should be bought or sold. These exceptional people—in the authors' words—"have a quicker and more profound understanding of the economic consequences to individual firms of changes in the economic environment or changes within the firm itself." They have "a rare and valuable talent." I disagree completely with this viewpoint. To establish the right price for a stock the market must have adequate information, but it by no means follows that if the market has this information it will thereupon establish the right price. The market's evaluation of the same data can vary over a wide range, dependent on bullish enthusiasm, concentrated speculative interest and similar influences, or bearish disillusionment. Knowledge is only one ingredient on arriving at a stock's proper price. The other ingredient, fully as important as information is sound judgment. Take Avon Products, which sold at 140 early last year, or $8 billion for the company and under 20—or a mere $1.2 billion—last month. Was the market for Avon "efficient" on both these dates, in the sense that the price reflected "fully and properly" (the latter my addition to the Lorie and Hamilton phrase) the knowable facts. Were the changes in the short period in the environment or the company's prospects sufficient to cut 85 percent from the true value of this highly profitable, well-managed, and strongly-financed enterprise?

Take at the other extreme the large group of stocks selling for less than their working capital. Is the market "efficient" in maintaining these "fire-sale" price levels? Surely it does not lack the essential information about companies. What it does lack is judgment, courage and patience. In situations of this kind lie the best opportunities for financial analysts to prove their mettle.

The value approach has always been more dependable when applied to senior issues than to common stocks. Its particular purpose in bond analysis is to determine whether the enterprise has a fair value so comfortably in excess of its debt as to provide an adequate margin of safety. The standard calculation of interest coverage has much the same function. There is much work of truly professional calibre that analysts can do in the vast area of bonds and preferred stocks—and, to some degree also, in that of convertible issues. The field has become an increasingly important one, especially since all well-rounded portfolios should have their bond component.

Any security analyst worth his salt should be able to decide whether a given senior issue has enough statistically-based protection to warrent its consideration for investment. This job has been neglected at times in the past ten years—most glaringly in the case of the Penn-Central debt structure. It is an unforgivable blot on the record of our profession that the Penn-Central bonds were allowed to sell in 1968 at the same prices as good public-utility issues. An examination of that system's record in previous years—noting inter alia, its peculiar accounting and the fact that it paid virtually no income taxes—would have clearly called for moving out of the bonds, to say nothing of the stock even at prices well below its high of 86. We now have a situation in which all bonds sell at high yields, but many companies have an overextended debt position. Also, many of them do not seem to have sufficiently strong protective provision in their bond indentures to prevent them from offering new debt in exchange for their own common stock. (A striking example is the current bond for stock operation of Caesar's World.) These widespread present maneuvers seem to me to be so many daggers thrust in the soft bodies of the poor creditors. Bondholders can and should take steps, legal if necessary, to protect their interests against such forms of invasion.

Thus security analysts could well advise a host of worthwhile switching in the bond field. Even in the Federal debt structure—where safety is not at issue—the multiplicity of indirect U. S. Government obligations of all sorts, including some tax exempts, suggest many opportunities for investors to improve their yields. Similarly, we have seen many convertible issues selling at close to a parity price with the common; in the typical case the senior issue has offered a higher yield than the junior shares. Thus a switch from the common stock into the senior issue in these cases would be a plain matter of common sense. (Examples: Studebaker-Worthington and Engelhard Mineral preferred vs. common.)

Let me close with a few words of counsel from an 80-year-old veteran of many a bull and many a bear market. Do those things as an analyst that you know you can do well, and only those things. If you can really beat the market by charts, by astrology, or by some rare and valuable gift of your own, then that's the row you should hoe. If you're really good at picking the stocks most likely to succeed in the next twelve months, base your work on the endeavor. If you can foretell the next important development in the economy, or in technology, or in consumers' preferences, and gauge its consequences for various equity values, then concentrate on that particular activity. But in each case you must prove to yourself by honest, no-bluffing self-examination, and by continuous testing of performance, that you have what it takes to produce worthwhile results.

If you believe—as I have always believed—that the value approach is inherently sound, workable, and profitable, then devote yourself to that principle. Stick to it, and don't be led astray by Wall Street's fashions, its illusions, and its constant chase after the fast dollar. Let me emphasize that it does not take a genius or even a superior talent to be successful as a value analyst. What it needs is, first, reasonable good intelligence; second, sound principles of operation; third, and most important, firmness of character.

But whatever path you follow as financial analysts, hold on to your moral and intellectual integrity. Wall Street in the past decade fell far short of its once praiseworthy ethical standards, to the great detriment of the public it serves and of the financial community itself. When I was in elementary school in this city, more than 70 years ago, we had to write various maxims in our copybooks. The first on the list was: "Honesty is the best policy." It is still the best policy, as our new President reminded us last month.

THREE SIMPLE METHODS OF COMMON-STOCK SELECTION

Benjamin Graham

At the outset I must apologize to all of you, and especially to the other speakers, for the lack of congruence, even for a basic contradiction between my material and the general theme of this seminar: "The Economic Framework of Investors." What I shall have to say will have little or nothing to do with economics in the usual sense of the term.

This paper will discuss the results of a rather extensive investigation of the behavior of common stock prices in the past fifteen years. The study was inspired by my observation that during this period the most impressive characteristic of the stock market was the wide amplitude and the repetitiveness of price fluctuations in the typical NYSE issue.

In the 1973 edition of *The Intelligent Investor,* I illustrated this point by data on McGraw-Hill stock, pointing out that in every two-year period between 1958 and 1971 the shares had either risen or declined by at least a third. (Several of the fluctuations were more than 100 percent, and they have continued throughout the past three years—mostly downward, of course.)

The question presented itself whether some simple method or methods could have been devised for taking profitable advantage of these up-and-down movements of the majority of listed issues. Such an approach should have had three main characteristics: (1) a logical theoretical basis; (2) simplicity of application; and (3) a satisfactory financial result when applied over a long-term period, including the generally unrewarding years 1960-1974.

I was encouraged to pursue this research ~~by my own ex~~perience as an investment fund manager in the 35 years, 1923-1957. One of the mainstays of our operations was the rather undiscriminating purchase of common stocks at a price below their net-current-asset value, and later sale, typically at prices to yield a profit of 20 percent or more per annum. Our portfolio often included more than 100 of such bargain issues at a given time; fully 90 percent of these returned satisfactory profits over the three and one-half decades.

In the long bull market that began in 1949 such opportunities became increasingly scarce, and finally all but disappeared. (This was one of the reasons for our terminating the Graham-Newman Fund.) As you all know, the market decline of 1973-74 again produced an abundance of such "bargain-basement" or "fire-sale" issues. I have no doubt that their purchase now, on a diversified basis and without the addition of detailed analyses or forecasts, will prove eminently profitable in the next few years, as it always has in the past. While this approach does certainly meet our three requirements of logic, simplicity and good performance, I must hesitate to recommend it at this moment as a "standard" or unique method for purchasing common stocks in, say, the next fifteen years; because the market record of 1960-1972 offered too limited a selection of such issues to encourage the hope that they will be sufficiently plentiful in the future to permit continuous operations by large numbers of security analysts.

Nonetheless, could we not identify other simple criteria for attractive buying levels that could have been exploited with good results in the past decade or more and which presumably should prove equally rewarding if the stock market is destined to fluctuate in the future pretty much as we have seen it fluctuate in the past?

I could easily name five such criteria which might be applied singly or in combination. These would be: (1) an attractive P/E ratio; (2) an attractive dividend yield; (3) a price below book value or, say, at two-thirds thereof; (4) a price well below its previous high; and (5) an attractive price in relation to the past earnings growth.

As I envisage it, the method of application of the criterion adopted would be as follows: (a) a portfolio of, say 30 issues, would be chosen more or less at random from among all those meeting the specific criterion used; (b) a target profit within a target holding period would be set for each individual portfolio issue; and (c) all the issues in the portfolio which are not disposed of at the designated target profit would be sold out at their market price at the end of the maximum target holding period.

The choice of the specific methods used to test this approach must necessarily be more or less arbitrary. For reasons which you should readily understand—if not agree with—those methods I used in my tests were the following: The target profit in all cases was fifty percent above cost, to be attained within two years. The Earnings-Price ratio required

for purchase under criterion (1) was twice the last twelve month's yield on Moody's Aaa bonds, but never less than ten percent. In 1959, for example, Aaa bonds yielded only 4.12 percent; hence my buying price level for stocks in 1963 was the full 10 times their previous or current twelve month's earnings per share (i.e., an E/P ratio of no less than ten percent). By contrast the Aaa average yield for 1973 was 7.5 percent. Hence the E/P ratio for purchases made in January 1974 would have been no less than 15 percent, or a P/E ratio of no greater than 6.7. My target holding period ends at the close of the second calendar year after purchase. (2) For the second criterion, all stocks selling below book value would have been available for purchase. (I have made some alternative tests based on a price requirement of less than two-thirds of the preceding year's book value. Such issues were avai' in sufficient number in 1973 and 1974.) Finally, (3) for my pre arket price criterion I took a current price of one-half the high o ous two calendar years.

My tests did not include the dividend return or earnings growth, primarily because the d available was not in a form permitting the ready application ments. (But I think also that any criterion based solely on eld should produce results paralleling fairly well those from tests.)

My research project pro g two basic lines. First, I confined myself to the P/E crite isted from a rapid perusal of *Moody's Handbook* all the insta issues were available at my required multiplier of current igs, and applied thereto my technique of purchase and sale. (f differences between using current and previous year's earni t important.) This gave me a total of about 900 assumed tran which about half were sold at a profit of 50 percent within th ear; about 17 percent sold in the second year, and the rest dis orce at the end of the second year. Only 63 of these showed than 10 percent, as against 686 yielding significant profits.

My second approach extend to the two criteria of market price below previous year's book va arket price at half the high of the previous two years. This was don osing for each year between 1960 and 1972 otherwise random po of 30 stocks meeting each of my three criteria. This gave me 13 pc based on earnings, 13 based on previous highs, and nine based o value, for which my figures begin in 1964.

Table 1, presented below, shows ults of 35 of these imputed portfolios, covering 1050 issues, beg n 1960 and ending with the

1972 operations regretfully closed out at the end of a depressed market in 1974. I add some interim results for assumed purchases in 1973 and 1974, and these must be regarded as still pending until terminated in December 1975 and 1976. Equal dollar commitments have been assumed for each issue bought; the overall percentage result was calculated for each 30-stock portfolio, and this in turn reduced to an annual basis by dividing the total percentages by the average holding period in years; the latter tended to run between one and one-half and two years for nearly all the portfolios. (Some additional portfolio tests have been averaged in with the basic 35 covering the 13 years described. Table 1 compares the indicated annual results with those shown by the Dow Jones Industrial Average and by the Value-Line Composite Index; these were assumed to be bought each January 1, and sold out two years later. Dividends received and brokerage commissions paid have been disregarded; they should add about three percentage points to the annual profit rates as shown.

Let me comment briefly on the results shown in Table 1, first in terms of the figures, second in terms of the fundamental differences between our present approach and that generally followed by financial analysts in their portfolio selections, and third in terms of their possible implications for both the professional investor and the lay investor.

The annual percentage results shown in the table appear to me at least modestly satisfactory in themselves—though not loss-proof in severe bear markets—and quite impressive when compared with the DJIA figures and especially those of the comprehensive Value-Line Composite Index. By any of our simple methods the investor could have averaged five percent to fifteen percent greater than in a typical NYSE random portfolio. The use of the P/E-ratio-approach in our group purchases would have worked out quite a bit better than either of the other criteria. It would have given an average return of some eighteen percent, including dividends, for the thirteen years 1960-1973. But the 1973 portfolio shows a loss of some twenty-five percent to the end of 1974, about the same as the Dow. This decline could have been reduced to about fifteen percent, less dividends, if each individual issue had been required to meet all our three criteria to qualify for purchase. Similarly, a portfolio acquired in 1974 would have shown a shrinkage of only seven percent or less to the end of the year, if all three criteria had been imposed. It is reassuring that not only the 1974 losses but the 1973 shrinkage as well would have disappeared in the market rise to March 7 last.

TABLE 1

ANNUAL RESULTS OF COMMON STOCK SELECTIONS IN 1960-1974 BASED ON ONE TO THREE CRITERIA, COMPARED WITH THE DJIA AND THE VALUE-LINE COMPOSITE

(DIVIDENDS AND COMMISSIONS OMITTED)

Year of Purchase	P/E Ratio Criterion	P/E Criterion: Annual Results	Previous High Criterion: Annual Results	Book Value Criterion: Annual Results	DJIA Annual Results	Composite Index Value-Line Annual Results
1960	10.0x	+11.1%	+ 8.7%	—	+ 4.0%	—
1961	10.0x	+10.4	+ 3.0	—	+ 3.0	—
1962	10.0x	+17.6	+11.0	—	+ 2.0	- 1.0%
1963	10.0x	+21.0	+12.5	—	+16.5	-12.3
1964	10.0x	+16.0	+13.5	+ 2.1%	+13.5	+17.0
1965	10.0x	+20.0	+16.0	+11.9	- 5.0	+ 2.1
1966	9.7x	+23.0	+36.0	+19.0	- 3.5	+ 5.9
1967	9.0x	+31.2	+26.0	+26.0	+10.0	+27.6
1968	8.0x	+ 0.9	+ 1.5	+ 4.1	- 5.5	- 6.5
1969	7.1x	+ 3.4	+ 1.1	+ 0.7	- 5.5	-22.0
1970	7.0x	+35.0	+ 6.3	+16.0	+ 5.5	- 7.8
1971	6.2x	even	- 1.5	- 7.9	+10.0	+ 5.5
1972	6.8x	+ 4.3	-12.0	-22.0	-19.5	-22.0
1960-72 Annual Average		+14.9%	+ 9.7%	+ 7.7%	- 8.5%(6)	-53.0%(6)
1973 (1½ yrs.)	6.7x	-25.0%(1)	-25.0%(2)	-25.5%(3)	-19.0%(2)	-29.0%(2)
1974 (1 yr.)	6.5x	-23.0%(5)	-11.8%	-28.8%(4)	-27.6%	-34.2%

(1) If all 3 criteria were applied in 1973, result to December 1974 would be -14.7%.
(2) Result from June 1973 to December 1974, annual basis.
(3) If bought at 2/3 book value, result would be -19.0% per annum.
(4) Assuming purchases at 2/3 of 1973 book value.
(5) If all 3 criteria were applied in January 1974, result to December 1974 would be -6.5%.
(6) Overall decline from January 1960 and January 1962 to December 1974.

Mr. Irving Kahn, C.F.A., has kindly supplied me with price and earnings material for the years 1951-1960, enabling me to apply two of my criteria to that earlier decade (book-value data were not included). The partial tests I made for the period gave encouraging results from the two approaches—surprisingly good ones in fact from purchases at half the previous two-year highs. Two such tests covering about 300 purchases in various years indicated profits of twenty percent and twenty-seven percent per annum, exclusive of dividends. For individual years the results sometimes failed to equal the large rises of the Dow in that heady bull market; and there were also indications that better results would have followed from confining purchases to stocks paying dividends. Overall, however, the combination of wide individual fluctuations with the general upswing in the decade did provide an excellent milieu for simple operations of our type, with results that should have satisfied all but the impatient and over-greedy. Overall, therefore, my tests cover a period of just twenty-five years in the past.

Nevertheless, to most, our techniques themselves must seem too simple to be convincing. They involve no forecasts of the economy or of the stock market, and no selectivity among industries and individual companies. The sole reliance is placed on a single criterion of price attractiveness, applied indiscriminately on a group basis. Let us take a moment to compare "portfolio construction" by our approach with that of the well-known Markowitz-Sharpe technique, known in financial literature under the title of "efficient portfolios." Following our prescription, nothing could have been simpler, in almost any year, than to pick out from Moody's or Standard & Poor's or the Value-Line services an otherwise random portfolio of common stocks selling at less than half their high prices of the two preceding years. (But in some years the high level of the market made such low price relationships hard to find in sufficient quantity.) The other two criteria are also relatively easy to apply by mere inspection of the figures—no computer work is necessary.

On the other hand, the Markowitz—Sharpe approach requires that the security analyst estimate for a given universe of common stocks both the profit potentially and the risk of price decline—otherwise disguised as our friend the "beta"—for each component issue. According to their theories, it would then be possible for a computer to select the portfolio of any convenient size that offers the best percentage of profit for a pre-accepted risk factor, or conversely the one that offers the lowest percentage of expectable downward price

movement for a pre-selected level of anticipated profit. The method is indeed highly mathematical and complicated enough to require twenty pages of description and discussion in Lorie and Hamilton's recent book, *The Stock Market.* But proponents and discussants alike do not seem to have realized to what extent the application of these methods depends on fallible human estimates and judgments of both expectable profits and anticipable price declines of many individual issues.

Self-respecting security analysts should be dissatisfied with my own three approaches in the bare-bones form in which they have been presented. Most would be sure that they could have gotten better results than my calculations show by adding either a little or a lot to the procedure I followed. The first question one is likely to ask is: "Why limit ourselves to just one criterion for stock selection? Why not require that the portfolio issues meet all three or at least two of our conditions for purchase? Again one may ask why I have not tested out other logical criteria, such as a minimum dividend return—presumably in relation to going bond-interest rates—or a minimum rate of past earnings growth—as set forth, say, in the Value-Line analyses—or, thirdly, some relatively simple tests of financial strength, etc.

I have indeed made some supplementary tests of the first kind, which combined two or more of my criteria, but the results before 1972 were not persuasive. In 1962 for example, my 10X earnings criterion would have produced an annual profit rate of twenty-one percent while our 30-stock portfolio bought at half the 1960-1961 high prices yielded a corresponding gain of 12½ percent. A third group that met both of these tests would have shown a profit of thirty-two percent, excluding dividends, over an average holding period of 1.7 years, thus averaging an in-between annual rate of 18.3 percent.

However, as Table 1 shows, the temporary bad results of 1973 and 1974 could have been appreciably improved by insisting that each portfolio stock meet all three of my criteria, and by setting the book-value test at two-thirds thereof, instead of 100 percent, as heretofore.

What I have been presenting so far is by no means a single cut-and-dried method for buying and selling common stocks—though it could easily be reduced to so narrow a scope. But the very fact that my research has been carried out on a three-pronged basis should suggest that there is an ample field there for additional studies by the body of financial anlaysts, and thus for a variety of individual judgments as to the most appealing criteria and other parameters—to use a now fashionable word—for this type of investment technique.

Early in 1975 it would have been possible to find a large number of common stocks, each meeting an assortment of quantitative criteria. Let me enumerate the following seven (1) A price under 5.3X last twelve months' earnings. (This would represent our standard requirement of an earnings yield twice the current Aaa bond rate of 9½ percent. (2) A dividend return of at least six percent. (This is an arbitrary figure, and may appear too low to some of you compared with bond yields.) Experience shows that the dividend return usually plays a small part in the overall results of a less-than-three-years' holding of common stocks—which our method prescribes—except to the important degree that rate changes may influence the price movement. (3) A price less than half the 1972-1974 high. This is readily obtainable and corresponds to one of our single criteria. (4) A price less than two-thirds of book value. The figure is set at this large discount first because it is now readily obtainable, and second it suggests the appealing technique of buying at two-thirds of book and selling within, say, two years at 100 percent of book—for a 50 percent-plus profit. (5) A satisfactory past growth rate—as measured simply by 1974 earnings at least twice those of 1964. About half the NYSE issues would meet this criterion. (6) A sound financial condition from the standpoint of debt. I apply this by requiring that each company pass at least two of the following three tests:

(6a) Current Assets = 1.9X Current Liabilities.

(6b) Current Assets = Current liabilities plus debt.

(6c) Stock equity (including preferred stock) = Current liabilities plus debt.

About half the NYSE list met two of these requirements, based on their 1973 balance sheets.

(7) Earnings stability, as shown by both of the following:

(7a) No deficit in the 1965-1974 decade.

(7b) Not more than two years of decline in per share earnings—five percent or more—in the ten years of 1965-1974.

I applied these seven criteria at the close of 1974 to four random samples aggregating 100 NYSE issues. The number meeting each requirement ranged from a minimum of fifty percent to a maximum of eighty percent. What is most interesting perhaps is that thirty-two issues met all seven criteria—indicating that some 500 listed issues in all would have been available for such further selective processes as you analysts would insist upon. Hence, these could have offered as many as seventeen 30-stock portfolios—all different. In the aggregate, portfolios of this kind should prove statistically almost fool-proof, and they all promise a satisfactory rate of return over the next two years—unless the economic sky actually falls down upon us, as a few Cassandras are predicting, not without their disquieting arguments. On this crucial point it seems to me that we might as well base our investment policy on the assumption that now—as always in the past—the bear market and the recession-depression will prove temporary, and offer more opportunities than risks to those who do not borrow money to buy stocks. I see no clear alternatives to such a combination of courage, optimism, and patience.

Returning for a moment to the idea of buying stocks below their working-capital value—with which I began this paper—I have a compilation that lists as many as 600 such opportunities taken from the S&P Monthly Stock Guide at 1974 year-end—about one company out of six in the booklet. More than half of these were selling at two-thirds or less of net-current—asset value, and also more than half at less than five times last twelve months' earnings. Of the two latter bargain categories about 100 were listed on the NYSE, and 31 of these were available at both less than two-thirds working-capital-value and less than five times earnings.

At the market level of December 1974, security analysis had become almost a superfluity. The selectivity-element might pretty well have been limited to the factor of financial strength or credit risk; beyond that it was by no means clear to me that even my seven criteria could be expected to yield results significantly better than any purely-random 30 stock portfolio—chosen by the so-called dart-throwing method assumed often by academics of the "efficient market" or anti-security analysis school.

A basic question raised in this paper is not whether elaborate security analysis is required for common-stock selection under 1974-1975 conditions—to which my answer would be no—but rather the extent to which the simple approaches expounded today could be expected to prove rewarding to the stock markets of the future—say of the next 10 or 15 years—which will make up a significant part of the working careers of those in my audience. Those of you who have been following this presentation closely will have adduced that my attitude partakes of both the negative and the positive on the need for elaborate security analysis. I do not have much confidence in the practical worth for most analysts of detailed studies of individual companies, with emphasis placed either on their comparative past performance or on predictions of their relative future performance over a one-to-five-years time span.

My reputation—such as it is, or perhaps as recently revived—seems to be associated chiefly with the concept of "Value." But I have been truly interested solely in such aspects of value as present themselves in a clear and convincing manner, derived from basic elements of earning power and balance-sheet-position, with no emphasis at all placed on such matters as small variations in the growth rate from quarter to quarter, or the inclusion or exclusion of minor items in calculating the so-called "primary earnings." Most significant here, I have resolutely turned my back on efforts to predict the future.

To that extent I share the scepticism expressed by the "efficient market" theoreticians as to the ability of all but very superior security anlaysts to do a good job of individual stock selection. But this is far from saying that I think that individual stock prices reflect in general and under most conditions the "fair value" of each issue. On the contrary, my present emphasis on the tendency of most stocks to fluctuate widely and often wildly in price over the years should show my conviction that stock prices are often out of line with their fair or intrinsic values.

I see no reason to expect the disappearance or any great diminution of the age-old tendency of most common stocks to move up and down over a wide percentage range: I deem this a consequence of the psychological or rather the pathological nature of stock speculation. Nor have there been any signs that the institutional dominance of the stock market in the past decade has tended to lessen the amplitude of these fluctuations. We cannot predict the overall performance of common stocks in the next fifteen years—the exhilarating achievement of better than fifteen percent per annum for 1944-1959 was followed by practically a zero performance in 1960-1974. But in both the rewarding and the disillusioning periods the bulk of individual issues persisted in their wide upswings and downswings. It is happening once

again in the current market. (The zebra will grow older but will not change his stripes.)

Coming back in conclusion to stocks selection in future years let me make two undeniable assertions: The first is that the behavior of stock prices in the past fifteen years and more does indicate that relatively simply criteria of purchase and sale could have been applied on a group basis with satisfactory results throughout this period, except naturally in 1973 and 1974; secondly, if the general character of future common-stock movements will resemble basically that of the past, in their tendency to move up and down, then there is good reason for financial analysts to develop and apply systematically—each in his individual fashion—the type of investment policy I have discussed today.