A QUESTIONNAIRE ON STOCKHOLDER-MANAGEMENT RELATIONSHIPS

BENJAMIN GRAHAM and DAVID L. DODD

In June 1947, the writers of this report, at their expense, sent of the N.Y.Society of Security Analysts, comprising a questionnaire to the members seven questions on Stockholder-Management Relationships.* A total of 573 replies was received. It is our intention to include the results of this questionnaire in a comprehensive revision of our textbook "Security Analysis", upon which we are now engaged. of N.Y.S.S.A. The members/may be interested in the following discussion of the various questions and of their answers thereto.

Question 1 -Do you believe that the competence of management is a practical consideration in the selection of securities?

Replies - Yes 558
No 14
No answer 1

Discussion:-The keyword in the question is "practical". Everyone will agree that the competence of the management has a most important effect upon the success of any stock investment. But can that competence be appraised by a security analyst in such wise as to enter into his selection of common stocks? The analysts themselves have answered overwhelmingly in the affirmative. Clearly, they do try to form some idea of management competence in their practical work of analysing securities.

Question 2 -Of 100 listed companies taken at random, about what percentage do you think would have a fully satisfactory management?

The replies covered a wide range, and are summarized as follows:

*The questionnaire was sent out at our expense.

Per cent "Fully Satisfactory"	Replies
0 - 25%	142
26%- 50%	143
51%- 75%	140
76%-100%	61
	486
No estimate	87
~~Total Replies~~	~~573~~

The mid-point of the estimates is slightly under 50%.

Discussion: -Most of the analysts were willing to express some idea, admittedly rough, of the prevalence of good or poor management. We used the phrase "fully satisfactory" without explanation. In our view the management would be "fully satisfactory" if no concrete criticism could be offered against it. Those not entirely satisfactory might deserve to be retained, but presumably their methods could be improved upon. The replies show a very wide variation in the view of our members as to the prevalence of "fully satisfactory" managements. Regardless of just how the phrase might be construed, the median figure of under 50% would seem to signify that in the minds of security analysts there is wide room and perhaps need for changes in managerial methods or personnel. If the analysts are right on this point, then it would seem that stockholders, as the owning groups, should interest themselves actively in the question of managerial competence. Where it seems to be lacking they should take whatever steps are reasonably appropriate to improve the situation.

In the opinion of the writers, if as low as 10% of the corporate managements are unsatisfactory, it would mean that the issue is of real significance in the investment field.

Question 3 -Do you favor cumulative voting for Directors?

Replies -		
	Yes ~~345~~	349
	No ~~164~~	169
	No answer ~~64~~	55

Discussion: Cumulative voting is one means by which a fairly large minority group of stockholders can exercise some part of the managerial function by securing representation on the Board of Directors. A few states - e.g. Pennsylvania, Michigan - have made cumulative voting a mandatory privilege; in most others it may be provided for by inclusion in the By-laws. If the majority view of our members on this point is sound, stockholders would be well advised to move for cumulative voting in their respective corporations. The procedure would be to introduce a resolution to that effect at an annual meeting.

Question 4 -Do you believe that a majority (or a substantial minority) of the Directors of the typical corporation should be independent of the operating management - in particular, that they should not be recipients of salaries or other substantial income from the corporation?

Replies -

Yes	291	A majority	291
No	80	A substantial minority	120
A substantial minority	120	Neither	80
No answer	82	No Answer	82
Total -	573		

Discussion:- Critics of our corporate machinery often contend that the typical Board of Directors, while in theory the selector and appraiser of the operating management, does not in fact exercise independent judgment in this field. This is clearly the case where the officials themselves constitute a majority of the Board, or where the majority is made up of themselves and other directors closely associated with them by ties of friendship or function.

Our question proposed a fairly radical solution of this problem, by making the majority of the Board independent of the operating management. As an alternative we suggested a substantial minority rather than a majority. Since three replies were possible, there

was a wider distribution of answers to this question than to the others. About half voted in favor of a majority of independent directors, and more than 2/3 preferred either a majority or a substantial minority. ¶ In the writers' opinion, the prevailing view here is eminently sound. It would be appropriate for stockholders to move to change the setup of many corporations so as to provide a majority - or at least a substantial minority - of independent stockholder directors. We do not imply that when the officers dominate the board the result is always unsatisfactory to the shareholders. On the contrary, a number of our most successful corporations have had such an arrangement. But certainly these companies would not have been hurt by the presence of several representative outside stockholders. And many relatively unsuccessful corporations might have greatly benefited by the injection of new and independent thinking into their boards. ¶ On this point we should like to quote from a letter sent us in answer to our questionnaire by a member holding a high position in one of our leading banks:

> "It is my opinion that the primary job of a director is to see that there is good management. If a majority of a board are members of the management, that makes it self-perpetuating and it is impossible to get rid of a management that is bad. I think it is extremely important that a majority of a board should be independent of the operating management. However, they should have salaries in an amount that would make it possible to attract the right kind of men to those boards and to compensate them adequately for the risks they take as directors. It is becoming more common every day to pay directors salaries up to $5,000 and in some cases as high as $10,000."

¶ The suggestion that a fair-sized annual salary be paid to independent directors was made in several of the replies. Such compensation would ordinarily not be so substantial as to make the directors the equivalent of additional operating personnel.

Question 5 -If a company's average earnings fail to show a reasonable return on the stockholders' equity, and if they are substantially lower than in the industry as a whole, do you believe that this fact calls for inquiry by shareholders?

Replies -		
	Yes	539
	No	18
	No answer	8

Discussion:-This question shifts our emphasis from the makeup of the management to measuring its results. If poor management is to be improved upon, it must first be identified as poor. The test given in our question affords prima facie evidence of the need for improvement. We did not suggest that if the results are bad the managers should be changed - as usually happens in baseball - but only that the owners then proceed to look carefully into the question.

The overwhelming vote in favor of an inquiry by shareholders, in such cases, might seem a bit surprising when we reflect that such action is almost unheard of in practice. In our view this vote is perhaps the most significant in the questionnaire because it highlights the wide gulf between what should happen and what does happen in stockholder-management relationships.

Machinery for setting up such an inquiry by shareholders is readily available. As in the case of cumulative voting, all that is needed is an appropriate resolution at an annual meeting. The resolution should call for a study of the managerial methods and general efficiency of the management to be made by established experts in the field, who should report directly to a committee of independent stockholders named in the resolution.

If the security analysts would support stockholder efforts of this kind in practice - as they apparently favor them in theory - it would not be long before this technique is widely adopted as a means of improving the position of the stockholder ownership interest.

Question 6 -Do you believe that it is the duty of the Directors to pay such dividends, within the average earnings of the business, as will be reasonably commensurate with the intrinsic value of the shares, as they determine such value?

Replies - Yes 329
No 162
No Answer 74

Discussion:-One source of complaint by stockholders is inadequate dividends. The management invariably justifies a niggardly dividend on the ground that the Company and the shareholders will benefit from keeping the earnings in the business. Our question suggests as a simple criterion of proper dividend action that, where earnings are large enough, the stockholders should receive a dividend commensurate with the value of their investment. Under present conditions, an appropriate rate would be not less than 4% upon such value. Since the latter term is subject to much argument, our question suggests that the Directors form their own idea of the value of the enterprise and then do their best to keep the dividend policy reasonably in line with that value.

A number of replies remarked that dividend policy must take into account the Company's financial position and needs as well as its average earnings. This is undoubtedly true. A weak financial position clearly calls for conservatism in dividends. But the real controversy generally arises when the management has expansion in mind. The stockholders might well contend that such expansion would be better financed through the sale of additional stock rather than by withholding dividends, since the latter choice often condemns their shares to both an unduly low income and an unduly low market price. Which policy should be followed to finance expansion will depend on the particular case. But it would be of advantage to stockholders for Directors to be guided by the premise that they should pay a reasonable dividend on the reasonable value of the stock unless compelled to act

otherwise by conditions which left them no sound alternative. *

Question 7 -Do you believe that it is the duty of the management to transmit to stockholders any offer to purchase a substantial number of shares at more than current market price?

Replies - Yes 477
No 67
No Answer 21

Discussion:-One way of improving unsatisfactory management is thru acquisition of control by new interests. They are sometimes willing to pay well above the market for such control, especially since the market might be quite depressed because of the shortcomings of the incumbent management. Our members take what seems the obvious view that every stockholder is entitled to decide for himself whether or not to accept such an offer for the shares. Yet managements have been able to find legal sanctions for their refusal to make such offers available to the owners of the business. As in other matters covered by this questionnaire, the difference here between the opinion of the security analysts and what actually happens indicates clearly that stockholders should wake up.

* Cf. The following from the Wall St. Journal of August 7, 1947, in discussing stockholder relations: "Company officers privately tell Exchange representatives that the best stockholder relations are steady dividends at a satisfactory rate" (Italics ours).

B.G. found that trends did not continue for any great length of time.
When sales go up there is a tendency for the profit margin to rise at least immediately. Kroger the other way around.
Companies always seem to adjust themselves to a larger amount of business ultimately in such a way that they don't make any more profit per dollar on the larger business than they used to make on the smaller.

Next question is the multiplier we would apply to expected future earnings of $1.70 on this company(Barker). Suggestion that shares of smaller companies occupying a secondary position and with records that are not satisfactory when you study them over a period of years - those companies should be valued on a fairly modest basis and I would be inclines to think that a multiplier of 12 would be as high as you would be likely to give and on that basis you would get a valuation of this company between 20 and 21 without any allowance for the asset component or consideration. Selling at moment above this value (1/17/47).

Valuation of this company is on conservative side- when we valued Dow Jones average we tended to get a value higher than the market price. This shows that secondary companies do not show up as well in this method of analysis.

Then compared Barker Bros to mandel Bros. Mandel 18½ million sales on an average before the war (profit margin very low). 27 million during war. 30 million post war. Feels profit margin should be better. Compares current earnings.

Word or two on asset component on earning power valuation. Don't want to stress it too much as it is not customarily used and we have no particular reason for believing we are right For the record B.G. indicates how he feels). If the earning power value exceeds the asset value some reduction should be made for that fact. We suggest 1/4 of the difference be taken off. Arbitrary figure. If difference is great adjustment more important.

Where the assets exceed the earning power we do not value the company upward because we are not very much impressed by assets that do not have earning power.

There is one rather important difference there and that relates to working capital. When the working capital exceeds the earning power value, we are impressed by experience to believe that there is some significance in that fact and in summary fashion we are inclined to add 1/2 of the difference to the earning power value to allow for the excess working capital which in some way or other tends to make itself felt over the years. Sometimes you get it in a distribution; sometimes you get it in sale of the property; sometimes you get it because the company changes its policy and is able to use its working capital more effectively than otherwise. He is not inclined to stress that technique of analysis too much. (nowtakes stock in what we are trying to do in these lectures).

We discussed first- The market market behavior in general in the years 1941-45 in relation to economic changes that affected security values. We considered new factors that were involved in the correct statement of the results that an individual company may have achieved during the war and post-war periods. And then we have just recently finished our discussion of the technique of valuing companies, based upon the capitalization of earning power and with a minor adjustment for the asset picture.

Scope of the analysis activities in the securities markets and his approach to his function of analyzing securities and drawing conclusions from his analysis.

Two fundamentally different approaches that the analysit may take to securities as a whole

1. The conventional one-- that is based primarily on quality and on prospects.

2.The penetrating one and that is based on value.

The conventional one isdivided into 3 separate ways of dealing with securities.

A. Identification of good stocks ie; Strong stocks, strong companies, well-entrenched companies or high quality companies and those companies presumably can safely be bought at reasonabl prices. This seems like a simple enough activity.

B The selection of companies which have better than average long-term prospects of growth and earnings. They are generally called growth stocks.

C. An intermediate activity which involves the selection of companies which are expected to do better business in the near term than the average company. All 3 of these activities I call conventional.

The second approach should be divided into 2 sub-classifications of action.

A. The purchases of securities generally when the market is at a low level as the market is considered by analysts.

B. The purchase of special or individual securities at almost any time when the price appears to be well below the appraised or analyzed value.

XB AN APPRAISAL OF THE APPRAISERS THEMSELVES (B.G)

A is the most useful of the conventional approaches as long as a conscientious effort is made to see that a good stock is not selling above the range of conservative value. Investors do not make mistakes or bad mistakes in buying good stocks at fair prices. To see that good companies and their prices are on the whole reasonable is their job and also x

of established investment counsel and it accounts for their ability to survive in spite of the fact that they are not in a very easy kind of business.

Getting into type B is more interesting and difficult ground. For a long while selection of growth stocks was the best regarded type of activity of analysts.

It is questionable whether you can establish a technique and transmit it to someone else. B.G. thinks at bottom success of identification of growth stocks comes from being smart or shrewd and doesn't consider it a standard quality of a good security analysis to be smart or shrewd. Doesn't seem to him to fit into the general pattern or canon of security analysis to require these rare qualities.

Security Analysts should be required to be wise in the sense that his is technically competen that he is experience and that he is prudent. Doesn't think this type of wisdom is adapted for selection of growth stocks.

Third activity of conventional sort. This is done most day by day in Wall St. operations. The trade investigation which leads one to believe that this industry or company is going to have an unusually good year in the next 12 months and therefor should be bought. He is most skeptical of this Wall St. activity probably because it is the most popular form of passing the time of the Security analyst. Regards it as NAIVE in the extreme.

To carry conventional lines of activity and analysis it is necessary that you impose some fairly obvious but nonetheless rigorous conditions on your own writing and recommending. If you select good stocks, determine and specify that the price is within a range of fair value. If you select growth stock determine and specify the round amount which the buyer at the current price is already paying for the growth factor as compared with its reasonable price if the growth prospects were only average. Then determine and state whether in the analysts judgment the growth prospects are such as to warrant the payment of current price by a prudent investor.

See statements of that kind made in the security analysis and in circulars. In recommending a stock for its near-term prospects determine and state whether in the analysts judgment the market price and its fairly recent market action has reflected the expectations of the analyst.

Near term valuation one or two years.

Unconventional or penetrating type of analysis which emphasizes value.

First division represents buying into the market as a whole at low levels-- that is copy book procedure.

Formula. Industrial Production times Consumers purchasing power equals Income Payments

B.G.s formula for measuring chance of sucess of special situations. Judgment a factor.

G equals Gain in points if successful
L equals loss in points if unsuccessful
C equals Chance of success in %
Y equals Time of holding in years
P equals Current Price

Metropolitan West Sides at 25.

Indicated Annual Return equals $\frac{GC - L(100-C)}{YP}$ $\frac{9 \times 75 - 6 \times 25}{1 \times 26}$ equals $\frac{525}{26}$ equals 20.2%

Some more publications that I have not read

Unorthodox Investment G(erald) M Loeb Barrons Book Dept
Realistic Speculation " " " "
Common Speculation by the Trader(Harry Nelson) Barrons
Investment for Appreciation L.L.B.Angas Somerset Publishing Co
The Dow Theory by Robert Rhea
Stock Market Theory & Practice by Shabacker By Forbes Publishing
Security Analysis Graham & Dodd McGraw Hill
Interpretation of Financial Statements Graham & Meredith
10 Lectures Current Problems in Security Analysis.

Railroad calculations

The most conservative way to determine earnings protection for a railroad bond where net after taxes(railway operating income) is greater than amount available for fixed charges(gross income) is:

(a) Divide the amount available for fixed charges by the amount available for fixed charges minus net income
(b) Divide net after taxes by the net after taxes minus net income Question ?

If net after taxes(Rway Oper Income) exceeds Gross income (net after rents plus other income) use this figure in calculating fixed charges called the net deductions method.
Subtract net income from net after taxes to get fixed charges.
Subtract net income from gross income to get fixed charges. See Security Analysis.

Low market in relation to the past pattern of the market and by simple valuation methods such as the type we have been discussing. A good analyst doesn't change his concept of what the earnings of the next 5 years are going to be because the market changes. His views of averag future earnings would change only because he is convinced that there has been some change in underlying factors of a very significant sort.

An example is the Yale University method.

Good to buy undervalued securities. One proviso don't buy them when the general marke seems very high.

A cheap stock tends to decrease along with the popularity of others when the stock market falls. Lower prices stocks lose more percentagewise than the high prices ones. Field of undervalued securities is popular at all times.

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MONEY AS PURE COMMODITY

By BENJAMIN GRAHAM
New York City

Money has the aspect of "pure commodity" insofar as it consists of or is backed by one or more commodities with substantial intrinsic value. From the earliest times, money has derived either all or a good part of its value from its physical or legal relationship to monetary commodities, usually gold or silver. More recently it has appeared, conversely, that a good part of the value of both silver and gold is derived from their status as monetary metals. This latter fact suggests that a new stage in monetary technique may be appropriate, in which monetary status and pure commodity value are made reciprocally beneficial. That is, money will be benefited by commodity backing and commodities will be benefited by monetary status.

Historically, money's identification with pure commodity values falls into three stages: being first complete, then partial or fractional, and then completely absent.

The first stage is characterized by Aristotle's statement that "the substance of money should be something which is intrinsically useful and easily applicable to the purposes of life—for example, iron, silver, and the like."[1]

The emergence of gold as the primary monetary commodity, and the defeat of its rivals, seems to be associated historically with a gradual loss of emphasis on its pure commodity aspects, and its assumption of what R. H. Brand called "a certain mystic quality."[2] Thus through the ages gold appears to have transformed itself slowly from pure commodity into pure money—from the physical to the metaphysical. At a point just before World War II it threatened to lose all its contacts with human realities—at least in the Western World.

In the second stage, all forms of money are legally exchangeable for gold, but the quantity of gold available is much less than the money claims against it. Under the Federal Reserve System, prior to 1934 the relationship between our paper money and gold was about the same as that between our demand deposits and currency. In either case complete convertibility existed *de jure,* but *de facto* convertibility depended on the absence of mass conversions. In this stage the relationship between money and pure commodity has become ambiguous in several respects—including uncertainty as to how much pure commodity value resides in gold and silver.

[1] *Nicomachean Ethics,* Book V.
[2] *The Times* (London), June 16, 1937,

The fractional aspect of pure commodity backing in the second stage may be illustrated by the ratio of our gold holdings to the total of currency outstanding plus "adjusted" demand deposits. (In the balance of this paper the word "money" will refer to this total.) The ratio was 18 per cent in 1900, 16 per cent in 1929, over 50 per cent in 1940, and again at about 18 per cent at the present time. I shall mention, but not dilate upon, the additional role of gold under the gold standard as regulator of both the internal credit system and the import-export flow. These functions arise, I believe, not from the quality of gold as commodity but from the formal monetary structure.

As is well known, Adam Smith and Ricardo considered a nation's stock of monetary gold and silver as akin to economic waste. They preferred a "well-regulated paper currency";[3] but they recognized that effective regulation required the obligation to redeem paper money in gold on demand. Hence in classical theory the metal reserve should be held to the minimum necessary to guarantee convertibility. But the world's inability to keep its paper money "well regulated" led inevitably to the common view that the more gold a nation held the better.

If we view the history of this second stage over a long period, we may be surprised at the success with which bank deposits and paper money have gained acceptance in place of gold and silver. Their sole advantage has been convenience; their crying disadvantage has been that they lack physical substance, and that time after time they have proved a poorer asset than their equivalent in precious metals. For long periods each of us could have held all his money in gold just for the asking, but instead we have preferred bank deposits and $10 bills. It is clear that most Americans and Britishers, at least, have had very little interest in the pure commodity aspect of gold and silver from the standpoint of joy of possession. Our interest therein has been self-protective or negative. We have desired gold only as we mistrusted paper. Whenever we could trust paper again—and often unshrewdly—we lost interest in gold.

The third stage, in which money is by choice completely divorced from commodity backing, may be said to have existed in Great Britain in the late thirties. Not only did England leave the gold standard under economic pressure—which has happened to many nations—but thereafter she definitely repudiated the principle of gold backing for her currency, as old-fashioned and inherently undesirable. Britain said clearly that she would not go back to gold even if she could—and for

[3] *Wealth of Nations*, Book IV, 1. Cf. also Ricardo, *Principles of Political Economy and Taxation*, Ch. VIII: "A currency is in its most perfect state when it consists wholly of paper money, but of paper money of an equal value with the gold which it professes to represent."

some years prior to World War II she could undoubtedly have returned to gold.

England has now accepted a link between her currency and gold, via Bretton Woods. There is no indication in this undertaking that the pound will be given an effective gold backing at home, or that it will have any direct tie to pure commodity values. The pound may be in fact exchangeable for gold in the open market, just as a United States government bond can be exchanged for a gold watch—but this would in no sense be a "pure commodity" aspect such as we have been discussing.

We may add that since 1933 the United States has been in some twilight zone between the second and third stage of monetary development. Legally we are now committed only to maintaining the gold equivalent for the dollar in foreign exchange—which is about the same kind of obligation as England assumes under Bretton Woods. But more explicitly, the Treasury is directed to sell gold at $35 per ounce when necessary to secure the exchange value of the dollar.

The unparalleled expansion of monetary claims during the war might well be expected to have increased the preference of Americans for physical gold as against fiduciary paper. My inquiries lead to the conclusion that there has been no appreciable hoarding of gold, although the latter was feasible in various ways. Amid all our black markets, we have never heard of a black market for gold in this country—despite its prevalence abroad. To my mind this fact is extraordinary. It indicates that within not more than a generation there has been something of a revolution in the popular attitude toward gold. The man in the street probably subscribes to the recent statement in *Business Week* that "actually gold derives its value from the American dollar today."[4] Not so long ago it was everyone's belief that the money of the United States derived its value chiefly from being backed by gold.[5]

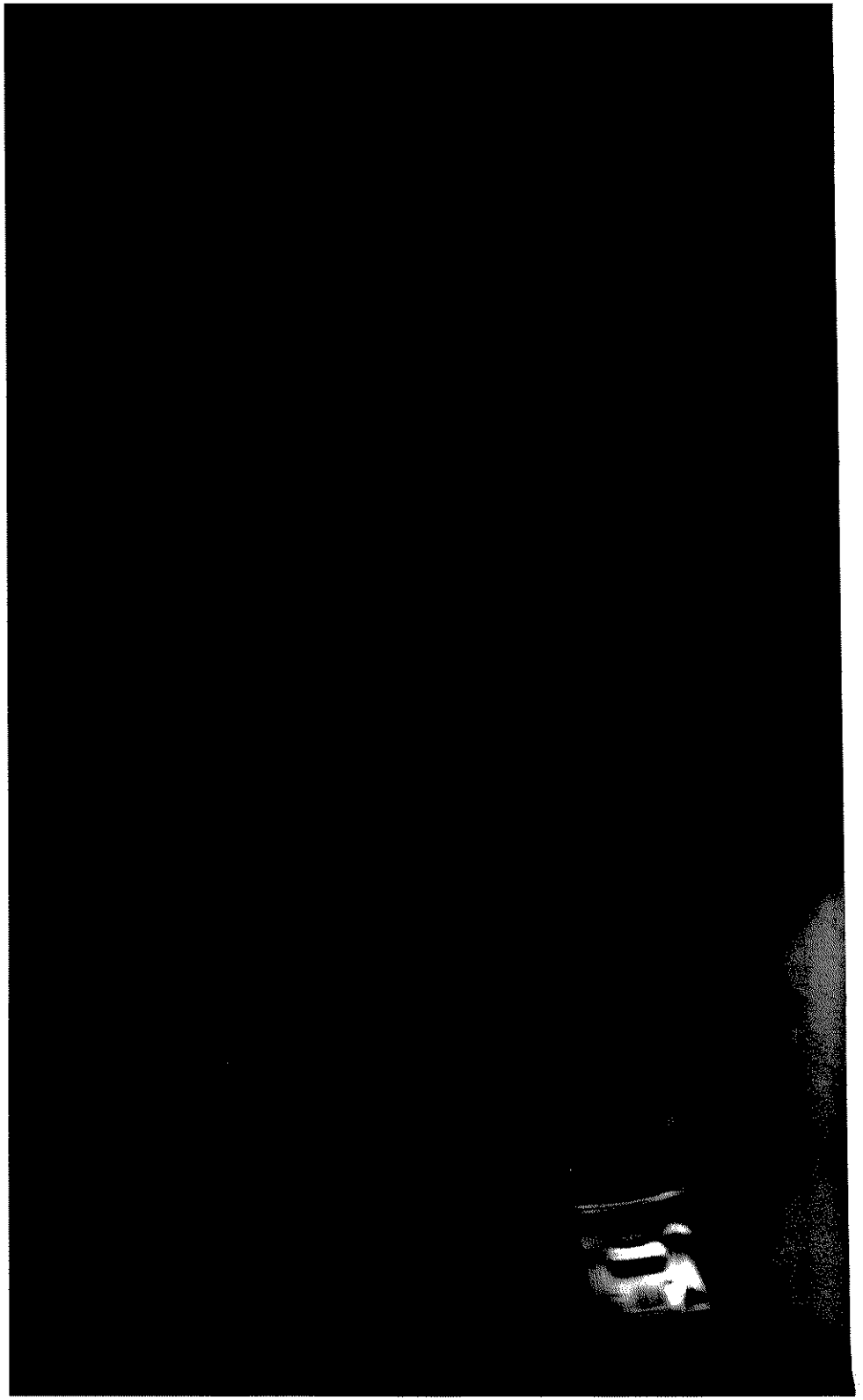
The history of silver has been the opposite to that of gold. Silver has tended to lose in monetary status while it gained in industrial utility. Great Britain has just decided to abandon its thousand-year silver currency, and to melt down all its silver coins, largely in order to supply the nation's industrial needs for the metal.[6] During the last war the United States Treasury was compelled to loan out a huge amount of its monetary silver for industrial use—some 30,000 tons, of which nearly half went to the atomic bomb project.[7] By contrast, the industrial uses of gold in the war were negligible.

[4] *Business Week*, November 2, 1946, p. 10.

[5] See discussions of gold premiums abroad in the August, 1946, letter of the National City Bank of New York. We have not space to discuss the "gold premiums" appearing in backward countries and those with depreciating currencies.

[6] *Financial Times* (London), September 18, 1946, p. 1.

[7] See article, "Plans to Return Borrowed Silver," *Commercial and Financial Chronicle*, November 14, 1946.



I should like now to refer to a possible fourth stage in the commodity aspect of money—one in which a two-way exchange is established between paper money and a composite group of basic commodities. It may be thought that this would amount to returning to a combination of the early part of stage 1—in which many different commodities functioned as money—and stage 2, in which more money exists than monetary commodities.

In my view, however, the proposal for commodity reserve currency[8] marks a new departure in the monetary field. Its object is not so much to give commodity value to money as to give monetary value to commodities. There should be a real advantage in having our money backed in part by basic commodities—"objects applicable to the purposes of life"—for the generally bad history of unsecured and inconvertible paper money suggests that physical backing and convertibility are desirable attributes of money.

But the novel monetary aspect of the commodity reserve idea is that it is designed to benefit the producers of raw materials by giving them as a group the economic advantages now enjoyed by producers of gold and silver; namely, an unlimited market at a level price for balanced production. As a derived effect, it is designed to protect the entire economy from the baleful results of recurrent wide fluctuations in the market price of basic commodities.

The money of the future cannot again be fully identified with pure commodity values, but it can and should be related to such values. Certain key commodities should form a broad connecting bridge between the world of goods on the one hand and the world of money on the other. The flow of such key commodities into and out of monetary status can supply an important factor of equilibrium, or balance wheel, for the entire economy. As Hayek pointed out,[9] gold is no longer important enough intrinsically to perform this role adequately; and the relationship between money and pure commodities should rest in the future on a broader base than the precious metals.

It is difficult to state categorically what advantage will accrue to the huge monetary structure of today if a relatively small amount of pure commodities are placed behind it as security. Future confidence in the dollar will depend in part on government policies recognized as sound, and in part on mass psychology. In this speaker's opinion, the placing of a quantity of basic commodities behind our money will be sound policy, and their presence will contribute to a psychology of confidence in our currency.

[8] See B. Graham, *World Commodities and World Currency* (New York, 1944); F. A. Hayek, "A Commodity Reserve Currency," *Economic Journal*, June-September, 1943; etc.
[9] Hayek, *loc. cit.*, pp. 177, 178.

NATIONAL PRODUCTIVITY: ITS RELATIONSHIP TO UNEMPLOYMENT-IN-PROSPERITY

BY

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PRODUCTIVITY IN THE AMERICAN ECONOMY

NATIONAL PRODUCTIVITY: ITS RELATIONSHIP TO UNEMPLOYMENT-IN-PROSPERITY

By BENJAMIN GRAHAM
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"Productivity on the national level" begins as a purely arithmetical concept. It is the quotient of national income or product divided by total hours worked, and it is expressed in cents per hour. If income or product in different years is expressed in constant dollars, then the derived figures for national productivity measure changes in over-all physical output per man-hour worked. They are as reliable as are the data for income or product and for total hours. But since over-all productivity is a composite figure, it reflects not only the changes in man-hours required to turn out each given product but also the shifts in relative quantities and prices between industries or products. Hence we should distinguish in our thinking between "operational" and "structural" changes in national productivity.

The year-to-year changes in over-all output per man-hour do not carry any imputation of merit or credit as between men, management, and machines; nor do they admit of useful analysis for this purpose. The same is probably true of all productivity figures above the level of the single plant. There are differences in significance and utility, of course, between our broad figures of national productivity and more limited measures, such as the familiar index of factory productivity of the BLS. But since both are composite expressions the difference is at bottom one of degree and not of kind. Available data permit us to work out separate productivity values for the respective industrial divisions of our economy—e.g., agriculture, manufacturing, even services—and these can be aggregated into our total figures.

National productivity is one of four basic arithmetical factors which together determine the development of employment and unemployment in successive years. The other three are the labor force, the national income or product, and the average hours of work. The equation is a simple one: $U = F - \frac{I}{PH}$. Where U is the Number Unemployed, F is Working Force, I is National Income (or Product), P is National Productivity, and H is the Average Hours Worked per Year. (The values of P will be larger if it is based on Gross National Product instead of Income.)

In the arithmetic, an increase in national productivity will make for an increase in unemployment unless it is offset by corrective move-

ments in the other three terms. It is our normal hope and expectation that the offset will come primarily from an increase in national income, and secondarily from shorter hours or a relatively smaller working force. But if the other terms change insufficiently or perversely, then the increase in productivity is actually accompanied by (or "creates") a rise in unemployment. In our actual experience since 1900 the changes in productivity have been larger percentagewise than in the other elements in the right side of the equation. To that extent increased productivity may be called the key element in the development of unemployment before the war.

The chief purpose of this paper is to trace, arithmetically and historically, the leading role of national productivity in the creation of a new phenomenon—that of unemployment in prosperity, as evidenced by the conditions prevailing in 1940 and 1941. The level of business activity in 1941 was far higher than in any previous year—being 127.2 per cent of normal against 110.3 per cent in 1929 (Cleveland Trust Company index). Yet in that year the unemployed averaged 5 million, a figure also exceeding that of any year before the great depression, not excepting 1921. In 1940, with general business averaging a little better than computed normal, unemployment exceeded 7,400,000; while in 1924, the earliest previous year of similar normal activity, unemployment was only 2,400,000. This coexistence of normal and even booming business conditions with large-scale unemployment deserves careful inquiry. Our analysis may suggest certain broad policies with respect to hours of work and wage rates, as supplements to other lines of attack on future unemployment.

The sources of the data used are stated in the Appendix. We have studied figures both for GNP and National Income, with substantially similar results; but we shall use the income figures in this paper, because they appear more reliable for years prior to 1919, and also because they fall between the series of GNP and that of Disposable Income. In reducing our figures to a per capita basis, for year-to-year comparisons, it has seemed wise to allow for the steadily declining proportion of children. This has been done by giving half-weight to persons under sixteen. If the unweighted population were used some of the conclusions in this study would be overemphasized.

Our primary comparisons are between five well-separated years, each of which enjoyed approximately "normal business activity" according to the Ayres–Cleveland Trust index. These are 1900, 1910, 1915, 1924, and 1940. By selecting these years we can pretty well eliminate cyclical influences, and concentrate on the secular movement. For additional information we supply figures covering the boom years 1929, 1941, and also 1946 (partly estimated).

It seems best to rely chiefly on three charts which show graphically

how the unemployment of 1940 and 1941 developed out of the disparate movements of the formula factors. The data underlying the charts and also a table showing the percentage changes in significant items between various pairs of years—normal against normal, boom against boom, and normal against later boom—are found in the Appendix to this paper. Interesting calculations can be made involving depression years, but they are not particularly useful for this study. The same applies to comparisons between boom years and later normal years.

The most significant factor shown by our numerous comparisons is the tendency for productivity to increase at a faster rate than production (or consumption and income). This has been uniformly true, prior to Pearl Harbor, except in two *short* periods between normal and boom times (1925-29 and 1940-41) when product and income rose at an ultrarapid rate.

If productivity advances faster than per capita production, the arithmetical result must be a decline in the hours of work required per capita of population. And if working hours per worker do not fall as fast as the hours needed per capita, then the arithmetical result must be a reduction in the percentage of the population employed. Our charts show that both of these results developed between 1900 and 1940.

Between 1910 and 1940 the reduction in the work week—substantial as it was—proved insufficient to offset the decline in working hours needed per capita; hence there was an important falling off in the number of workers needed (employed) per capita. Between 1910 and 1924 this reduction was only 1.8 per cent, but between 1924 and 1940 the tendency accelerated and produced a reduction of 6.4 per cent. While these percentage figures appear small they are of great marginal importance—the 6.4 per cent decrease in workers needed per capita between 1924 and 1940 meant a reduction of about 3,200,000 in employment in the latter year.

The difference between the 6.4 per cent figure in 1924-40 and the 1.8 per cent reduction in 1910-24 explains in good part why mass unemployment in prosperity was apparent in 1940, as against the very minor problem existing in 1924. The underlying tendency towards increasing unemployment in successive normal years was existent prior to 1929; but it escaped notice, first, because it had not yet reached serious proportions, and, second, because it was obscured by the temporary boom conditions of the late twenties. As will be seen from Chart C, a substantial part of the unemployment of 1940 and 1941 grew out of a separate factor; namely, an embarrassing increase in the working force relative to population.

When 1940 is compared with 1910, the lapse of a generation brings out the divergence between productivity and production in striking fashion. An extreme way of showing what has happened is as follows. In these thirty years there was an increase of 103 per cent in national income in constant dollars, but this increase was produced by working total hours only 8 per cent greater in 1940 than in 1910.

Looking forward into the future, the crucial question will be whether we shall be able to reverse this tendency for productivity to expand faster than per capita product. On this point the results of 1946—to be discussed later—will be found startling rather than conclusive. The arithmetical rule involved may be summarized in the following alternative: either (a) we must increase production-consumption-income as fast as over-all productivity, or (b) failing that, we must decrease working hours sufficiently to offset the disparity, or (c) failing both *a* and *b*, we shall employ fewer workers per capita.

The "Stagnation Theory" and 1940-41 Unemployment

Our figures show clearly that the unemployment under study does not owe its origin to economic maturity or stagnation—as those terms are generally understood. The record high business activity in 1941 makes such an explanation manifestly inapplicable to the large unemployment in that year. But even in 1940, when unemployment stood at 7½ millions, there were no statistical signs of stagnation; at most there was a slight suggestion that the rate of expansion between successive normal years had slowed up somewhat.

Unemployment in prosperity is a phenomenon not of stagnation but of disparate rates of expansion. This may best be demonstrated by comparing the 1900-10 material with that for the 1929-41 interval. In the first decade of the century national income and productivity apparently rose at about equal rates; there was a negligible decrease in total hours worked, and this was more than offset by a modest shrinkage in the work week. The result was an increase of 3.7 per cent in workers needed (employed) per capita.

Between 1929 and 1941 the percentage increase in over-all productivity was more than twice as great as that in national income per capita. The result was that hours worked per unit of population shrank 14.8 per cent; and even a drop in weekly hours from 51.5 to 45.5 was not enough to prevent a 3 per cent decline in the percentage of the population employed. In the meantime, there was a similar rise in the percentage of the population seeking work. These two tendencies accounted about equally for an increase of 3½ million in unemployment between 1929, a boom year, and 1941, a still better year.

Unemployment caused by an over-all productivity that outstrips

total production might properly be called "general technological unemployment." It is essentially dynamic in its character, and is more of a threat under conditions of technical progress than in stagnation. We shall not here discuss the extent to which this unemployment may also be called "structural," in the sense that it arises from failure of wage rates to fall to a level that will clear the labor market. It may be observed, however, that the faster the rate of advance in productivity the more drastic would have to be the decline in the price and wage structure to maintain full employment by the automatic responses of the markets—and the more serious the consequent problems facing both business and labor.

The Results of 1946

Let us turn our attention now to the data for 1946, as they are tentatively available. Since there was only minor unemployment last year, it is evident that our arithmetical factors were in better relationship, employmentwise, than they were in the years 1940 and 1941. The detailed figures carry some surprises.

The most important point is that between 1940 and 1946 the gain in national income far outstripped the rise in productivity. This is the reverse of what happened between 1900 (or 1924) and 1940. Interestingly enough, the reversal is not due to any real slackening in the rate of increase in national productivity—just as the development of unemployment from 1924 to 1940 was not due to a serious slackening in the rate of expansion in national income.

Our national productivity figure was about 18 per cent better in 1946 than in 1940. But during the same period the manufacturing component shows a small decline in productivity; and if we take automobiles as an important subcomponent we find here an apparent decline of about 25 per cent in output per man-hour. (The latter two figures are computed from the monthly series of dollar shipments from factories, price index of manufactured goods, number employed, and average weekly hours. By a coincidence this calculation gives an actual 1946 figure for factory productivity almost identical with the C. E. D. projection made in 1945.[1])

By contrast, however, our computations show productivity increases of from 25 per cent to 35 per cent over 1940 in the important areas of agriculture, trade, railroad transportation, and mining.[2] It is a strange phenomenon to see manufacturing productivity lag so far behind the

[1] *American Industry Looks Ahead*, p. 46.

[2] May I state respectful disagreement with Ewan Clague's statement that productivity figures for trade have little meaning. (See his address, "The Facts of Productivity," December 6, 1944, New York.)

other sectors. As our chart shows, the opposite relationship held true steadily between 1900 and 1940.

Another striking fact about our 1946 data is that they correspond very closely with several of the full employment estimates for 1950. We actually registered a national income of about 165 billion dollars, a labor force of 61½ million, and total employment of 59 million. Prices, however, averaged about 10 per cent higher than the 1944 level used in these 1950 projections; hence real income and real national productivity were about 10 per cent lower than the estimates of 1950. But the 18 per cent rise in over-all productivity between 1940 and 1946 is about "on the beam" of the 35 per cent increase generally expected by 1950.

An extraordinary paradox is implicit in these figures. In over-all terms of real income and full employment 1946 was a banner year, and far exceeded anything we could dare to hope for before the war. It solved most favorably the problem of productivity's outstripping income, that created unemployment in prosperity during 1940 and 1941. However, 1946 did not bring us economic satisfaction. It has been called "a year of great economic confusion" (A. P. Sloan, Jr.), and even "a year that the locust hath eaten."[3]

One key to the paradox and the malaise of 1946 probably lies in the discrepancy between the lagging productivity in manufacturing lines and the brilliant production results achieved elsewhere in the economy. Manufacturing has long been the central sector of management-labor negotiations; hence the nontypical character of manufacturing results in 1946 opened the way to a mass of misunderstanding and conflict in industrial relations.

I return now to the bearing of the 1946 figures on my basic thesis that unemployment in prosperity has resulted from the outpacing of income by productivity. Was that a phenomenon only of pre-Pearl Harbor; and does the full employment of 1946 mean that from now on national income will expand at least as rapidly as national productivity? This may be so, but I greatly doubt it. There are too many reasons for believing that 1946 was a boom year, and that its favorable configuration in our analysis is destined to prove temporary. Aside from the major element of replenishment demand, we must recognize in 1946 at least five other factors characteristic of temporary booms. These are rising prices, expanding inventories, commercial loans, and installment debt; and an unusually large export balance. While nothing is certain in our dynamic history, I believe economists would do well to assume that the trends clearly recognizable over the long period

[3] R. Rodgers, *Commercial and Financial Chronicle*, January 9, 1947, p. 120.

1900-40 are more likely to hold sway in the future than are the quite contrary developments of our first postwar year.

If this deduction is correct we shall again encounter grave problems in later years, growing out of that very national productivity on which we so justly pride ourselves. Not the least of our logical difficulties lies in the Janus-like character of productivity—which now enables employers and union leaders to talk past each other, with no meeting of minds. Employers insist (in the recent words of Dr. E. P. Schmidt) that "only by more production per man-hour can all workers and all persons attain a higher standard of living."[4] Union leaders are keenly aware that increased productivity has precipitated and may continue to precipitate "personal tragedy."[5] Both of these seemingly divergent viewpoints are correct. It is the task of economic statesmanship to develop an underlying philosophy and technique of employment which fully recognize both faces of the coin of productivity.

Hours of Work and Unemployment

The relationship between national productivity and unemployment is strongly affected by the three other arithmetical factors in our original equation; namely, national income, hours of work, and labor force.[6] Our discussion to this point has centered on the relative movement of national productivity and national income. We lack time for an adequate treatment of the hours-of-work factor and the working force factor; hence we must confine ourselves to some summary statements on the subject.

Our Chart B shows that the decline in the work week between 1900 and 1940 offset a large part of the decline in total working hours needed per capita, but not all of it. There is a strong implication here that if the work week had fallen still more rapidly, the unemployment in 1940 and 1941 would have been smaller, and conversely if the work week had not fallen as much. This suggests that, instead of permitting shorter hours to work out as an accidental offset to developing unemployment, it would have been wiser to study carefully their potentialities as a planned and purposeful corrective.

We shall not attempt such a study here, beyond suggesting a basic arithmetical relationship existing between (a) an increase in per capita income or product; (b) a greater increase in production per man-hour; (c) the reduction in hours required to absorb the difference; and (d)

[4] *Chronicle*, January 2, 1947, p. 26.
[5] Solomon Barkin, *Chronicle*, December 12, 1946, p. 3122.
[6] It is mathematically true, of course, that any four of the quantities determine, or "create," the fifth. I suggest as an economic truth that the ratio of income to productivity, i.e., their relative rate of increase, is largely independent of the other three factors; and that the size of the working force is similarly independent.

the resultant hourly and weekly wages needed to yield constant unit costs. The rule is as follows: If in any period national income increases, but productivity rises faster, it is possible to reduce hours, maintain employment, hold down unit costs, and still increase the weekly pay at the same rate as the rise in per capita national product.

Assume, for example, that in a given period of years per capita income rises 12 per cent and productivity rises 20 per cent. Hourly wages can be advanced 20 per cent without increasing unit costs, but hours must be reduced 6⅔ per cent to maintain employment. If both of these are done, then, even though the work week is thus shortened, the weekly pay will still increase by 12 per cent. These are average figures, and are thus subject to many practical limitations; but the basic principle is sound and useful.

The Working Force Factor

Our third chart shows that since 1929 the working force has risen persistently in ratio to weighted population. Although the percentages involved are seemingly small, they had a profound influence on the unemployment figures of 1940 and 1941. The rise in national income in 1946 not only absorbed the increased productivity since 1940 but was enough to offset a continued perverse increase in the relative labor force; and, beyond that, to cancel most of the unemployment of 1940. But on the other hand, practically all the large increase in unemployment from 1924 to 1941 was caused by the rise in the relative working force during the seventeen-year period. If we are to move back to more familiar and less favorable economic conditions, the perverse trend in the labor force may be found to be as direct and embarrassing a source of unemployment as the relative decline in the need for workers. The relationship of this factor to the responsibilities assumed in any "national full employment policy" is recommended for serious study by economists.

Generalization versus Discrimination

Our studies of national productivity since 1900, and allied data, are presented with the knowledge that they are not precisely accurate and that the over-all figures conceal many disparate components. We suggest, however, that neither of these deficiencies impairs the utility of the data, provided we limit their use to its proper area. They contribute a broad and perhaps a new insight into the changing forces affecting employment and unemployment in the past half century. The major relationships shown by the lines in our charts are not likely to be modified appreciably by any refinement of our quantities, nor would we gain in basic understanding if we broke them down into numerous components.

The use of over-all data has been sharply criticized of late, because they were put forward as the determinant of current wage policy. It is difficult to say which mistake would be greater: to base policy exclusively on over-all data, or to ignore over-all data entirely in arriving at policy. Discrimination is indeed of the essence; but this includes the discriminating use of national data. Whether we like it or not, the level of unemployment is a national datum. Its future development will be controlled inescapably by developments in national productivity, in national income, in national working force, and even in that purely arithmetical creature, the national hours-of-work.

Appendix

Source of Data Used

1. National Income in Constant Dollars. Figures for 1919-41 were supplied by the Department of Commerce, in 1939 dollars. Those for 1900-18 are based on W. I. King's material, which is used by the Department of Agriculture.

2. Gross National Product in Constant Dollars. Taken from page 37 of *Senate Hearings on S-380.*

3. Factory Productivity. Figures for 1910-41 from BLS; 1900 is my estimate; for 1946 see text.

4. Work Week. Figures for 1940, 1941, and 1946 are based on Department of Commerce data for private nonagricultural workers. (Survey of C. B., December, 1946, page 9), plus estimate of fifty-five hours for farm workers. Previous years' figures are based largely on estimates developed by Dr. Paul Douglas. Both the farm and nonfarm week in 1900 are taken at fifty-eight hours. The over-all reduction from 1900 to 1940 is 25 per cent; cf. the "round figure" of a 20 per cent reduction from 1899 to 1939 given by Fabricant, *Labor Savings in American Industry, 1900-39*, page 34.

5. Working Force and Employment. Taken from page 58 of *Senate Hearings on S-380.* The 1910 figure for working force is appreciably lower than that given in the census, but it appears more plausible.

CHART A

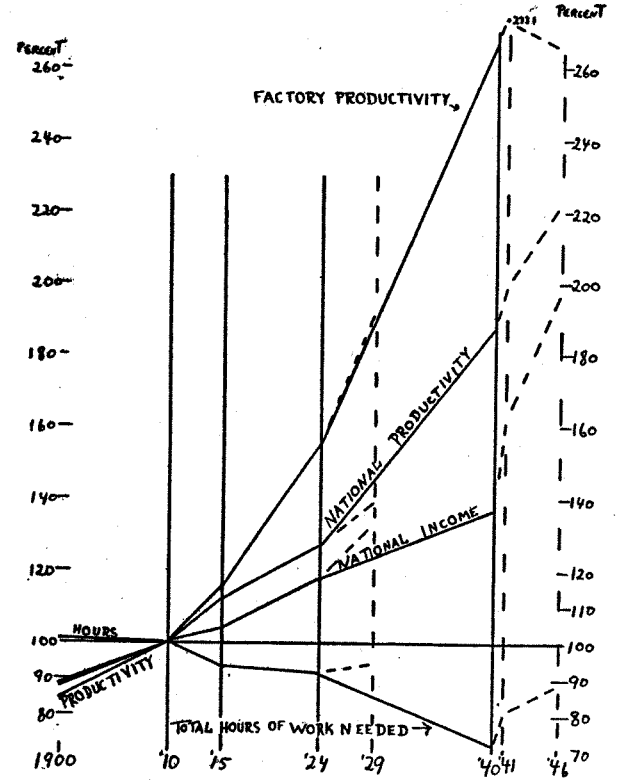

CHART B

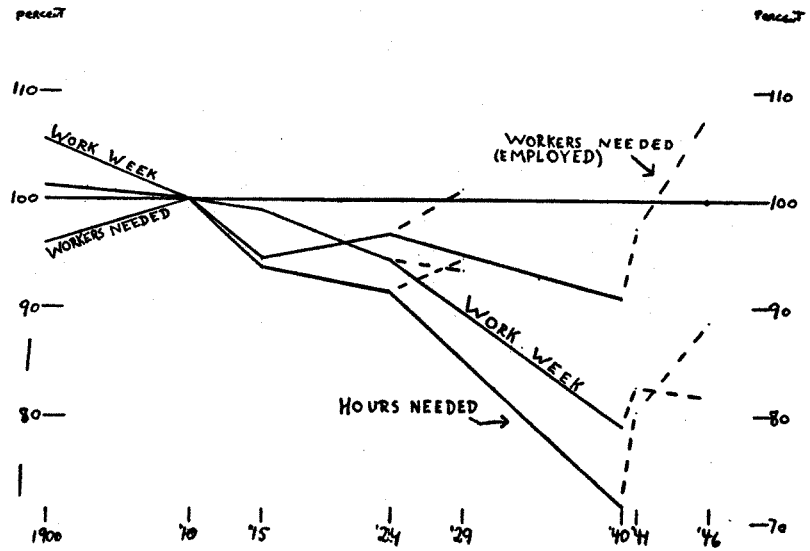

CHART C

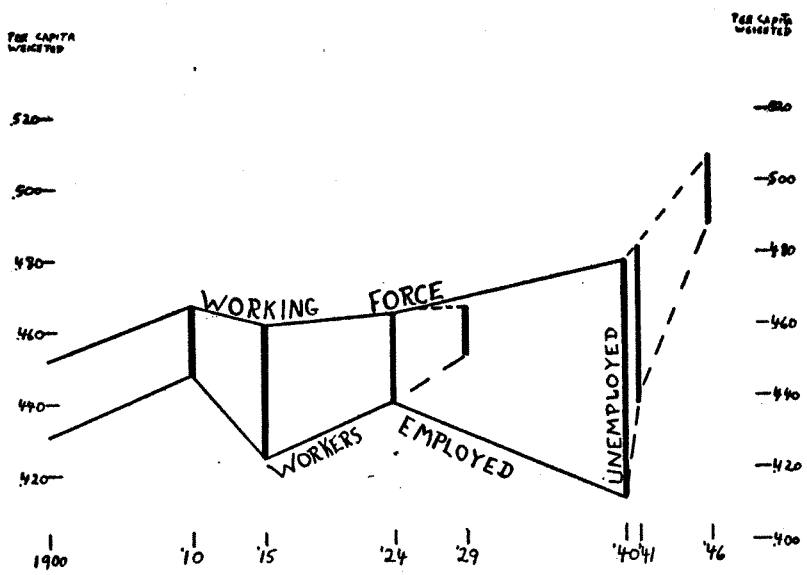

TABLE IA

VALUES FOR CHARTS A, B, AND C

	1900	1910	1915	1924	1929	1940	1941	1946
National income (1944 dollars)	537	605	631	707	805	827	974	1199
National productivity (1944 dollars)	41.3	47.2	52.3	60.1	65.6	88.9	93.9	105.0
Annual hours required	1301	1283	1206	1177	1213	921	1034	1139
Factory productivity	44	52	60	80.6	100	138.8	142	138
Average work week	58	55	54.5	52	51.5	43.5	45.5	45
Workers needed	.431	.448	.424	.439	.453	.412	.439	.488
Working force	.452	.467	.461	.464	.466	.478	.482	.507
Unemployment	.021	.019	.037	.025	.013	.066	.043	.019

National productivity in cents per hour; factory productivity as percentage of 1929; work week in hours. All other data are "per-capita-weighted."

TABLE IB

SUPPLEMENTARY DATA

	1900	1910	1915	1924	1929	1940	1941	1946
Population (millions)	76.1	92.4	100.5	114.1	122.8	132.0	133.2	141.0
Population weighted (millions)	62.2	76.7	83.5	95.5	102.7	114.2	115.0	121.0
National income current dollars (billions)	19.1	32.6	39.3	78.6	83.4	77.6	96.9	161.0[a]
National income 1944 dollars (billions)	33.4	46.4	52.7	67.5	82.7	94.4	112.5	145.0
Working force (millions)	28.1	35.8	38.5	44.3	47.9	54.6	55.7	61.4
Employment (millions)	26.8	34.4	35.4	41.9	46.5	47.1	50.7	59.1
Unemployment (millions)	1.3	1.4	3.1	2.4	1.4	7.5	5.0	2.3
Total hours worked (billions)	80.9	98.3	100.8	112.4	124.5	105.8	119.5	137.7
GNP[b]	544	653	651	873	990	1060	1245	1578
Productivity—GNP basis[c]	41.8	51.1	53.9	74.0	81.8	114.1	118.3	137.3

[a] Less $4 billion increased federal bond interest.
[b] Dollars per-capita-weighted, in 1944 dollars.
[c] Cents per hour.

TABLE II

PERCENTAGE CHANGES BETWEEN YEARS IN FACTORS DETERMINING EMPLOYMENT AND UNEMPLOYMENT
(All comparisons are on a "per-capita-weighted" basis, except those for productivity and work week.)
Productivity = National Income Produced per Man-hour

	(1) 5 years 1915 vs. 1910	(2) 10 Years 1910 vs. 1900	(3) 14 Years 1924 vs. 1910	(4) 16 Years 1940 vs. 1924	(5) 30 Years 1940 vs. 1910
	A—Normal Year vs. Normal Year				
National income	+ 4.3%	+12.6%	+16.9%	+17.1%	+36.8%
Productivity	+10.8	+14.2	+27.3	+46.1	+88.3
Total hours worked	− 6.0	− 1.5	− 8.5	−21.7	−28.3
Work week	− 1.0	− 5.2	− 5.5	−16.3	−20.9
Employment	− 5.1	+ 3.8	− 1.8	− 6.1	− 7.8
Working force	− 1.1	+ 3.1	+ 0.2	+ 3.0	+ 2.6
Unemployment	+95.0	− 9.0	+32.0	+164.0	+247.0

	(6) 1 Year 1941 vs. 1940	(7) 5 Years 1929 vs. 1924	(8) 17 Years 1941 vs. 1924	(9) 29 Years 1929 vs. 1900	(10) 31 Years 1941 vs. 1910
	B—Boom Year vs. Normal Year				
National income	+17.7%	+13.8%	+37.8%	+50.0%	+61.0%
Productivity	+ 5.6	+ 9.1	+56.1	+59.0	+99.0
Total hours worked	+13.3	+ 3.3	−12.0	− 6.6	−19.4
Work week	+ 4.6	− 0.9	−12.5	−11.1	−17.2
Employment	+ 6.5	+ 3.0	—	+ 5.0	− 1.8
Working force	+ 0.9	+ 0.4	+ 3.8	+ 3.1	+ 3.4
Unemployment	−34.0	−48.0	+72.0	−38.0	+121.0

TABLE II *(continued)*

	(11) 12 Years 1941 vs. 1929	(12) 6 Years 1946 vs. 1940	(13) 17 Years 1946 vs. 1929	(14) 22 Years 1946 vs. 1924	(15) 36 Years 1946 vs. 1910
	C—Boom Year vs. Boom Year	*D—1946 vs. Previous Years*			
National income	+ 20.9%	+45.0%	+49.0%	+69.5%	+ 98.0%
Productivity	+ 43.1%	+18.7%	+60.2%	+75.0%	+122.8%
Total hours worked	− 15.5	+23.5	− 6.2	− 3.4	− 11.3
Work week	− 12.8	+ 3.4	−12.5	−13.3	− 17.4
Employment	− 3.1	+18.4	+ 7.8	+11.1	+ 8.9
Working force	+ 3.4	+ 6.0	+ 8.8	+ 9.2	+ 8.5
Unemployment	+231.0%	−71.1%	+46.0%	−24.0%	—

TABLE III

SOURCE OF INCREASED UNEMPLOYMENT 1941 AND 1940 VS. 1924

	1940 vs. 1924	1941 vs. 1924
Increase due to:		
Larger population	470,000	500,000
Fewer workers needed	3,080,000	—
More workers available	1,550,000	2,100,000
Total	5,100,000	2,600,000

(Data are based on weighted population.)

Vhen to mount a corporation

ᴛHE Graham-Newman Corp. of New York has developed a specialized in-estment business on the theory that uides museums of natural history—ome beasts are worth more stuffed and iounted than on the hoof. As a conse-uence Graham-Newman between 1936 nd 1946 paid to its stockholders in divi-ends more than twice as much (in terms f percentage of 1936 assets) as the vastly larger State Street Investment Corp., more than three times as much as Lehman Corp. Graham-Newman's formula runs this way: First, buy into a company priced well below its net current-asset value, provided its past earnings id future prospects are reasonably good. econd, if the management takes inade-uate interest in the market price of its iares, initiate criticism or even a proxy ght as an alert stockholder. Third, sell it if the price rises above liquidating lue. Fourth, in the extreme case, where e beast can't be put back on its feet, iish it off and mount it, that is, sell liquidate the business and pocket the

[*Continued on page 122*]

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difference. The last move is usually unnecessary. In the past eleven years, out of 300 investments that might conceivably have involved the mounting-*in-extremis* theory, Graham-Newman has, in fact, mounted only three corporations.

Graham-Newman began as a joint investment venture two decades ago and was incorporated in 1936. President Benjamin Graham hit upon the specialized formula. By means of a proxy fight, he forced several pipeline companies, which the government had squeezed out of Standard's oil trust, to pay out in dividends all cash not needed for operations. For example, after Mr. Graham got going, Northern Pipe reluctantly forked over $70 for every share valued shortly before at $50. Not long after, his concern did a taxidermy job on several textile companies that would otherwise have done business long enough to dissipate liquid assets through operating losses.

Stephen Greene

BENJAMIN GRAHAM

There are other reasons for liquida-

by taking advantage of price spreads between old securities and the new ones for which they are exchangeable, or between senior securities and the packages of common stock into which they are convertible. During the late bull market, the firm found many such opportunities in railroad and utility issues, but today Graham-Newman is again hunting its favorite type of situation. It has bought into aircraft manufacturing, which of late has been cold-shouldered so extensively that some companies are purchasable for half of their net quick assets. Graham-Newman's policy is not to buy into top companies alone but into all companies in any group that give promise of yielding adequate future earnings or liquidating dividends.

Even when it got control, Graham-Newman claims never to have liquidated a business that had an economic reason to exist. When it got hold of American Tube Works—then (1933) the oldest of U.S.

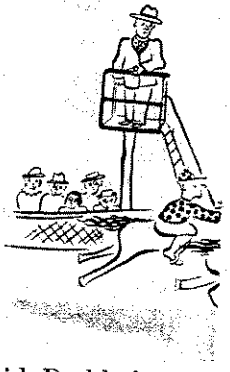
BENJAMIN GRAHAM

the government had squeezed out of Standard's oil trust, to pay out in dividends all cash not needed for operations. For example, after Mr. Graham got going, Northern Pipe reluctantly forked over $70 for every share valued shortly before at $50. Not long after, his concern did a taxidermy job on several textile companies that would otherwise have done business long enough to dissipate liquid assets through operating losses.

There are other reasons for liquidation apart from the profit-and-loss statement. When the Lincoln Warehouse Corp. had in its cash balance money realized from the highly profitable sale of the Manhattan site of the present Lincoln Building, the Iselin and Vanderbilt interests were willing to sell their controlling equity at a discount, thus getting the benefit of capital-gains provisions in the tax law. (If the company's cash had been distributed as dividends, it would have been taxable as income.) Graham-Newman then sold the warehouse business and distributed the excess in the company's treasury, thus clearing for itself $228,000. This $228,000 helped build up Graham-Newman's 1944 dividend distribution to $35.60 a share. Currently, Graham-Newman's largest common-stock investment is a 10 per cent interest in National Transit Co., a Pennsylvania pipeline acquired from the Rockefeller Foundation. Transit has a lot of U.S. bonds, which it will cash for the benefit of stockholders, and a pump subsidiary whose stock it will distribute, assuming government approval. The program is Graham-Newman's.

As a rule, companies are worth more dead than alive only during bearish periods. When most stocks are overpriced, Graham-Newman switches to arbitraging ly that some companies are purchasable for half of their net quick assets. Graham-Newman's policy is not to buy into top companies alone but into all companies in any group that give promise of yielding adequate future earnings or liquidating dividends.

Even when it got control, Graham-Newman claims never to have liquidated a business that had an economic reason to exist. When it got hold of American Tube Works—then (1933) the oldest of U.S. seamless drawn brass and copper-tube mills—it managed operations for a year and a half and increased the company's share of U.S. dealings in the field from 5 to 16½ per cent. The going concern was then sold to Phelps Dodge. Again, by selling the big non-automatic mill of Fall River's Merchants Manufacturing Co., Graham-Newman reduced taxes and put a profitless textile operation into the black. In fact, of its $4,277,000 in gross earnings in the past ten years, only $385,000 represents actual liquidating take.



Benjamin Graham's way with a balance sheet has been a matter of interest not only to Graham-Newman's stockholders. Between 1927 and 1941 he conducted a course on investments at Columbia University, where he is considered the country's top security analyst. With a colleague, Professor David Dodd, he wrote a book, *Security Analysis*, that has become a professional bible. The other half of Graham-Newman's management is Jerome A. Newman, a man as practical as Mr. Graham can be theoretical. It is he who sees that Mr. Graham abides by his own rule of not waiting for the top of the market to dispose of securities.

When the firm found itself running the American Tube Works, Mr. Newman took charge as Board Chairman.

In eleven years Graham-Newman has distributed on each of its shares (which cost some holders only $100) over $189 in cash and rights. Even if tax laws did not require it to pay out the bulk of earnings in dividends, the company would probably do so. Incidentally, its directors feel that large investment companies cannot earn as much on capital as firms small enough to turn on a market dime. Graham-Newman now has total assets of $4 million and since, according to Mr. Graham, that may be close to the optimum, the company has stopped selling shares. It is willing to redeem any outstanding shares whenever asked to, but none have been cashed in since 1943.

Of course, not all companies priced below their scrap value are to be considered cheap. Publicly held concerns are rarely liquidated, and, if there are no earnings, liquid assets will eventually disappear. Of seventy-nine stocks publicly listed by Standard & Poor's as purchasable for less than their net quick-asset value last February, fifty-two were still cheaper by July 15 and maybe dear at that. Graham-Newman does not recommend as a general practice the trick of making money out of companies worth more dead than alive.

THE NEW SCHOOL Fall 1947

#78 CURRENT PROBLEMS OF THE INVESTOR
Benjamin Graham, A. Wilfred May

OUTLINE OF OCTOBER 30TH LECTURE
Benjamin Graham

THE INVESTOR'S APPROACH TO BONDS AND PREFERRED STOCKS

A - Recommendations made in Lecture I

B - General discussion of Bonds and Preferred Stocks. Their paradoxical features as to form:

1 - Preferred stocks legally partnership interest but actually a watered down creditor's claim.

2 - Bondholder has superior legal rights, but he rarely uses them to sue for his money. His rights are a club rather than a weapon.

3 - Bonds are not much superior to Preferreds in very prosperous or unprosperous cases. Their superiority is real in middle-ground cases.

4 - Income Bonds are theoretically the soundest form, but are least satisfactory group in actual market performance

5 - Unsecured (debenture) bonds of industrials now have better investment rating than mortgage bonds.

6 - Convertible securities are very attractive in form but on the whole tend to act badly in the market.

7 - Conclusion: Investment policy cannot rely on form of a senior security but on its substance.

8 - New offerings have a tendency to decline excessively in weak markets.
Moral: They are unattractive at time of issue, but may be quite attractive later.

C - Terms and advantages of U.S. Savings Bonds. Comparison with high-grade corporate issues. Risks in high-grade bonds, if interest rates advance. (Current examples.)

D - Medium-grade issues. Their disadvantages for average investor outweighs their advantages.

E - Undervalued Bonds and Preferred Stocks. For aggressive investors only. Wide opportunities recently in (a) real estate issues, (b) reorganization railroads, (c) public utility holding companies. Examples - Choctaw & Memphis 5s, Cities Service Pfd., Trinity Building bonds.

F - Convertible Issues. They present good opportunities, but caution is needed. (Current examples) Examples from recent past (Fairchild, Eversharp) show possibilities and risks of convertibles.

G - Brief resume of factors in analysis of investment grade Bonds and Pfd. Stks.

1 - Overall Earnings Coverage

2 - Stock Value Ratio or "Cushion".

3 - Working Capital (Industrials)

4 - Property Values (Utilities, Investment Co. Issues).

#78 CURRENT PROBLEMS OF THE INVESTOR
Benjamin Graham, A. Wilfred May

OUTLINE OF NOVEMBER 6TH LECTURE

Benjamin Graham

RULES FOR APPRAISAL OF COMMON STOCKS FOR INVESTMENT PURPOSES

1. Appraised Value is determined by (a) estimating the Earning Power (b) applying thereto a suitable multiplier, and (c) adjusting, if necessary, for asset value.

2. Earning Power should ordinarily represent an estimate of average earnings for the next five years.

3. Earning Power should ordinarily be derived from actual earnings over some period in the past. Where trend has been neutral, the period should be five to seven years. Where definite trend is shown, actual earnings for last year of reasonably normal general business may be taken, if it seems desirable.

4. In deriving Earning Power, the past earnings may be adjusted for known or highly probable developments -- e.g., changes in capitalization, properties, tax rates. Changes of a qualitative nature -- e.g., in competitive conditions, products, management -- should be reflected in the multiplier.

5. The multiplier should reflect prospective changes in earnings. A multiplier of 12 is suitable for stocks with neutral prospects. Increases or decreases from this figure must depend on the judgment and preferences of the appraiser. However, in all but the most exceptional cases the maximum multiplier should be 20 and the minimum should be 4.

6. If tangible asset value is less than earning power value (earning power X multiplier), the latter should be reduced by 25% of the deficiency to give the final Appraised Value. (Do not increase for excess tangible value except as under 7).

7. If Net Current Asset Value exceeds earning power value, the latter should be increased by 50% of the excess to give the final Appriased Value.

8. Where extraordinary conditions prevail -- e.g., war profits or war restrictions, a temporary royalty or rental situation -- the amount of the total probable gain or loss per share due to such conditions should be estimated, and added to or subtracted from the appraised value as determined without considering the abnormal conditions.

9. Where the capitalization structure is highly speculative -- i.e., the total of senior securities is disproportionately large -- then the value of the entire enterprise should first be determined as if it had common stock only. This value should be apportioned between the senior securities and the common stock on a basis which recognizes the going-concern value of the senior claims. (Note difference between this treatment and a valuation based on dissolution rights of the senior securities). If an adjustment is needed for extraordinary conditions, referred to in (8), this should be made in the total enterprise value, not on a per-share-of-common basis.

10. The more speculative the position of the common stock -- for whatever reason -- the less practical dependence can be accorded to the Appraised Value found.