Mr. Roberts says, "It is evident that the *Journal of Commerce* never contemplated that the figures would be used as a basis for comparing the total dividend-and-interest payments of all corporations over a period of years. Their use for that purpose and the arguments based upon their use in the text of the article, therefore, are unwarranted and misleading." It is true that any figures are perfectly harmless until they are used, but it is difficult to see why figures should be compiled and then reported by such agencies as Standard Statistics and the Department of Commerce unless they can be used for the purpose of showing changes and movements. It is possible that even the Treasury Department did not contemplate the use of its figures as a basis for comparing capital returns with labor returns, but that would hardly constitute a valid condemnation of such use.

I quote Mr. Roberts again: "to use newspaper reports of dividend payments which did not purport to be complete or comparable from year to year, is proof of careless methods." I plead guilty of negligence in not having more carefully checked the *Journal of Commerce* figures before using them; however, neither *Standard Statistics* nor the 1931 "Supplement" of the *Survey of Current Business*, which were the sources I used, raised any question concerning the comparability of the data from year to year. In regard to Mr. Roberts' question as to why the "Statistics of Income" figures were not used in the first place, the answer is that they are not available currently, but only after several years delay. Figures for 1929 have little value as an indication of what is happening in 1933.

Mr. Roberts suggests that interest-and-dividend payments of non-industrial corporations should not be included in the index of capital returns. He points out that the organization and rapid expansion of financial and non-industrial corporations was one of the outstanding features of the period 1926-1929. From Mr. Roberts' own argument it becomes obvious, therefore, that an index of capital returns which did not include the interest-and-dividend payments of these corporations would not reveal the true picture during the period under consideration. It is true that holding companies receive dividends and interest from the corporations they control, and then pay them out again. This results in a certain amount of duplication, but it cannot be eliminated except by subtracting dividends and interest received by corporations from dividends and interest paid. This practice, however, would eliminate not only the duplication but also a considerable amount of true dividend-and-interest income. Many corporations receive dividends and interest from others and then use the proceeds to expand capital facilities. The dividends and interest received from other corporations and used in this way are a true capital return and should be included in the index. Furthermore, corporations use a large part of their own operating income to expand plant, create large surpluses, etc. These amounts are also capital returns, but do not show up in an index of capital returns based merely on interest-and-dividend payments. In view of these facts, it is probable that the revised index of dividend-and-interest payments underestimates the growth in capital returns from 1926 to 1929. Mr. Roberts says that interest-and-dividend payments of manufacturing industries increased only 21 per cent while interest-and-dividend payments of all corporations increased 33 per cent from 1926 to 1929; but a 21 per cent increase in manufacturing interest-and-dividend payments appears rather large when compared with an increase of 0.6 per cent in factory payrolls during the same period.

It is not surprising that the average percentage of profits on aggregate net sales of manufactured goods showed no decided upward trend during the period 1923-1929. Aggregate profits are, to a large extent, dependent upon the volume of sales. The average percentage of profit shows little change, therefore, since it is derived by dividing aggregate profits by aggregate net sales, both of which tend to parallel each other. Furthermore, interest payments are deducted before the amount of profit is determined; what I was discussing in the article was the relationship between capital returns and labor returns. If it had not been for instalment and credit sales on a large scale during this period, the inability of consumers to purchase the goods produced would probably have shown up before 1929.

Mr. Roberts points out that the ratio of net income to net worth, represented by preferred and common-stock and surplus account, increased from 6.75 per cent in 1926 to 7.34 per cent in 1929, or by less than one-tenth. This would naturally be expected for two reasons: first, Chart V shows that new capital issues were being issued at a tremendous rate during this period; and second, net worth of corporations is to a large extent dependent upon net income. Naturally the two factors moved together, but the important thing is that net worth, net income, and dividend-interest payments were all increasing in the aggregate at a very rapid rate while wages and salaries were increasing but little from 1926 to 1929. This fact hits right at the core of the argument. Investments of all kinds were absorbing a larger and larger proportion of the national income and credit from 1926 to 1929, and a smaller and smaller proportion was left for consumption.

Quoting Mr. Roberts again, "An average profit of 5 per cent on the volume of business may rise to 10 per cent, or fall from 10 to 5, under changing conditions in production, trade and markets and thus effect a 50-100 per cent change with a comparatively small change in turnover. Mr. Welch takes no account of the greater variability of profits as compared with the total volume of business or wage payments." I wish to state that my calculations are based on aggregates, not ratios; whereas, Mr. Roberts gives two perfect illustrations of the type of ratio calculation which he condemns, when he shows the ratios of profits to net sales and of net income to net worth.

Mr. Roberts objects to the fact that I did not exclude investment trusts and holding companies from the index of new capital issues. It is true that these companies provided a considerable portion of the new capital issues, and it is further true that a considerable portion of the funds for these issues was raised by credit expansion. But that is all the more reason for including holding companies and investment trusts in the index of new issues. The very fact that savings can be geared up by means of credit expansion, makes them all the more effective in building up a huge mushroom structure of debts and fictitious capital values. The holding company is a very good example of how a small amount of actual savings or capital can be used to build up, by a process of credit inflation, book entries, stock watering, etc., a large capital pyramid on a small base of productive facilities. Any index of new capital issues that failed to include the holding company and investment-trust issues would surely fall far short of revealing what was happening to our tower of debts and capital values from 1923 to 1929.

In referring to table VII Mr. Roberts says specifically, "After 1914, and particularly after 1921, lower costs of raw materials and higher wages caused 'value added by manufacture' to take first place in Chart VII." He says this in spite of the fact that Chart VIII, which analyzes value added by manufacture, shows that wages increased but little from 1923 to 1929, while value added by manufacture and overhead and profits increased at a very rapid rate. It was decidedly not an increase in wages that caused the value added by manufacture to increase so rapidly from 1923 to 1929. It takes a powerful imagination to see wherein Chart VII "refutes from

Mr. Welch's own evidence his comments upon Chart VIII." In presenting Chart VII I made no assumptions as to why value added by manufacture increased so rapidly. Chart VIII answers the question for us and it was not because of "a phenomenal rise of wages" induced by "an unlimited and imperative demand for manpower." This situation existed to a considerable degree during the war, but not during the period from 1923 to 1929. During the war, the pre-war relationships between the various factors of production were fairly well maintained; it was during the period 1923 to 1929 that the various factors of production changed in relation to each other.

Another quotation from Mr. Roberts: "Industrial gains are distributed to the public not alone through rising wages, but also through declining prices, a fact which throughout his thinking, Mr. Welch fails to recognize. He sees wages as purchasing power to the recipients, but never as a factor in the cost of living or the purchasing power of consumers." A sufficient answer to this blast is to refer Mr. Roberts and the readers to references in my article: page 169—paragraphs 3 and 4; page 172—second column; page 173—first column.

It is true that Professor Mills' book shows that unit selling prices of manufactured goods were falling from 1923 to 1929. But it is also true that unit material and labor costs were falling still faster than selling prices—otherwise, total value added by manufacture could not have increased faster than cost of material and value of product on Chart VII, and overhead and profits could not have increased faster than wages paid and value added by manufacture on Chart VIII. As a matter of fact if Mr. Roberts took the trouble to read Professor Mills' discussion "On the Relative Importance of Different Elements of Cost as Factors in Price Changes, 1923-1929," on page 410 of "Economic Tendencies," he probably saw the following statement, "The decline of 9.2 per cent in selling price is the net result of a decline of 12.11 per cent in material costs, a decline of 14.25 per cent in labor costs, and an advance of 4.76 per cent in overhead costs plus profits." And Mr. Roberts calls it an "obsession" when I point out that overhead costs and profits were increasing while labor and material costs were declining! Then Mr. Roberts proceeds to state that the depression was caused by the maintenance of war-time wages in the highly organized industries.

In regard to the share of the national income and its purchasing power which is going to labor and capital, I refer Mr. Roberts to page 555 of Professor Mills' book. These figures are more recent than Professor King's, and are brought up to 1929. From 1922 to 1929, "the general index of real wages advanced by 2.1 per cent a year. . . Bondholders suffered a slight decline in real income (-0.1 per cent a year), while common-stock holders gained in real income at a rate of 16.4 per cent a year. During this period the capital values of invested funds (in current dollars) increased at a rate of 1.9 per cent a year for bondholders, at a rate of 18.8 per cent a year for holders of common stocks."

In submitting the table showing the average annual increase of 3 per cent in manufacturing physical output per wage earner from 1899 to 1929, Mr. Roberts might have pointed out that the average per capita annual increase in wage earners' purchasing power was approximately 0.6 per cent during the same period.

Mr. Roberts points out that the average annual rate of growth in production of consumers' goods was 42.3 per cent larger in the period 1923-29 than in the period 1899-1914. On the other hand, the average annual rate of growth in production of producers' goods was only 28 per cent larger in the 1923-1929 period than in the 1899-1914 period. Here is another case where misleading results are obtained by dealing with ratios of ratios. In absolute terms, the rate of growth increased *less* between the two periods in the case of consumers' goods than in the case of producers' goods, 1.1 and 1.4 per cent, respectively. Furthermore, it should be borne in mind that capital goods are partially cumulative, due to longer life. Another point that should be remembered is that the capacity of a nation to utilize an expansion of producers' goods is dependent upon its state of industrial development. I fail to see wherein Mr. Roberts has "completely disposed of the theory so confidently advanced by Mr. Welch and others." The article itself is sufficient evidence of what my reply to Mr. Roberts' war-and-high-wages theory of the depression would be.

As to the place of the profit motive in modern business and economic life, I refer Mr. Roberts to any standard textbook on economics or business.

In re 1933

Greetings from a British Member

The "Hogmanayful" Greetings that I would have sent to you
Have this year been retarded by that pestilential "flu":
I hope it's only streptococcic spleen that makes me doubt
If any grounds yet justify an optimistic shout!

The number of Earth's Sovereign States exceeds three score and ten,
Each one of which is taught to call the others "alien":
Within the sacred bounds of each, the Jingoist neurotic
Proclaims exports as "dutiful"; imports "unpatriotic":
Their politician-pundits are most grievously dismayed
Unless each has a "favorable balance" to its trade—
A comic sort of phrase which signifies—'tis strange but true—
The act of parting with more wealth than others send to you!
Each State seeks self-sufficiency within its garden wall
Until its Board of Trade declares there ain't no trade at all:
How can, indeed, the Mariners continue as its carriers
While world-wide fiscal foolery goes boosting up new barriers?
The ships go into dock to stop, while each despairing nation
Relapses to a state of crass commercial constipation:
The Governments, Micawber-like, then call upon all ranks
To grin and be content with less—excepting, p'raps, the Banks:
With falling profits, dwindling staffs, and confidence destroyed,
Fresh hundred thousands go to swell the millions unemployed,
Who mustn't be allowed to mend the drains and stop the smells,
To clear the slums, repair the roads, or build some new hotels,
Produce a bit more grub at home, and do what folk have written
To make the place more human-like for those who "Come to Britain."

But no! From all constructive work it seems we must desist
While interest is payable on wealth which don't exist.
No matter where one walks abroad—in France or Germany
The world seems to be safe for nothing but Shylockracy,
For prostituted Science, for Pseudo-economy,
The fostering of racial or of class antipathy!
When will the Money-monger Lords discover their mistakes
Of trying to make the wheels go round by putting on the brakes?

Things being thus, my fervent wish, until these shades have passed,
Is that this year will not turn out too much worse than the last;
But should for you the clouds disperse, to show a clearer sky,
No-one would more rejoice thereat than Reginald Mackay.