U.S. Corporate Profitability and Capital Formation

Are Rates of Return Sufficient?

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Preface

While profit trends of an individual company typically command the interest of investors year in and year out, its performance as part of macroeconomic policy appears to be of intermittent interest. Rightfully, however, the rate of return on investment, should it have declined in recent years as this study shows, surely has contributed to the decline in the growth of capital formation and productivity that has characterized the U.S. economy since 1973. In the nonfarm business economy, the decline in productivity growth from 2.0 percent per year in 1965-73 to 0.8 percent in 1973-78 and 0.5 percent in 1978 raises serious difficulties affecting fulfillment of this nation's responsibilities. Primary among these are the U.S. capabilities to deal with our domestic and international obligations towards raising living standards of peoples, both here and abroad. Moreover, the decline in productivity growth represents a crucial setback in limiting the accelerated pace of inflation in recent years, perhaps the major social disturbance of the present age. The cushioning effect that productivity exerts in reducing wage and other cost pressures on prices is lost in this process. Finally, as investment and productivity lag, barriers to inflation diminish even in periods of slow growth, as business costs continue to rise and "stagflation" is made increasingly possible.

Of course, no single cause explains the decline in productivity growth. The slowing may have derived from changes in the age distribution of the labor force, as less productive teenagers and women increased as a share of the total; higher costs of environmental legislation (both directly as a more expensive input, and indirectly as a deterrent to investment); substitution of more labor for energy-using capital equipment; etc.

Manifestly, however, the slow-up in growth of capital stock would appear to be an important factor in contributing to declining productivity growth. The capital-labor ratio in nonfarm industries has grown only 0.9 percent per annum since 1973, contrasting with the 2.2 percent growth between 1948 and 1973. The decline in growth of the net stock of

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Manifestly, however, the slow-up in growth of capital stock would appear to be an important factor in contributing to declining productivity growth. The capital-labor ratio in nonfarm industries has grown only 0.9 percent per annum since 1973, contrasting with the 2.2 percent growth between 1948 and 1973. The decline in growth of the net stock of capital is even more striking. Between 1973 and 1978, growth of production facilities (though inclusive of environmental outlays) was 2.4 percent, which compares with 4.5 percent during 1965-73 and with 3.6 percent when the entire 1948-73 period is considered.

Profitability in the U.S. economy surely is related to the investment process. While the sufficiency of demand needs to be considered before investment is encouraged, expected rates of return must be a second blade of the scissor in the investment decision. In that respect, current profitability resolves that decision, as many studies have shown. Moreover, those rates of return are reflected in stock market prices, whose performance in recent years appears lackluster at best in support of capital formation.

It is to the resolution of problems with respect to whether rates of return are sufficient to encourage investment that this book is directed. More specifically, the objectives of this study were:

- To supply an analysis for economic policymakers and the literate public which might resolve the issue of the trend in profitability over the past three decades. Though complex econometric methods of analyses were utilized, so were some relatively simple procedures that might be readily comprehensible to noneconomists. Indeed, where complexities arose, simplification in exposition was provided, sometimes with sacrifice of supporting materials not herein included. In any event, that objective of exposition and simplification might explain to economists why some topics have been addressed in what might be considered summary fashion.

- To provide a compendium of statistics bearing on profitability, which could serve as a reference data base for persons seeking information and analysis in this field. The dozens of tables which have been provided in the statistical appendix should supply much material to fact-seekers. Aside from the conclusions of the study, these tables may prove helpful in providing the statistical framework for other studies.

- To furnish a comprehensive review and analysis of the literature pertaining to the recent trend in profitability of nonfinancial corporations that provides the substance of these works in a handy and nontechnical manner.

Much more work than appears here needs to be done on trends in profitability. Accordingly, the conclusions reached herein must be considered tentative. That should not be surprising nor disappointing in view of the 200 years or so that economists and accountants have addressed themselves merely to the problem of defining profits, let alone profitability or rates of return. Hopefully, official and other sources will continue to provide funds for further research in this area.

Though the author has been concerned with trends in profitability for nearly a decade, much of the materials presented herein were developed with financial assistance provided in 1978 by the Office of the Secretary, United States Department of the Treasury.

Acknowledgments

The merits that may be found in this study resulted from the combined efforts of a team. Throughout, Mr. Robert Ott managed required computer program services, organized the tables, and contributed to the interpretation of the data. Mr. Lawrence Summers provided an early draft of the review of the relevant literature. Ms. Joy C. Olgyay helped in computer assistance and advice at a preliminary stage of the study, as did Ms. Lois Fulmer during that period. Mr. David Kohls was responsible for preparing and revising final tables and charts and was generally helpful as a research assistant. Mrs. June Vail typed the final manuscript. However, all errors in the study should be attributed to the author.

Mrs. Beatrice Vaccara, Deputy Assistant Secretary of the United States Treasury Department (Economic Policy) was extremely helpful in suggestions regarding the form in which this study appears. Of course, she, too, is blameless for errors of substance.

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1 Summary and Public Policy Issues

In several widely cited studies in recent years, profitability or the rate of return on corporate capital was perceived to have declined during the 1970s to 30-year lows – but only because of special factors which already have, or soon would, wane in influence. (Cagan & Lipsey, 1978; Chimerine & Himmelstein, 1979; Feldstein & Summers, 1977). Statistically processed by so-called "cyclical adjustments," by allowances for an ascribed transient squeeze from higher costs of energy, and by other special and temporary influences, the preadjusted, measured, low profit rates recorded in the 1970s are thereby raised. (A review of the relevant literature is presented in Chapter 3.)

In their cyclically adjusted form, the rates of return appear not at all ominous, especially if pretax trends are observed. Indeed, these "adjusted" rates have been interpreted to be in the normal range; if anything, they are concluded as being precursive to an improved performance in the "measured" rates. The recent preadjusted figures for 1976 and 1977, in these studies, already are considered to have fluctuated within the normal range previously observed in the "good" years of the post-World War II period.

One consequence of this conclusion is that rates of return, especially on a pretax basis, need not generate much concern for economic policymakers. Of course, some room is left for policy change – since lowered economic growth and investment in the 1970s surely could not be ignored. This finds expression in recommendations for improved aftertax rates of return, presumably to be attained by reduction in corporate tax rates.

If this conclusion of a current satisfactory state of pretax profits were to be accepted, economic policy initially could be directed merely to the maintenance of high level economic activity. (Robust economic growth was a condition which surely prevailed in 1976 and 1977 and, accordingly, profitability in these years already was judged by some to be in the "normal" range.) High level economic activity would ensure adequate pretax rates of return, assuming that the cyclical adjustments in these studies were valid. Together with adjustment in tax rates, that would be deemed sufficient to attain the higher rates of capital formation thought necessary to increase our capacity to produce, to raise living standards, and to moderate inflation.

A by-product of this view is that a boom in the stock market merely awaits more general awareness of this "normality" in profitability.

A SUMMARY STATEMENT OF THE CONCLUSION

The adequacy in pretax rates of return that has been found in these recent studies rests on uncertain ground. Though special factors did abound, the case for the special nature of the 1970s is not convincing in explaining low profitability. Not the least for such is the faulty use of dummy variables, as utilized in these econometric studies, which appeared to validate the importance of special factors that could explain why measured rates were low and why they would not permanently remain low.

Moreover, the choice of which among many plausible "rates of return" as the standard by which to view profitability is not beyond criticism – much depending on whether company-recorded or real economic profits (or inclusive or exclusive of interest paid on capital supplied through debt) was used in the numerator. Book profits, which are based on historical rather than replacement cost, remain the typical basis of corporate accounts. This results in bloating earnings; making them look unduly high and subject to public criticism; and distorting the numerator in rates of return calculations. The latter are affected also by whether total or physical capital at company-recorded or real costs was used in the denominator.

Finally, the difficulties of measuring rates of return have been especially complicated by the distortions caused by inflation, which has affected the valuation of most elements of the balance sheet and the income statement. Nevertheless, those studies which make "inflation adjustments" do not appear to have taken into account the full range of benefits and costs of inflation on corporate debt. Because of their net debtor status, inflation generates a gain to nonfinancial corporations as the real value of liabilities declines. In some studies, such gains are added to profits (Cagan and Lipsey, 1978). However, this adjustment for inflation is incomplete; no account is made of the loss to corporations in their creditor status in pension funds, whose assets decline in value with inflation and thereby raise contingent liabilities.

In contrast with those that support a view of normal or usual profitability, the overall conclusion of this study is that lowered rates of return on both pre- and posttax bases have developed in the 1970s; and, moreover, that they reflect more than transient influences. Indeed, a permanent or structural change to lowered profitability apparently was initiated as long ago as the mid-1960s.

A CAPSULE OF THE FINDINGS

As previously noted, the interpretation of trends in profit rates has always been difficult. To restate, such different measures may be utilized in the numerator as profits before tax, profits after tax, historical or replacement cost of inventory change and depreciation charges, and assigned gains to equity resulting from the reduced real value of the debt due to inflation; while the denominator might utilize net worth (with or without adjustment for updating the value of physical assets) or total assets on an historical or replacement basis. The inclusion of interest paid by corporations in the numerator also yields a somewhat different perspective to the trend in profit rates. Finally, another approach to profitability frequently used is the profit share to total value of output – which in many respects overcomes the balance sheet problems of valuation of assets and liabilities. (These issues are treated in detail in Chapter 2).

Approximate and differing in concept though they are, most standard measures of corporate profitability, nevertheless, have registered significant declines in trend since the mid-1960s.

- Favorable productivity conditions propelled rates of return upward in the mid-1960s to an historical peak in post-World War II experience. However, the sharp descent from those mid-1960 peaks toward lesser profitability in recent years has represented more than a decline from so-called over-inflated or unusual rates of the mid-1960s.

- Cyclical adjustments do not bring current profit rates back to a normal range. Indeed, this study utilized several varieties of cyclical adjustments and found lower rates of return to have developed even on the basis of the most optimistic view of potential capacity (which would have exerted the maximum lift on recorded profit rates).

- Trends toward lesser profitability in the 1970s are striking on either the pretax or the posttax corporate profits bases; and also when net interest paid by corporations is either included or excluded.

An interesting aspect of the results of this study is the apparently large decline in the 1970s in rates of return on a pretax plus interest paid basis – "capital income" (see table 1.1). As adjusted by the procedures of the official national accounts for the exclusion of inventory gains and the replacement cost of depreciation, the pretax capital income return on investment was reduced by four percentage points in the 1970s, as compared with the 1948-69 period. The decline becomes even sharper when interest paid is not included as earnings on capital. As noted earlier, the pretax rates of return for the 1970s are said in some studies to be aberrant and self-corrective in nature. This is a contention that this study disputes on the basis of econometric