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Volume Title: The Financial Effects of Inflation

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Volume Publisher: NBER

Volume ISBN: 0-88410-486-9

Volume URL: <http://www.nber.org/books/caga78-1>

Publication Date: 1978

Chapter Title: Summary: Financial Adjustments to the Uncertainty of Inflation

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Chapter URL: <http://www.nber.org/chapters/c3878>

Chapter pages in book: (p. 67 - 72)

**Summary: Financial Adjustments
to the Uncertainty of Inflation**

Experience with inflation in the past decade has shattered many presuppositions. While it was once thought that the economy could follow an inflationary trend with no more and perhaps less fluctuation than in periods of stable prices, the actual course has been volatile for both the inflation rate and economic activity. Even aside from unusual years such as 1973-1974, when the inflation rate first doubled and then halved, the annual rate has changed by a couple of percentage points from one year to the next. These fluctuations affect interest rates and market values by a large amount. While it was once thought that inflation tends to reduce unemployment, the average rate of unemployment has been rising. In large part, the instability reflects the gyrations of aggregate demand policy, in which the economy is first restrained to reduce inflation and then stimulated to overcome the contractionary effects of the restraint. International disturbances add to the instability, as in 1973. But, in part, the instability also appears to reflect a change in the way that prices respond to disturbances in an inflationary environment, whereby market adjustments no longer moderate disturbances but tend to magnify them. So far, no new theory has been developed to explain and clarify the new behavior. In view of the difficulties of subduing inflation, no one knows when and if it will end, and adjusting to the possibility of continuing inflation is the prudent course. It was once thought that the economy would in time make all the necessary adjustments, but many of them are proving to be very difficult. They are taking a long time and may never be complete.

For financial institutions and markets, the effects of inflation

have been extremely unsettling. (1) Interest rates have risen to high levels and undergone wide fluctuations, occasionally subjecting financial markets to disabling stringencies. (2) Common stocks have lost ground relative to the general price level and are subject to sharp declines whenever inflation speeds up or monetary policy takes steps to reduce it. (3) Long-term financing has become more difficult. The periods of the business cycle during which the market is receptive to issues of common stocks or long-term bonds have become shorter, and generally the public prefers short-term instruments to avoid the wide fluctuations in nominal value now associated with interest rate movements. (4) Households have not been attracted to common stocks as a hedge against inflation, and, although the total value of residential housing has risen, there has been no increase in net purchases of housing relative to disposable income. Although many influences were at work in the household demand for real property, a strong demand to hedge against inflation was not conspicuously a major one. Financial intermediaries did not find their short flirtation with equity kickers and income participations in the late 1960s successful and have abandoned them, although they have continued to invest in real estate on a wholly owned basis. One indication of shifts toward real assets is the recent dramatic rise in prices of diamonds and other such special items of wealth. Such items do not solve the problem of hedging against inflation for financial institutions and most investors, however. (5) Contrary to the presupposition that inflation causes a shift from fixed-dollar to real assets, household saving has increased largely in the form of financial assets, apparently as a response to the uncertainty of inflation. (6) Intermediaries have maintained their position in the financial structure, but they are vulnerable to short-run fluctuations in interest rates due to the variability of inflation and are severely buffeted whenever the rate of inflation steps up.

A central presupposition about inflation has been that financial markets would adjust to it and find ways to protect savers. While interest rates have risen to compensate for the anticipated rate of long-run inflation, common stocks, which were supposed to provide a hedge against the uncertainty of the inflation rate, have failed to do so over the past decade. The basic reasons are that profit rates have declined since the mid-1960s and that operating profits are subject to considerable fluctuation in an inflationary environment. Profit margins are squeezed by the tendency of costs to outstrip selling prices when inflationary pressures intensify and as frequent bouts of monetary restraint reduce demand and output. (Corporate profit rates in the aggregate recovered in recent years and reached

the level of the mid-1960s, when measured by conventional dollar cost accounting. When adjusted for the effects of inflation, profit rates were lower in 1976-1977 than in the mid-1960s, though the level varies with the particular adjustments included.) The decline in profit rates and in their degree of stability led to a market revaluation of net worth from a high premium in the mid-1960s to a substantial discount in the mid-1970s.

If the low valuation of net worth in the mid-1970s were to be maintained or raised, common stocks would henceforth provide a positive real rate of return over the long run, even under continuing inflation. Even should the very long-term investor from now on be able to preserve his capital on the average by holding common stocks in an inflationary environment, such holdings will undergo substantial short-run fluctuations in real value with no certainty about the long-run outcome. Indeed, fluctuating rates of inflation make it extremely difficult to discern what sustainable profit rates have been and are likely to average in the future. The attraction of common stocks as a short-run hedge against inflation has for the present been radically reduced. Yet no alternative readily takes their place. Direct holdings of real assets such as commodities or property lack the ease of sale and management and possible diversification of investments provided by a portfolio of common stocks and are therefore not a satisfactory substitute. The inability of any available assets to serve as a practical hedge against inflation adds to the financial uncertainty of inflation and helps to explain the anomaly of higher saving in the form of short-term financial assets, which are subject to depreciation in real terms by inflation but which nevertheless are attractive because they do not undergo the large swings in real value of bonds and stocks. Contrary to the traditional view that investors should hold common stocks when inflation threatens, therefore, the recent experience indicates that both stocks and bonds decline when inflation escalates. At such times, cash or liquid assets have paradoxically appeared safest.

Present financial practices can hardly be said to offer satisfactory answers to the problems of inflation for short-term investors or reasonable safety to long-term investors. The bulk of financial assets held by households for contingencies and retirement are subject to uncertain rates of depreciation in real terms. Nominal interest rates on those assets may or may not adequately compensate for future inflation rates. In 1976-1977, nominal interest rates on many financial assets were lower than the rise in prices of 6 percent and gave a zero or negative real rate of return. The public faces the disconcerting prospect of accumulating financial wealth that may

yield low or even negative real returns due to continual erosion by inflation. Furthermore, long-term financial commitments, such as home mortgages, harbor severe difficulties for borrowers in terms of their planned lifetime saving should long-run inflation rates decline appreciably and difficulties for lenders should inflation rates increase.

Financial practices seem bound to evolve through further attempts to provide a positive real rate of return and to adjust to the uncertainty of inflation. What direction such an evolution will take depends upon the severity of future inflation, changes in regulations, the success or failure of various experiments, and the response of the public. For example, present experiments with variable rate mortgages will undoubtedly continue, and their use is likely to expand if inflation continues at high and variable rates. Pressures to lift the prohibition of interest on demand deposits with commercial banks have intensified with the growth of checking privileges and phone transfers of interest-bearing deposits with thrift institutions, and the prohibition is not likely to survive many more years. Accounting practices to report business earnings in an inflationary environment are under review and bound to change, though progress so far has been slow.

These and other developments are peripheral, however, to the central problem of protecting financial assets against uncertain inflation rates. Securities linked in value to a price index, which have appeared in other countries, have yet to be introduced in the United States. Indexing is now a feature of social security and federal employee retirement benefits. The particular indexing schemes adopted were improperly devised and produced increases in nominal benefits that overcompensated for advances in the cost of living. The formula for indexing the benefits has been revised. The changes made may solve the immediate problem; but indexing is never perfect and other difficulties may come to light. Pension indexing in general presents the danger that growth in future financial obligations will outstrip growth in contributions and investment income and at some point require unplanned increases in contributions that are inequitable between younger working and older retired generations. Indexing of wages, which has a longer history, does not involve the same problem of making distant future commitments, because the terms are renegotiated every few years. But the present implicit indexing of many private pension plans, in which benefits are based on wages in the final years before retirement, raises problems about the current adequacy of funding.

The solution to the private pension problem would be the

availability of a diversified list of indexed bonds, but private corporations have avoided their issue, in part perhaps because of the uncertainty that the product prices of individual companies will rise commensurately with the general level of prices.¹ For the time being, financial arrangements are likely to remain subject to the vicissitudes of fixed dollar securities and common stocks. Additions to the present halfway measures to deal with the uncertainty of inflation await the financial innovations that current and future incentives for change can be expected to bring.

NOTES

1. One reason for such uncertainty is that the variability of changes in relative prices appears to rise as the overall rate of inflation increases. See Vining and Elwertowski [1976].

With its taxing power, the federal government could issue an indexed bond. Such a step would no doubt initiate radical changes in the private financial sector.

For one view on the future of private pensions, see Munnell [1978].

