Indexation as a Response to Inflation: An Examination

As response to the current high rates of inflaltion in the U. S. economy, indexation is regarded by some observers "as changing the game-plan from a strategy to achieve victory to a willingness to settle for a tie." Others feel that we have been "playing catch-up long enough and that a tie may be the best that we can hope for at this point in time." In any case, the most notable current proponent of indexation is the distinguished economist, Milton Friedman, who broached the idea following a visit to Brazil.

In his regular column in *Newsweek* (January 21, 1974), Professor Friedman noted that Brazil had introduced purchasing-power escalator clauses into a wide range of contracts and that this action was characterized a "monetary correction." He added that "with it, the Brazilians have been able to reduce inflation gradually from about 30 percent in 1967 to about 15 percent now without inhibiting rapid growth, and they may be able to succeed in gradually bringing inflation down to near zero."[1]

As the rate of inflation remains stubbornly high in the United States in apparent defiance of conventional stabilization weapons, more and more discussion is being devoted to the feasibililty of applying an indexing system to the American economy. In view of such current interest, it seems useful (1) to examine how an indexing system might work; and (2) to evaluate some of the observations made by analysts with regard to indexation as a desirable arrangement for the American economy.

HOW IT WORKS

In an indexed economy the terms of all deferred payments are explicitly tied to a specific price index, thereby guaranteeing the future purchasing power of these payments. Professor Friedman proposes that provision for the terms of payments between the public and the Federal Government should be legislated, whereas those for the rest of the economy would be voluntary.[2] Other analysts argue that the entire economy must be indexed if the system is to be expected to eliminate distortions caused by rising prices and if inequities are to be avoided. In brief, all deferred payments, including wages, salaries, rents, interest and principal payments, insurance and pensions would be linked to a price index, as would be the payment terms on contracts for future delivery of goods. Only transactions in which the purchase and payment are made simultaneously would be exempted. Thus the purchase prices of most consumer goods and consumer durables would not be indexed, but the interest and principal payments on any consumer loans taken out to purchase these goods would be.

To illustrate the operation of a hypothetical indexing system, assume that a worker is employed at an hourly wage of $2.00, with his total wages to be paid at the end of the month. This worker's hourly wage would be tied to a price index, since payment for his services is on a deferred basis. If the price index should rise, say, by 10 percent during a particular month, he would receive an hourly wage of $2.20—the $2.00 which he would have been paid if there had been no increase in the price level plus an additional 10 percent or $.20 because of the rise in the price index. In short, even though there was a 10 percent inflation between the time the worker began his employment and when he was paid, the indexing arrangement assures that he loses nothing in terms of the purchasing power of his wages. His wages now buy what he expected them to buy when he started working at the beginning of the month.

A similar adjustment would be made to the interest and principal paid on bonds, loans, and savings accounts. Again, assuming a 10 percent rise in the price level, an individual holding a $1000 savings account, paying a 5 percent nominal interest rate, would receive $55 in interest (the $50 he would have received if there had been no inflation and an additional 10 percent because of the rise in the price index). Further, the principal amount of his savings account would be increased 10 percent, to $1100. Hence the purchasing power of the savings account would not be diminished by the inflation. In this fashion, the holder of this savings account is protected against the attrition that inflation would other-

[1] *Newsweek*, January 21, 1974, p. 80.

[2] *Fortune*, July 1974, p. 96.

wise work on the purchasing power of his savings and his interest earnings.

If after-tax or disposable income is to be protected against inflation, the progressive income tax system should likewise be covered by indexation. Under the current income tax provisions in the United States, inflation moves individual taxpayers into higher tax brackets even though their real income may not have increased. Using computations based on I.R.S. data, Professor James M. Buchanan suggests that for the country as a whole a 10 percent inflation will generate a 15 percent increase in personal income tax liabilities.

To be complete, the system of indexing should also cover business accounting procedures, such as depreciation and the valuation of fixed assets. This would allow business firms to report their real earnings and would likewise enable potential investors to be able to identify the real profitability of the business firm. If accounting procedures were indexed in this manner, the mere fact that inflation had not been adequately taken into account by the firm's accounting procedures could not give rise to measured profits.

For business firms such as savings and loan associations and insurance companies, indexation would add an escalator clause to the nominal percentage yields on their mortgage and other loans. Also in the case of savings and loan associations, for example, payments to shareholders or depositors would include a contracted nominal rate of interest plus an adjustment tied to a price index. Insurance firms' liabilities under policy contracts would also be subject to an escalator clause. This same arrangement would be applied to the assets of institutions like pension funds, which would then offer inflation-protected benefits.

CURRENT PRACTICE IN THE UNITED STATES

The term "indexation" is a relative newcomer to the economic jargon in the United States. The practice of tying deferred payments to the price index, however, is well established in a number of sectors in the American economy. The most familiar example is the wage agreement that includes a cost-of-living escalator clause. Under such a clause a rise in the cost-of-living index automatically gives workers an increase in wages. Actually, such clauses were used on a small scale prior to World War II. They attracted public notice, however, during wage negotiations in the automobile industry in 1948. As of October 1974, escalator clauses appeared in wage agreements covering about five million employees, public and private.[3] With the exception of some 115,000 workers whose wages were tied to various Bureau of Labor Statistics city indexes, the bulk of these workers were covered by clauses tied to the national Consumer Price Index.

Even the Federal Government has paid deference to the idea of indexing. Pensions to both retired federal employees and retired military personnel—with some lag—are tied to changes in the Consumer Price Index; and beginning July 1975, payments to about 29 million Social Security recipients are scheduled to be tied to this same index. Similarly, benefits to food stamp recipients are pegged to the Consumer Price Index. Taking into account the dependents of these persons who receive transfer payments from the Federal Government, the Commissioner of the Bureau of Labor Statistics considers 50 million to be a conservative estimate of the number of people whose incomes are affected by more or less automatic cost-of-living adjustments.[4]

OBJECTIVES AND PRESUMED BENEFITS

Supporters of indexation are quick to point out one thing, namely that the plan, taken by itself, cannot stop inflation. But they argue that the obstacles to ending inflation can be substantially reduced through indexation and that, in particular, the harsher side effects of effective anti-inflation measures can be substantially mitigated. These side effects supposedly reflect distortions introduced into *relative* prices by *unanticipated* inflation (or deflation), distortions that arise because contracts are entered into under mistaken perceptions about the likely course of general price movements. Indexation, it is argued, reduces these side effects by assuring that contracts involving prices, wages, and interest rates are stipulated in *real* rather than *nominal* terms.

Removing Uncertainty Over Real Value of Future Income A key objective sought by proponents of indexation is the elimination of the current inflation-caused uncertainty over the real value of future money income which individuals and businesses will receive. In an economy that is not indexed, the chances of sizable losses or gains in income resulting from sharp fluctuations in the general level of prices are great, especially in an economy with a history of price instability. While, in a general sense, the risk of loss should be offset by

[3] See *Monthly Labor Review*, January 1973, U. S. Department of Labor, Bureau of Labor Statistics, p. 8. (data updated by telephone on 10-25-74.)

[4] Estimate received by telephone from the Bureau of Labor Statistics.

the chance of gain, it might be argued that many, if not most, businesses and households are prepared to give up the chance of gain in order to avoid the risk of loss. That is to say that many would prefer a hedged position with respect to general price movements. Accordingly, it might well be that in an unindexed economy more resources, on balance, will be devoted to seeking effective hedges than will be the case in an indexed economy. Thus in the absence of indexing, labor unions and even individual workers, as a preliminary to wage bargaining, devote resources to estimating the attrition which future inflation may work on real wages. Investors devote resources, either directly or indirectly, to seeking out inflation-proof or deflation-proof assets. Rational, profit-maximizing business decisions require more inputs of information and hence more resources devoted to information-gathering and processing. Indexing eliminates the need for these extra resource-using activities by insuring that general price level movements will have only minimal effects on the real value of future income or capital payments. Hence, it is argued, the indexing arrangement reduces real costs and improves the efficiency of the economy overall.

Offsetting the Effects on Income Distribution It has long been observed that swings in the general level of prices may bring in their wake shifts in the distribution of income among various socio-economic groups. While, in a general inflation, all prices may be under upward pressure, the prices of some goods and services typically go up more than the prices of others. This unevenness of the price impact results in part from different degrees of market power enjoyed by sellers of different kinds of goods and services. For example, some strong labor unions might enjoy the protection of escalator clauses in their trade agreement while weaker unions or nonunion workers do not. Professor Friedman considers it "highly desirable that the practice of incorporating escalator clauses be extended to a far wider range of wage agreements, contracts for future delivery of products, and financial transactions involving borrowing and lending."[5] Critics of indexation concede that an across-the-board indexing system may be the most practicable means of buffering the incomes of groups who have little or no built-in protection against inflation.

Stabilizing Real Variables A number of advantages cited are associated with the belief that indexation will temper some of the distortions and hardships that usually follow from strong anti-inflation policies pursued in an unindexed economy. In the indexed economy, wage agreements, for example, would be stipulated in real terms and, while general price level changes would effect nominal wage rates, they would not affect the real wage rates that an employer must pay under the agreement. Similarly, the real interest cost to a borrower under a loan contract would not be affected by inflation or deflation. In essence, a system of indexation would increase the flexibility of nominal wages, nominal interest, and other nominal costs in response to price-level changes. But the resulting changes in the nominal cost items would stabilize the *real* cost items in existing contracts and if all deferred payments were covered by indexed contracts, this would do much to eliminate the inequities that may be associated with swings in price level movements, even those that are brought about by strong anti-inflation policies.

It is also argued that indexation would at least partly counteract the tendency of business firms to defer capital investment once total spending begins to decline because there would be less reason to wait in expectation of lower interest costs. Business firms would be able to borrow funds or enter into construction knowing that nominal interest rates and contract prices can be adjusted later on in accord with changes in indexes of prices.

Reduces Likelihood of Unemployment? To some proponents, the virtue of indexation with the widest appeal is the prospect that workers will come to rely on escalator clauses to keep wages in line with prices. This, they argue, would minimize the chances that demands for excessive "catch-up" wage increases would raise real wages to a point where total employment growth may be slowed. But it should be noted in this connection that there is nothing in the indexing arrangement, as such, to prevent workers from bargaining for, and realizing, increases in real wages, even wage gains that exceed productivity increases.

LIMITATIONS AND OBJECTIONS

At the heart of the widespread skepticism about indexation is the fact that the adoption of this arrangement does not necessarily mean the end of inflation. The latest statistics show that Brazil is still plagued by double-digit inflation, and one of that nation's leading economists claims only that the system of escalators in operation there "makes inflation livable."[6]

[5] *Fortune*, July 1974, p. 174.

[6] Contained in statement made by Alexandra Kafka in addressing The National Economists Club in March 1974.

As indicated earlier, those who support indexation for the American economy readily admit that, once the economy has adapted to indexation, the actual indexing, in and of itself, will not necessarily affect the inflation rate at all. However, many other criticisms of indexation have been voiced and doubts about its usefullness evoke strong opposition to the notion of implementing such an arrangement in the United States.

Discourages the Fight Against Inflation? As a first reaction to indexation, many critics ask cynically, "Why worry about double-digit inflation if we all will be protected?" This attitude suggests that whatever resistance to inflation that does exist in the economy would be dropped if a system of indexation is adopted. Said William J. Fellner, a member of the President's Council of Economic Advisers, "such a plan would lessen the possibility that any government could adopt harsher fiscal and monetary policies." Moreover, it is argued that the general public would interpret the adoption of escalator clauses to mean that the government has given up the fight against inflation and is seeking only to live with it—which in turn would reinforce inflationary expectations.

In any case, there is no reason to believe that indexation would put a stop to efforts of groups enjoying monopoly power to increase their respective shares of the national income through pushing up the prices of the goods or services they sell. To the extent that such power, whether it be based on market power or on political action that results in government support, is widespread in the economy, inflation is likely to remain a problem even in the face of indexation.

May Hamper Full Employment Policies Another frequently heard objection to indexation is that such an arrangement—because it makes inflation almost fully anticipated—eliminates the possibility of using inflation to reduce employment. This objection springs from an interpretation of the so-called Phillips relation, which suggests that higher inflation rates are accompanied by lower levels of unemployment, at least in the short run. The assumption here would appear to be that the short-run reduction is realized because unanticipated inflation leads workers to view increases in their money wage as increases in their real wage, inducing them to increase spending, thereby increasing employment. Also, the unanticipated inflation and consequent fall in real wage is assumed to prompt many employers to increase their hiring. In this fashion, the unexpected inflation is assumed to bring with it a decrease in unemployment, an advantage that, it is argued, may be lost under indexation.

Would Impair the Price Mechanism A more serious objection offered by some opponents is that indexation would hamper the economic process by interfering with the price allocation mechanism. This mechanism works by raising the relative price of scarce resources, thereby encouraging a more economical use of such resources. If as a part of indexing the economy, all costs were passed on and nominal incomes automatically adjusted, producers and consumers would have less incentive to economize by changing their buying patterns. As a result, inflationary pressures would become even stronger as scarce resources became more scarce. This argument, in brief, suggests that the effect of indexation would be similar to that of wage and price controls. But, again, it should be noted that the indexation arrangement, by itself, does not prevent relative price changes.

A Questionable Measuring Rod In his proposal for indexation, Professor Friedman suggests the use of the Bureau of Labor Statistics Consumer Price Index. He states that the question of which index number to use in escalator clauses is important but not critical.[7] Other analysts feel that the particular index used is indeed critical to any arrangement involving a payout of funds, and that the index used currently in many wage agreements and payments to Social Security recipients, retired federal employees, and others leaves much to be desired. This index, of course, is the Consumer Price Index (CPI) which, according to the Commissioner of the Bureau of Labor Statistics, is overdue for the revision that is now underway. The Commissioner favors more frequent, orderly updating than in the past, and broadening the index to cover all urban households. Currently it is based mainly on buying patterns of wage earners and clerical workers.

An index established by the Bureau of Labor Statistics, or any other agency, is likely to draw substantial criticism and opposition from various groups. Organized labor, for example, is already on record as opposing the use of a single, broad index, as suggested by the Commissioner of the Bureau of Labor Statistics, because a worker-based index is more closely related to wage bargaining. Other groups are currently arguing that the collection of goods used as the base for the CPI should be changed to reflect more adequately the buying habits of families in different income brackets and persons with different

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[7] *Fortune*, July 1974, p. 96.

tastes. Finally, there is a general criticism of the notion of using an index number to measure inflation. This criticism is based in part on the belief that price indexes fail to take into account such factors as changes in the quality of products and services.

SUMMARY

To be sure, indexation is not suggested as a means of stopping inflation. Proponents claim, however, that indexing the economy would reduce the adverse side effects that effective measures to end inflation would have on output and employment. These side effects would be reduced through the making of contracts with prices, wages, and interest rates stipulated in *real* terms, not nominal terms, through the widespread use of escalator clauses.

Opponents of indexation are legion. They fear that that such an arrangement would not only "enshrine" a particular rate of inflation, but also weaken the resolve of the nation's policymakers to end the cost-price spiral. Under indexation, the bargaining process between employers and unions can still bid up real wage costs, with implications for pressures on both prices and unemployment. Few analysts have confidence in the ability of professional technicians to construct an index that will be acceptable to all groups and organizations as a yardstick for compensating the real or imagined inequities of inflation or of anti-inflation policies.

Meanwhile, more and more persons, institutions, and business firms are wondering about the practicality of having certain segments of the economy indexed, while other segments are not. This is precisely the predicament in the American economy today; and as one might expect, the situation is producing an identifiable set of gainers and losers and a growing amount of disgruntlement over the failure of policymakers to find some solution to the problem of inflation.

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