Commentary

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Fischer's paper is the culmination of a series of important papers (one jointly with John Huizinga and one with Franco Modigliani) in which he enumerated the various costs of inflation and attempted a quantitative evaluation of these costs. We have learned a great deal from these papers. The enumeration included not only the obvious costs but also some less obvious and less easily quantified ones. It was surprising to see how *many* costs that we do not usually consider may rank in importance with the obvious ones. This list of costs of inflation must surely be welcome to policymakers who need some guidance as to what is important and what isn't.

This list is of course not the list that we would really have liked to have: a list of the relative costs and benefits of policies to deal with inflation. The whole reason for enumerating the costs of inflation is, apparently, to provide some guidance to policymakers. But by providing this enumeration, Fischer is not solving any of the fundamental problems in macroeconomic theory. These fundamental problems concern the interpretation of the correlations observed among macroeconomic variables in terms of a causal structure of the macroeconomy.

His list of costs of inflation seems to include any costs that a) are correlated with inflation and b) sound in some loose, intuitive sense like a part of the inflation process itself rather than of some other part of the business cycle. The source of this intuitive sense is not always presented to the reader. He does not include costs associated with variables related to the level of economic activity that are correlated with inflation.

Why does he not count wars as a cost of inflation? Wars are certainly correlated with inflation. Some of the fundamental economic problems that he associates with inflation might be transformed but not go away any more than wars would go away following an anti-inflationary policy.

In spite of this undeniably fundamental problem with the interpretation of his analysis, I do feel that by plunging ahead and making *some* accounting of the costs, Fischer has taught us a lot, so that his series of papers, with their creative empirical work, ranks as one of the major contributions to monetary economics in the last decade.

Apparently, from his accounting, the important costs of inflation are not what economists would think of first. Fischer points out that the pure economic cost of inflation, measured by welfare economists as the area of a certain triangle and representing the inconveniences that people suffer in economizing on cash balances, must be weighed against the welfare costs of other modes of taxation. In an earlier paper (1981b), Fischer presented some rough calculations, using Hausman's estimates of the ratio of excess burden to government revenue for labor income taxation, which suggested that a 9 percent inflation rate is probably too high. However, this conclusion appears to be rather imprecise, and it is certainly vulnerable to changes in transaction technology that might alter the demand curve for money. There is certainly no economic case against moderate inflation from these calculations. The cost of inflation that economists think of first, and which is clearly logically related to inflation, may not be a cost at all.

As Fischer himself suggests, all the remaining costs of inflation are costs of phenomena that we do observe with inflation but that have no necessary logical connection with inflation. These remaining costs of inflation are placed into three categories: costs of institutional nonadaptations, costs of price level uncertainty, and costs of relative price variability.

The institutional nonadaptations he refers to are apparently largely imposed by governments: nonindexation of government debt, legal restrictions preventing indexation of private debt, nonindexation of the tax system, and ceilings on nominal interest rates. The private sector institutional nonadaptations might be corrected if the government led the way. For example, he says that indexed private annuities would probably appear if indexed government bonds existed.

The price level uncertainty that he associates with inflation is also not necessarily logically connected with inflation. His scatter diagram in Figure 1 shows that some high-inflation countries have had low price level uncertainty. The Okun-Flemming explanation of the correlation between inflation levels and inflation variance that he cites attributes it to a tendency for policy regime shifts to accompany inflation. Anyway, the costs of inflation would largely disappear if the economy were more fully indexed. We thus do not need to eliminate inflation to deal with this cost.

The relative price variability that is associated with inflation is not logically related with inflation either. He does not show here a scatter diagram (like his Figure 1) between inflation rates and the variance of relative price movements for various years, but his regression results in an earlier paper, with quarterly U.S. data from 1948 to 1980 (1981b), show an R^2 of only around 0.4.[1] Thus, there *are* times of high inflation and low relative price variability. There is no reason to think that a deliberate policy of maintaining a higher inflation rate would cause higher relative price variability. In fact, his own econometric analysis (1981a) suggests that the observed correlation of relative price variability with inflation is largely due to the effect on both of energy and food supply shocks, evidence of problems an anti-inflation policy would not eliminate.

It's also not obvious that the relative price variability that tends to accompany inflation is a cost and not a benefit. We must know what happens to an appropriately defined measure of real income when inflation variability increases. There is a theorem in welfare economics that people are made *better* off by price level variability if their real income (measured using the stable prices before the variability) is not affected by the variability. Fischer addressed this issue before (1981a).

Fischer concludes that this standard list of costs of inflation really amounts to nothing much at all, for inflations of moderate range or variability, if the government takes steps to allow indexation.

He says that the reason governments resist indexation is that they deliberately wish to keep inflation painful to prove their resolve to contain it, and to constrain themselves from failing to do so. But I think that a more important reason may be that political systems do not deal well with problems whose solutions are poorly understood by the public, due to what he calls 'nominal thinking." For example, the public has shown little interest in inflation-adjusted earnings figures even though these make eminently good sense. If the government were to revise its deficit accounting to take account of the erosion in the real value of private debt, the public might tend to view this as a trick.

Fischer is right that nominal thinking is the core of the problem here. The source of all these institutional nonadaptations may ultimately be human error: difficulty in comprehending the arithmetic of inflation correction. The benefits of price stability here may thus be analogous to the benefits of our way of implementing daylight savings time: by setting clocks forward. We don't ask everyone individually to get up an hour earlier, come to work an hour earlier, etc., because people would find it

1. **Fischer (1981b), Table 3, p. 32.**

difficult to subtract 1 from all the times on their schedule. How much more difficult than subtracting 1 from all the times on one's schedule it is to make all the necessary inflation corrections! Even for such a simple matter as comparison shopping people must, in an inflationary'environment, remember not only prices but dates when prices were observed, as well as inflation rates over the various intervals. A result of inflation is thus that many simple errors are made (and this may be part of the reason for the correlation between inflation and relative price variability). Stable prices should be viewed as great simplifiers of our lives.

Let me say something in closing about the quotation from Buchanan and Wagner at the beginning of Fischer's paper, a quotation that attributes a sort of cost to inflation that is not in Fischer's list, and a cost that is allegedly very big. I suspect that this quote would win widespread applause from the general public (though they might think it a little overstated), even if we economists are inclined not to take it seriously. Inflation, in this view, "increases the sense of felt injustice and causes alienation," and "prompts the behavioral respqnses that reflect a general shortening of time horizons. Enjoy, enjoy."

Despite the overstatement, there is something that seems possibly true in this statement: People do seem to regard inflation as a major injustice to them, and this sense of injustice might have some effect on their ideals or social commitment. The views of the common man are the issues here, and these may be described most accurately by relying on surveys that document actual, widely held views.

The inflationary period since the mid-1960s has in fact been a period of increasing alienation. The Hams Poll has since 1966 asked a battery of questions aimed at gauging the level of alienation: "The rich get richer and the poor get poorer," "Most people with power try to take advantage of people like yourself," etc. The level of alienation as indicated by agreement with such statements has shown a steady increase since 1966.[2] Poll analysts Lipset and Schneider thought that this increase in alienation was related to inflation: "The effects of inflation can be seen clearly: It decreases optimism and increases pessimism about peoples' lives, the country, and the economy."[3]

Katona (1975) has provided a useful summary of the lessons from 30 years of data collected by the Survey Research Center of the Institute for Social Research at the University of Michigan. People, he said, ***resent*** price

2. See Lipset and Schneider (1983), p. 110.
3. Ibid., p. 145.

increases. Someone has ***cheated*** them, they think, when an item they are interested in has a higher price than it had a month or two earlier: "'Right' or 'normal' prices, as well as prices which are 'too high' have psychological meaning even though from an economic point of view they are undefinable concepts."[4]

One might have thought that the sense of injustice comes largely from the creditors (particularly those who lent to the government), but this point is not mentioned by Katona. An important factor contributing to the actual sense of injustice is that people do not *see* their own wage increases as part of an inflationary process, but tend to interpret the increases instead as the result of their own accomplishments. This fact has been widely mentioned, but the survey data that are the source of the observation are not widely cited. In Survey Research Center surveys taken in 1968-70, those respondents who said their income was higher than it was four years ago were asked why they were now making more. Of the respondents, 44 percent answered in terms of their own efforts: "Did good job, worked hard, deserved increase, advance in career, acquired more skill, experience, or changed job to a better one." Only 25 percent answered in terms of references to external causes, such things as inflation, business conditions, or labor unions. Only *6* percent mentioned inflation per se as the cause of their wage increase.[5]

Respondents were asked who is hurt most by inflation. "Overwhelmingly, people replied that poor people or the little man was hurt most, and only one out of five mentioned people with fixed or stable incomes. . . . Practically nobody said that lenders lose and borrowers profit from inflationP[6]

Fischer and Huizinga (1982)looked at other survey evidence regarding the 'misunderstanding hypothesis: the idea that people fail to see the connection between their own income increases and inflation. They summarize the evidence for this hypothesis as "mixed." However, none of the survey evidence cited there repeated Katona's question asking respondents to come up with a reason why their income increased. Every survey question they cited directly asked respondents to assess the effects of inflation on income. It's not inconsistent with the misunderstanding hypothesis that people answer as they do to such question.

4. Ibid.
5. Ibid., p. 191. Katona reported a lower proportion who attributed their wage increases to their own efforts in surveys taken in Europe, so that what we observe here may to some extent be a cultural phenomenon in the United States.
6. Ibid., p. 142.

The perceived costs of inflation by a public that thinks inflation is the No. 1 problem in the country[7] have little relation to the ***actual*** costs of inflation, and this perception may have important consequences. Well be happy to leave this dilemma to the policymakers themselves.

References

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7. The Gallup Poll reports that when people were asked 'What do you think is the most important problem facing this country today?" answers classified as 'inflation" or "high cost of living" ranked first or second in every year from 1973 through 1983.