## **Economic** SYNOPSES

short essays and reports on the economic issues of the day

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## Why Do People Dislike Inflation?

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Conomists have often puzzled over the costs of inflation. Di Tella, MacCulloch, and Oswald (2001) present cross-country survey evidence that people's happiness or life satisfaction is adversely related to their country's inflation rate. Also, survey evidence presented by Shiller (1997) shows that people from all walks of life dislike inflation because they almost unanimously think that inflation erodes their standard of living.

Yet standard economic theory predicts that the costs of inflation are small. The argument is that nominal income can adjust for anticipated inflation, leaving people almost as well off as they would have been in the absence of inflation except for the opportunity cost of holding non-interestbearing cash. Hence, economists commonly measure the cost of inflation as the area under the money demand function, which reflects the deadweight loss of holding cash instead of interest-bearing assets. By this measure, inflation has surprisingly small costs: about 0.1 to 0.8 percent of consumption when the inflation rate is 10 percent per year. The result is robust regardless of whether aggregate data or household data are used to estimate the demand function of money (see, e.g., Attanasio, Guiso, and Jappelli, 2002). If ordinary people have this cost of inflation in mind, they should not care much about moderate inflation. Yet Shiller (1997) found that the word "inflation" is the most common economic term among the general public, more common even than "unemployment."

Why do economists and ordinary people view the costs of inflation so differently? There are at least two plausible explanations. One is that standard economic measures may have failed to fully capture the costs of inflation. Another is that people are myopic and fail to see the connections between the costs and the benefits of inflation.

Wen (2010) argues that the standard economic measure of the costs of inflation does not take into account the insurance (buffer-stock) function of money. Since inflation destroys the value of money and reduces the demand for cash, it exposes people (especially low-income households) to more consumption variability than otherwise. Based on this concept, Wen finds that the cost of 10 percent annual inflation is equivalent to the loss of 8 to 12 percent of consumption (or income).

## Inflation is seldom caused by lump-sum transfers but is often caused by higher government spending programs.

The second explanation is that ordinary people, unlike economists, do not connect the costs of inflation with its benefits. For example, Shiller (1997) believes that people realize how inflation erodes the purchasing power of a dollar but do not realize that inflation also raises their nominal income. As another example, people may fail to differentiate between inflation and the causes of inflation. When a government finances spending by printing money, the general price level rises and people can buy less. That is, the government taxes people through inflation. Therefore, higher government spending is the true cause of the lowered living standard. However, when economists calculate the costs of inflation, they compare the cost of raising revenue through inflation to the cost of raising revenue with some alternative tax that does not distort the economycalled a "lump-sum" tax. Such a comparison isolates the net cost of inflation associated purely with the increase in the money stock. This comparison is equivalent to asking people "What would be the cost of inflation if the government prints and hands out money to people instead of spending the money itself?"

The reality, of course, is that the government never hands out money to people on the street when it increases the money supply. That is, inflation is seldom caused by lumpsum transfers but is often caused by higher government spending programs. For example, Calvo and Guidotti (1993, p. 683) conclude that "public finance considerations are major determinants of monetary policy as well as the proximate cause of inflation in many countries." In particular, using data from both developing and developed coun-

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tries, they show that high-inflation countries carry higher government deficits.

Thus, according to the theory of myopic behavior, when trying to understand the costs of inflation, people may miss not only the connection between inflation and increases in nominal income but also the connection between inflation and the benefits gained from government spending programs. So, the reason why people dislike inflation is similar to why they dislike income taxation.

Attanasio, Orazui; Guiso, Luigi and Jappelli, Tullio. "The Demand for Money, Financial Innovation, and the Welfare Cost of Inflation: An Analysis with Household Data." *Journal of Political Economy*, April 2002, *110*(2), pp. 317-51.

Calvo, Guillermo A. and Guidotti, Pablo E. "On the Flexibility of Monetary Policy: The Case of the Optimal Inflation Tax." *Review of Economic Studies*, July 1993, *60*(3), pp. 667-87.

Di Tella, Rafael; MacCulloch, Robert J. and Oswald, Andrew J. "Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness." *American Economic Review*, March 2001, *91*(1), pp. 335-41.

Shiller, Robert J. "Why Do People Dislike Inflation?" in Christina D. Romer and David H. Romer, eds., *Reducing Inflation: Motivation and Strategy*. Chap. 1. Chicago: University of Chicago Press, 1997, pp. 13-65.

Wen, Yi. "Liquidity Demand and Welfare in a Heterogeneous-Agent Economy." Working Paper 2010-009A, Federal Reserve Bank of St. Louis, March 2010; http://research.stlouisfed.org/wp/2010/2010-009.pdf.