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Monetary policy: Why money matters (and interest rates don't)

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ABSTRACT

Since the late 1980s the Fed has implemented monetary policy by adjusting its target for the overnight federal funds rate. Money's role in monetary policy has been tertiary, at best. Indeed, several influential economists suggest that money is irrelevant for monetary policy because central banks affect economic activity and inflation by (i) controlling a very short-term nominal interest rate and (ii) influencing financial market participants' expectation of the future policy rate. I offer an alternative perspective: Money is essential for monetary policy because it is essential for controlling the price level, and the monetary authority's ability to control interest rates is greatly exaggerated.

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*We'd always thought that if you wanted to cripple the U.S. economy, you'd take out the payment system...Businesses would resort to barter and IOUs; the level of economic activity across the country could drop like a rock.—Alan Greenspan, **The Age of Turbulence: Adventures in a New World**, p. 2.*

1. Introduction

Today "monetary policy" might be more aptly named "interest rate policy" because policymakers pay virtually no attention to money and focus almost exclusively on interest rates.[1] A prominent monetary/macroeconomic economist, Woodford (2000), has argued that money is irrelevant for monetary policy: "even if the demand for base money for use in facilitating transactions is largely or even completely eliminated, monetary policy should continue to be effective" because central banks could continue to control "a short-term nominal interest rate...through the use of a 'channel' system...like those currently used in Canada, Australia and New Zealand."[2]

In a similar vein, Svensson (2008) suggests that over the past 50 years monetary theorists and policymakers have learned that "monetary aggregates matter little, or even not at all, for monetary policy."[3] Given the prominence of these economists

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[1] This is true of most central banks in advance economies; however, the focus here is on the Federal Reserve.
[2] Woodford (2000), the abstract.
[3] Svensson (2008, p. 4).

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and the lack of attention to money by central bankers around the world, one might think it foolish to assert that money is essential for economic activity and for determining the price level. It will no doubt seem even more foolish to suggest that monetary policymakers' ability to influence interest rates, especially those that matter for the efficacy of monetary policy, is greatly exaggerated.

This paper is an attempt to motivate discussion and debate about the role of money in monetary policy. It is useful to have such debates, particularly now because the Federal Reserve and most other central banks ignore money and are pursuing unconventional monetary policies in an effort to enhance the effectiveness of their interest rate policies. Challenging orthodoxy is useful even if it serves only to solidify one's belief in it.

The remainder of the paper is as follows. Section 2 argues that money is essential for economic activity and critical for determining the price level and discusses several reasons for money's irrelevance in modern monetary theory and policymaking. Section 3 analyzes several reasons to be skeptical of the extent to which the Federal Reserve affects interest rates. Section 4 concludes.

2. Money: reasons for its irrelevance

It is widely understood that money exists because of the three methods of affecting exchange (barter, pure credit, and money), money is far and away the most economically efficient.[4] Money's primary function is to provide final settlement, i.e., money can be exchanged for the desired commodity. The existence of money has significantly increased economic welfare by expanding the amount of specialization and trade over what could be achieved using the next best method of exchange. Greenspan's quote above is a statement of the importance of money for economic welfare. Money is essential for the determination of prices simply because prices are stated in units of money—the price level is the price of goods and services in terms of money.

Despite these facts, for much of the postwar period money has played a limited role in monetary theory and policy. Indeed, until the Federal Reserve's dramatic demonstration to the contrary, the conventional wisdom in the economics profession was that central banks could not control inflation: the effect of changes in interest rates on aggregate demand was too weak to be effective and the supply of money was irrelevant.[5] It is now widely accepted that central banks can control inflation, and many (including the Fed) have a specific numerical inflation target. Despite this fact, money plays essentially no role in the formulation or conduct of monetary policy. There are perhaps many reasons for this, but several factors seem particularly relevant. First, the empirical importance of the supply of money for economic activity and the price level—which was first hotly debated, but subsequently demonstrated—all but vanished in the 1980s. For advanced economies, money appears to be irrelevant empirically for anything except the very long run.[6]

Second, money has evolved from being (or tied to) a commodity that has intrinsic value, like gold and silver, to fiat money—intrinsically worthless paper and coins. Several prominent monetary economists have suggested that we will evolve to a cashless economy—a monetary system with an arbitrary unit of account that is not linked to a physical object like currency. Former Governor of the Bank of England Mervyn King (1999) suggests that, were this to happen, there would be no need for a central bank: "Without such a role in settlements, central banks, in their present form, would no longer exist...nor would money."[7] Others, such as Charles Freedman (2000), former Deputy Governor of the Bank of Canada, believe that the central banks will always provide final settlement. Woodford (2000) is agnostic: "the question of finality of settlement is ultimately a question of the quality of one's information about the accounts of the parties with whom one transacts and while the development of central banking has undoubtedly been a useful way of economizing on limited information-processing capacities, it is not clear that advances in technology could not make other methods viable."[8] I do not take up the question of whether a pure exchange (moneyless) economy is likely or even possible. I simply note that we are not there yet. Hence, money is inexorably linked to the physical monetary unit, the dollar, the total supply of which can be controlled by the Federal Reserve.

Third, the fact that many if not most transactions are facilitated using credit and other forms of electronic transactions appears to have intensified the view that money is merely an accounting device. Consequently, it is important to understand that the predominance of credit is due to the existence of money.

In a world without money the use of credit would be severely limited. Credit is inter-temporal exchange, exchanging something today for the promise to receive some amount of the same thing or another thing at a future date. Money has greatly facilitated the use of credit because credit contracts are denominated in money and because loans are made with money, and principal and interest are paid in money. If loans were made and interest paid in bushels of wheat, gallons of milk, or other commodities, credit would be used infrequently. This, in combination with other financial innovations, has led to the widespread use of credit for carrying out transactions. Like many people I carry out a large proportion of my transactions with credit, rather than with checks or cash. I am able to do so because I promise to settle my account with cash or by

[4] For a detailed discussion of this, see Thornton (2000).

[5] See Bernanke and Gertler (1995) and Thornton (2012b) for a discussion of other reasons to be skeptical of the efficacy of the interest rate channel of monetary policy.

[6] For example, see Benati (2009) and Dwyer and Hafer (1999).

[7] King (1999, p. 26). The idea that the monetary system could evolve to where final settlement is achieved using an arbitrary unit of account has been around for some time, see Black (1970), Fama (1980), and Friedman (1999).

[8] Woodford (2000).