The New Aggregates, Economic Activity, and Monetary Policy

John B. Carlson

For a number of decades, economists have questioned traditional distinctions between money and other liquid assets and between commercial banks and other financial intermediaries. Over time these distinctions have become increasingly blurred. Yet there are fundamental differences in the treatment of cash, deposits at commercial banks, and other financial intermediaries.

The high market rates of interest in the 1970s have created strong incentives for holders of money balances to economize on reserves and for the creation of money-like, interest-bearing instruments. As a result, a number of financial instruments have been added to the variety of money-like assets available in the marketplace. Examples of these include automatic transfer savings (ATS), credit card share drafts, negotiable withdrawal (NOWA), and money-market mutual funds (MMFs).

Although financial innovations and more efficient cash management have increased the investment opportunities available to the public, they pose problems for monetary policy. Sema (1979), monetary policy has been formulated in terms of money supply data. Yet, since the late 1950s, growth in money supply measures has not been consistent with ultimate goals of economic policy (for example, growth in output and employment). Policy makers must now search for targets for money growth to guide policy.

The design of the new aggregates attempts to redress the implications of this problem (see description in box). Because definitions of M-1, M-2, and M-3, respectively, have mirrored the shortfall in the money-income relationship may be caused by many factors, but two stand out: rapid substitution of new instruments for demand deposits has deprived the economy of a well-suited to absorb, temporarily, excess reserves. The third money measure, M-2, more closely satisfies the temporary abode of purchasing power criterion. New M-2 differs from the former M-2 in four ways. First, like M-1B, components of M-2 are adjusted progressively broader measures of money.

The proliferation of new financial instruments has changed the historical relationship between the policy objectives and the various mone-

Table 1 Components of Monetary Aggregates

<table>
<thead>
<tr>
<th>Previously Defined Aggregates</th>
<th>New Aggregates</th>
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<tbody>
<tr>
<td>M-1: Currency held by nonbank public</td>
<td>M-1A: Previously defined M-1</td>
</tr>
<tr>
<td>demand deposits at all commercial banks, other than by nonbank public</td>
<td>demand deposits of foreign commercial banks</td>
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<td></td>
<td>demand deposits of foreign official institutions</td>
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<tr>
<td>M-2: Previously defined M-1</td>
<td>M-1B: M-1A</td>
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<tr>
<td>savings deposits at commercial banks</td>
<td>+ other checkable deposits</td>
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<td></td>
<td>and small time deposits</td>
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<td></td>
<td>demand deposits and demand at thrifts</td>
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<td>M-2B: + other checkable deposits</td>
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<td></td>
<td>and small time deposits</td>
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<td></td>
<td>demand deposits at all commercial banks</td>
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<td>overnight RPs at commercial banks</td>
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<td>overnight Eurodollars at Caribbean banks</td>
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<td></td>
<td>money-market mutual fund shares</td>
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<td>M-3: New M-2</td>
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<tr>
<td></td>
<td>+ nondepositary institutions (MMF shares)</td>
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<tr>
<td></td>
<td>+ overnight RPs at all deposit institutions</td>
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<td></td>
<td>+ term RPs at commercial banks</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>L: New M-3</td>
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<tr>
<td></td>
<td>+ other liquid assets (term Eurodollars, bank acceptances, commercial paper, liquid Treasury obligations, savings bonds)</td>
</tr>
</tbody>
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must be observable on a timely basis and subject to control by the monetary authority. Money has been defined as the most liquid and stable and predictable relationship with ultimate policy objectives. This relationship can be measured by the ratio of GNP to money stock, a concept known as velocity. In recent years, the velocities of previously defined money aggregates have fallen, causing a deterioration in the power criterion. New M-2 differs from the former M-2 in four ways. First, like M-1B, components of M-2 are adjusted progressively broader measures of money. The proliferation of new financial instruments has changed the historical relationship between the policy objectives and the various mone-

Money Measures and Economic Activity

There are additional considerations in choosing a monetary policy. If money is to be a useful target for monetary policy, it


5. Some economists argued that the narrower measures of money demand deposits of foreign official institutions. Because these deposits are held primarily as clearings balances for international transactions and are not considered to be part of the money stock. A slightly broader measure, M-1B, includes other checkable deposits often used as a means of payment. Although some analysts have argued that the narrow measures should also include overnight RPs and MMFs, neither of these instruments is used for most transactions. The RP is not used as a means of payment. While most MMFs have check-writing features, they are not intended to be associated with assets generally accepted as means of payment, these instruments would not be included.

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1. On November 1, 1978, the Federal Reserve permitted banks to offer demand deposits at nonbank public institutional accounts. Prior to 1979, these holdings totaled less than $10 million. The current total is roughly $1 billion or 0.4 percent of demand deposits at commercial banks.

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The velocity of new M-2 has shown virtually no trend over the last decade. The time path of new M-2 velocity closely resembles that of previous M-3 (see chart 2), in contrast, the velocity of previous M-2 has accelerated sharply since 1975, after drifting very slowly over two decades. The recent rapid growth in velocity of previous M-2 is partly a consequence of the same factors affecting the narrower measures, that is, improved cash management. The more recent acceleration has been attributed to the weakened competitive position of banks, resulting in part from rising interest rates. Because most time and savings deposits are exposed to interest-rate ceilings under Regulation Q, these deposits have become less attractive to higher-yielding liquid instru-
ments not included in previous M-2, particularly MMFs. Substitution of alternative instruments for commercial-bank deposits depresses M-2 growth relative to income.

Although the velocity of new M-3 has increased slightly during the last expansion, it has trended downward over the past 20 years (see table 2). This trend may reflect an increased use of negotiable CDs and term RPs as investment assets. As interest rates have trended upward, these short-term instruments appear to have become relatively more attractive than other investment opportunities, especially to large corporations.

Monetary Policy and the New Aggregates

The Humphrey-Hawkins Act of 1978 requires the Federal Reserve to report to Congress the annual growth ranges of money and credit for the coming year. These ranges are chosen by the Federal Open Market Committee (FOMC) to be consistent with its ultimate policy objectives. In February 1980 the Federal Reserve presented the money-growth targets in the form of the new aggregates. These growth targets assume that nationwide NOW accounts will not be authorized this year.

The targets manifest the Federal Re-
serve's intention to seek a significant decel-
eration in the growth of money. Although it is expected to
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reration in the growth of money. For M-1A, the FOMC established a target range of 3.5 to 6.0 percent (QIV '79 to QIV '80). The mid-
point of this range is 4.8 percent, below the 5.5 percent growth observed last year. This target range assumes a slowdown in 1980 in the substitution of checkable deposits for demand deposits. In addition, a downturn in economic activity also is expected to slow M-1A velocity growth. Thus, a deceleration in M-1A growth may be associated with an even sharper deceleration in nominal-income growth.

The target range of M-1B is 3 to 6 percent for 1980. Its midpoint is 4.5 percent, below the 6.3 percent growth observed last year. This range targets a significant slowdown from 8.8 percent in 1979. The 8 percent midpoint of the M-3 target range is well below the 9.5 percent growth observed last year. Thus, this measure is believed to be closely associated with GNP, and hence, deceleration in M-3 may be associated with a moderation in credit growth.

Summary and Conclusions

Until recently, banks had a unique status among financial intermediaries in that they were the sole purveyors of checkable deposits. Furthermore, other bank deposits were considered closer substitutes for demand deposits than the instruments of other depositories. Restricting noncurrency components of M-1 and M-2 to deposits of commercial banks was consistent both conceptually and pragmatically. Especially, regulatory change, market forces, and financial innovation have produced a proliferation of new money-like instruments.

The redefinition of the aggregates is a pragmatic effort to reconstruct money-supply measures to incorporate the new instruments with their ultimate policy targets. The new aggregates were guided by both conceptual and empirical criteria. The M-1B aggregate, for example, offers a comprehensive measure of trans-
actions money. Although it is expected to
have a more predictable relationship with economic activity than other less compre-
nsive measures, M-1B behavior will not be irri-
spuriously affected by the changing financial institutions. Historically, however, new M-2 velocity has declined during downturns in economic activity. Thus, the 7.5 percent mid-
point of the new M-2 target range rep-
sents a significant slowdown from 8.8 percent in 1979. The 8 percent midpoint of the M-3 range is well below the 9.5 percent growth observed last year. Thus, this measure is believed to be closely associated with GNP, and hence, deceleration in M-3 may be associated with a moderation in credit growth.