

# Fed Challenge Brief:

## Money Aggregates

### Overview

Economists study the relationships between **monetary aggregates** and the **monetary base** on the one hand and macroeconomic variables on the other. These relationships help forecast changes in economic activity, interest rates, and inflation.

*Monetary aggregates are measures of a nation's money supply; the monetary base is currency held by the public and in vaults of depository institutions plus reserves of depository institutions.*

### Monetary Aggregates Composition

**M1:** Currency held in the vaults of depository institutions, Federal Reserve Banks and the Treasury + travelers checks + demand and checkable deposits (except those due to the Treasury and depository institutions) – cash items in collection and Federal Reserve Float.

**M2:** M1 + savings deposits + money market deposits + time deposits under \$100K + money market mutual funds + retirement accounts

**M3:** M2 + time deposits \$100K and over + depository repurchase agreements + Eurodollar deposits + dollar-denominated deposits held at foreign offices of US banks + institutional money market funds

**MZM:** M2 – small time deposits + institutional money market mutual funds

### Money Supply and The Fed

#### Open Market Operations

The Federal Reserve has the ability to influence the aggregate money supply through the purchase and sale of US Treasury Securities.

#### Fed Funds Targeting

The Federal Reserve sets target ranges for money supply growth, but its primary focus is the Fed Funds rate target, which indirectly affects the monetary base and money supply growth.

### Macroeconomic Relationships

The link between monetary growth and changes in other macroeconomic variables, such as GDP and inflation:

Led the Federal Reserve to set target money supply growth rates.

Was viewed as a stable relationship until the 1980s. Has largely broken down with respect to M1 since 1980 and began to be de-emphasized by the Federal Reserve in 1982.

Broke down with respect to M2 in the early 1990s.

### Data and Resources

[www.stlouisfed.org/fred/](http://www.stlouisfed.org/fred/) - St. Louis: FRED

[www.federalreserve.gov/releases/](http://www.federalreserve.gov/releases/) - BOG

A Monetary History of the United States, 1867 – 1960, Milton Friedman and Anna Schwartz

Monetary Aggregates and Output, Scott Freeman and Finn Kydland  
Federal Reserve Bank of St. Louis, 1998