MDR: The Money Demand Ratio

M_1 / GDP

In the Institute for Economic Analysis (IEA) conceptual frame of reference, the money stock (M1) is an economy's total inventory of all transaction money (currency and checkable accounts) that is used to service the flow of goods-and-services expenditure (GDP) in that economy.

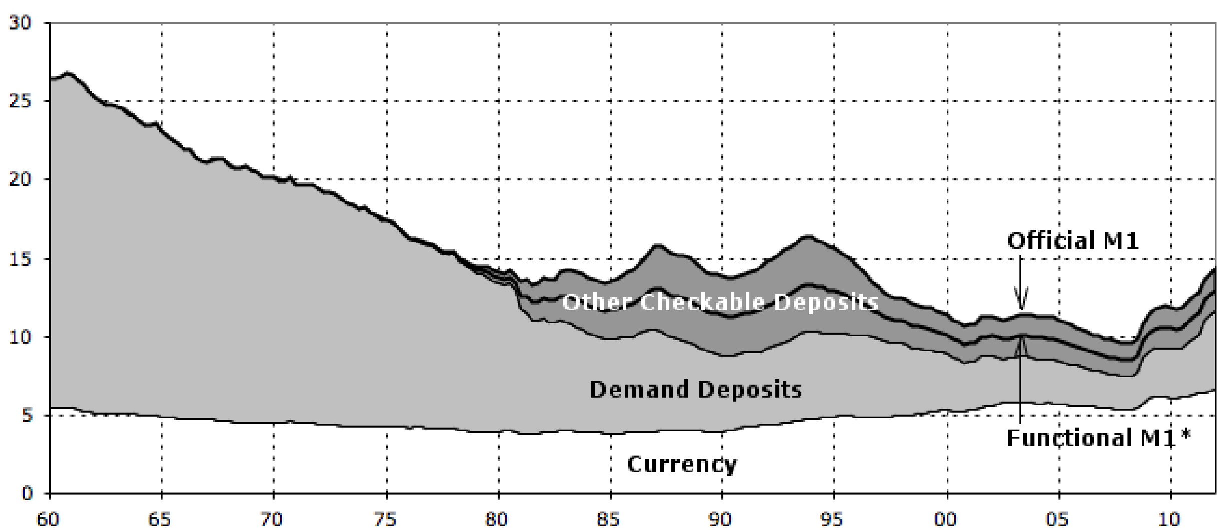
On the individual level, each individual, household, or business maintains whatever it feels to be a sufficient balance of cash and checking account to manage the purchase of goods and services. This inventory behaves in much the same way that a grocer's inventory does in managing the flow of groceries off the shelves, and the same inventory/sales ratio the grocer uses to manage the business is applicable to individuals, households, and -- in fact -- to the whole economy, which is the sum of all these actors.

At the level of the economy, IEA refers to this stock/flow ratio -- M1/GDP -- as the "**Money Demand Ratio**," and it is as characteristic of the way the economy does business as is a grocer's inventory/sales ratio -- e.g.,

- If the cost of holding inventory (M1) increases, there is an incentive to lower the level of inventory;
- however, this will decrease sales unless increased efficiency in managing inventory makes it possible to produce the same level of sales at a lower inventory level.

That these factors govern the behavior of the economy as a whole is borne out in the following chart:

Money Demand Ratio Components
(percent of GDP)



* "Functional M1" serves to symbolically note the uncertainty of the proportion of interest-bearing "Other Checkable Deposits" that serves a transaction function, and how much is held for investment purposes.

This chart shows the two primary components of the money stock -- the currency and checkable deposits. Checkable deposits consist of demand deposits, which bear no interest, and "other checkable deposits" such as NOW accounts, on which interest is paid. The chart shows the latter portion of what was a more-or-less steady decline in the checkable deposits component from about 50% at the end of WWII (not shown) to about 10% in 1980. This was a period of increasing technological efficiencies in handling money, and as a result, less and less money stock was needed to service a growing GDP. A decline such as this in the Money Demand Ratio -- which can often eliminate the need for newly-created money that would otherwise be needed to service a growing economy -- can be thought of as the "**new money equivalent**" of a shrinking MDR.

During the great OPEC-induced inflation which began in the mid-70's, the Federal Reserve broke the long-time wall between money and other financial assets provided by the prohibition of interest on Checkable deposits, creating the hybrid NOW-account -- a checkable account with interest. By injecting an investment incentive into the formerly simple reasons for keeping or reducing money in a transaction account, this change removed the close link between M1 money inventory and the GDP flows it finances. Decisions on how much M1 transaction money to hold now became influenced by interest rate comparisons with other investment vehicles such as CDs and savings accounts. As a result, monetary policy since then has been handicapped by the lack of a firm and precise definition of money:

> "...what specifically constitutes money is a notion that has, so far, eluded our analysis."
> -- Alan Greenspan, 10/19/00 remarks to Cato Institute

Therefore, one of the basic reforms needed in monetary policy is the reimposition of the pre-1980 interest prohibition on checkable deposits, which will induce a more-or-less automatic separation between the portion of NOW and ATS accounts which depositors consider investment accounts vs those which are considered checkable ("money") transaction accounts.

(Note: In the chart above, a line has been drawn through the middle of "Other Checkable Deposits" to symbolize the fact that, during the period in which interest has been permitted on such accounts, some (lower) fraction of their total has been functioning as an M1 component (transactions), giving a different, lower functional value for M1, while the other (upper) represents a non-transaction, non-M1 investment.)

A second, related reform is the re-classification of checkable deposits as "money," in the same sense that currency is "money," rather than considering them as credit-claims on money.

The post-World-War II decline in the MDR provided a "new money equivalent" to offset any need for an actual increase in the money stock. With the much smaller magnitude of the MDR, however, this is less likely to be the case in the future. Therefore, future economic growth will generally have to be financed by direct money-supply growth, either through the present imprecise and unpredictable private-bank fractional reserve system, or through a government system, such as that proposed at http://iea-macro-economics.org/rapid_recovery_summary.html.

On the web:

HTML http://www.iea-macro-economics.org/mdr.html
PDF http://www.iea-macro-economics.org/pdfs/mdr.pdf