

Money in Motion

By William F Hummel

Two major circular flows of money characterize a modern economy. The largest is the flow between firms and households within the private sector. The other is the flow between the private sector and the government, consisting of taxes and government spending.

Flows within the Private Sector

Within the private sector, the spending of one party is the income of another. Households can only be consumers to the extent that they can sell their services to firms for wages. Firms can only pay wages to the extent that they can sell their output to households. Income circulation is fundamental to a monetary economy. The greater the flow, the more robust is the economy.

The flow consists mainly of transfers of bank deposits, i.e. credit money. We will ignore the minor part played by notes and coins, which are used primarily in small retail transactions. Banks create deposits of credit money whenever they issue a loan. The demand for bank loans and the willingness of banks to lend determines the amount of the credit money issued. The private sector itself increases or decreases the money supply with its borrowing and repayment decisions. However the private sector cannot create *net* financial wealth through borrowing. All bank-issued credit is matched by equal liabilities, namely the deposits created to fund the loans.

For a credit money transaction to clear, the payer's bank must surrender an equal amount of its reserves of base money to the payee's bank. Base money refers to the monetary base, all of which is created by the Fed. Every credit money transaction requires an equal flow of reserves between banks to settle accounts. Thus base money is the foundation of the credit money system. We will see later how base money enters the system.

Flows Involving the Government

The Treasury spends out of its account at the Fed. It replenishes that account with transfers from commercial bank accounts where it deposits receipts from taxes and the sale of its securities -- bills, notes, and bonds. Those commercial accounts are known as Treasury Tax and Loan (TT&L) accounts. The Treasury

has no use for and does not accumulate funds in its TT&L accounts in excess of what it needs to cover its near term payment obligations.

All payments and receipts with the Treasury involve flows of base money. The Treasury will honor a bank check from a taxpayer only if the bank transfers an equal amount of reserves of base money to the TT&L bank where it deposits the check. Otherwise the check will not clear.

Where does the private sector get the base money it needs to purchase the Treasury securities sold to cover government deficit spending? In the aggregate, it comes from the deficit spending itself. Government spending transfers base money to the private sector; private sector payments to the government reverses that flow. The Treasury maintains a balanced flow of base money with the private sector with taxes, and the sale of its securities if necessary. Short-term imbalances may occur, but on average government spending does not cause a *net* change in either the credit money or base money supply.

Fed Operations

The Fed creates base money by purchasing Treasury securities from the private sector. It pays by simply crediting the seller's bank with a reserve deposit at the Fed. At the same time, the bank credits the seller with an equal deposit in his bank account. Conversely the Fed reduces reserves when it sells Treasury securities from its own portfolio, which it previously bought from the public.

The Fed does not have a target for the total amount of banking system reserves. Rather it adds or drains reserves only as needed to maintain the balance of supply and demand at its target Fed funds rate, i.e. the overnight interest rate in the inter-bank lending market. Then what causes total banking system reserves to increase with time? As banks increase their net lending in support of a growing economy, they need additional reserves to back that lending. The Fed must provide those reserves in order to maintain control of the Fed funds rate, its primary monetary policy tool.