is directly changed by the transaction. Similarly, when banks expand deposits by making loans, the monetary assets of the borrowers rise, but their liabilities to the banking system rise by an equal amount and their net worth and income are unchanged.

Since these substitution effects associated with open market operations and with the expansion of bank deposits are by far the most important operations by which the money supply is changed, it seems especially relevant to study the ways in which these effects may influence economic activity. The main avenues appear to be through changes in interest rates on the various types of assets and changes in the availability of credit. When the Federal Reserve or the commercial banks buy securities from the nonbank public in exchange for deposits, funds are made available for the public to purchase, in turn, a wide variety of private securities such as mortgages, corporate bonds, or bankers' acceptances.[20] The increased demand for these securities tends to push rates on them down. And with borrowing costs down, business firms may be induced to expand outlays on plant and equipment or inventory while consumers may increase spending on new homes. In most cases, the effects of lower interest rates on capital spending probably stem from the fact that external financing has become cheaper. In some cases, however, lower market yields on outstanding government and private securities might induce business holders to sell such assets in order to purchase higher yielding capital goods and thus, in effect, to make direct substitution of physical capital for financial assets in their "portfolios". Finally, lower interest rates on securities may reduce consumer incentives to acquire and hold financial assets while tempting them to make more use of consumer credit, thereby reducing saving out of current income and increasing con-

[20] The newly created deposits may of course in principle be used immediately to buy goods rather than financial assets, thus tending directly to stimulate business activity. Even in this case, however, the effects of the money-creating operations work through and depend upon reactions to interest rates. When the Federal Reserve or the commercial banks enter the market to buy securities, their bids add to total market demand, making market prices for securities higher (and yields lower) than they otherwise would have been. Indeed it is these relatively higher prices (lower yields) that induce the nonbank public to give up securities in exchange for deposits. If the deposits are in fact immediately used to purchase goods, then the process can be regarded as one in which lower market interest rates on securities stemming from bids by the Federal Reserve or the commercial banks have induced the public to give up securities in exchange for goods. The extent to which such switching will occur obviously depends upon the sensitivity to interest rates of business and consumer demands for goods.