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Money: How It Is Created and Controlled

Introduction

The purpose of this technical note is to explain the process by which money and credit are created and controlled. First, I explain what money is, its functions, and its role in the wealth of private agents. I then explain how money is created and, lastly, how monetary policy is used to control it.

1. Money

Money is the name we give to the *asset or assets we use as a means of payment*. In advanced modern societies this function is performed by currency in circulation outside banks, which includes coins and banknotes (issued by the central bank) held by the public and some bank liabilities that are readily convertible into cash by check or credit card (such as demand deposits and savings deposits).

Money is part of the *wealth* or *assets* of economic agents. **Exhibit 1** lists some of the many assets (and liabilities) that may form part of wealth. Whether wealth is invested in one kind of asset or another will depend on factors such as the *return* of each asset (relative to the return of other assets), the services provided by the different types of goods (money serves

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as a means of payment, residential property and consumer durables provide services directly, and shares give control over a company), *liquidity* (whether the asset can be converted into cash easily and quickly without loss), *risk* (interest rate risk, credit risk, exchange rate risk, inflation risk, etc.), *tax treatment*, etc.

Money is held mainly for use in payments, that is, for the service it provides, although it also performs other functions (for example, as a unit of value – prices are fixed in monetary units – and as a store of value – it is a component of wealth).[1]

2. How Money Is Created

Money, as defined here, is a *set of liabilities of the central bank* (coins and banknotes) *and of the banking system* (deposits). Central banks are public bodies (often independent of the government) entrusted with the management of monetary policy, as well as other tasks such as the issuing of notes and coins and, in some countries, banking supervision. For the purposes of this note, the *banking system* includes all entities some of whose liabilities are used as a means of payment: banks, savings banks, credit cooperatives, etc.

2. 1. How Money Is Created Through Bank Balances

The mechanism whereby money is created and the money supply is controlled can be explained using the balance sheets of the central bank and the banks, shown here in highly abbreviated form (the numbers in square brackets identify items that are common to both the central bank's and the banks' balance sheets):

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Central Bank Balance Sheet

Assets	Liabilities and shareholders' equity
Foreign sector (foreign exchange reserves)	Currency (coins and banknotes) outside banks)
Public sector (loans and government debt)	Currency held by banks [2]
Loans from the central bank to the banks [1]	Liquid assets of the banking system (deposits held by banks at the central bank) [3]
Other accounts (real assets, etc., less capital accounts)	

[1] Other assets that are part of wealth tend to be regarded as substitutes for money, as they compete with money in decisions about the investment of wealth. For that reason, any changes in the return, risk, liquidity, etc. of these assets will affect the amount of money people want to hold at any given time (the "demand for money"). For example, if the return on Treasury bills increases, the owners of wealth will tend to hold a smaller proportion of their wealth in money, and a larger proportion in Treasury bills.

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Banks' Balance Sheet

Assets	Liabilities and shareholders' equity
Foreign sector (assets less liabilities)	Deposits of the public at the banks
Currency held by banks [2]	Loans granted by the central bank to the banks [1]
Liquid assets of the banking system (deposits held at the central bank) [3]	
Private sector (loans granted and securities)	
Public sector (loans granted and public debt)	
Other accounts (real assets, etc., less capital accounts)	

Next, we consolidate the central bank balance sheet with the banks' balance sheet, adding together common items and canceling any that appear on both the asset and the liability sides (the ones identified in the balance sheets above with a number alongside the account):

Consolidated Balance Sheet of the Credit System (Central Bank and Banks)

Assets	Liabilities and shareholders' equity
Foreign sector (net)	Currency (coins and banknotes) in circulation outside banks
Public sector (loans granted and public debt)	Deposits of the public at the banks
Private sector (loans granted and securities)	
Other accounts (real assets, etc., less capital accounts)	

We can see how on the liabilities side of the consolidated balance sheet we have the accounts that we call money, namely, currency and deposits:

$$M = CU_p + D \qquad [1]$$

where M is the money supply, CU_p is currency outside banks, and D is deposits of the public at the banks.

On the assets side of the consolidated balance sheet we have the counterparts of money. The "Public sector," "Private sector" and "Other accounts" items in the consolidated balance sheet add up to what we shall call *domestic credit* (CR), that is, the financing provided by banks and the money markets to resident sectors (government, and the private sector: companies, households and non-profit institutions). The "Foreign sector" account, on the other hand, we shall call *foreign reserves* (FR), showing the net financing provided (or received) by non-resident sectors:

$$M = FR + DC \qquad [2]$$

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