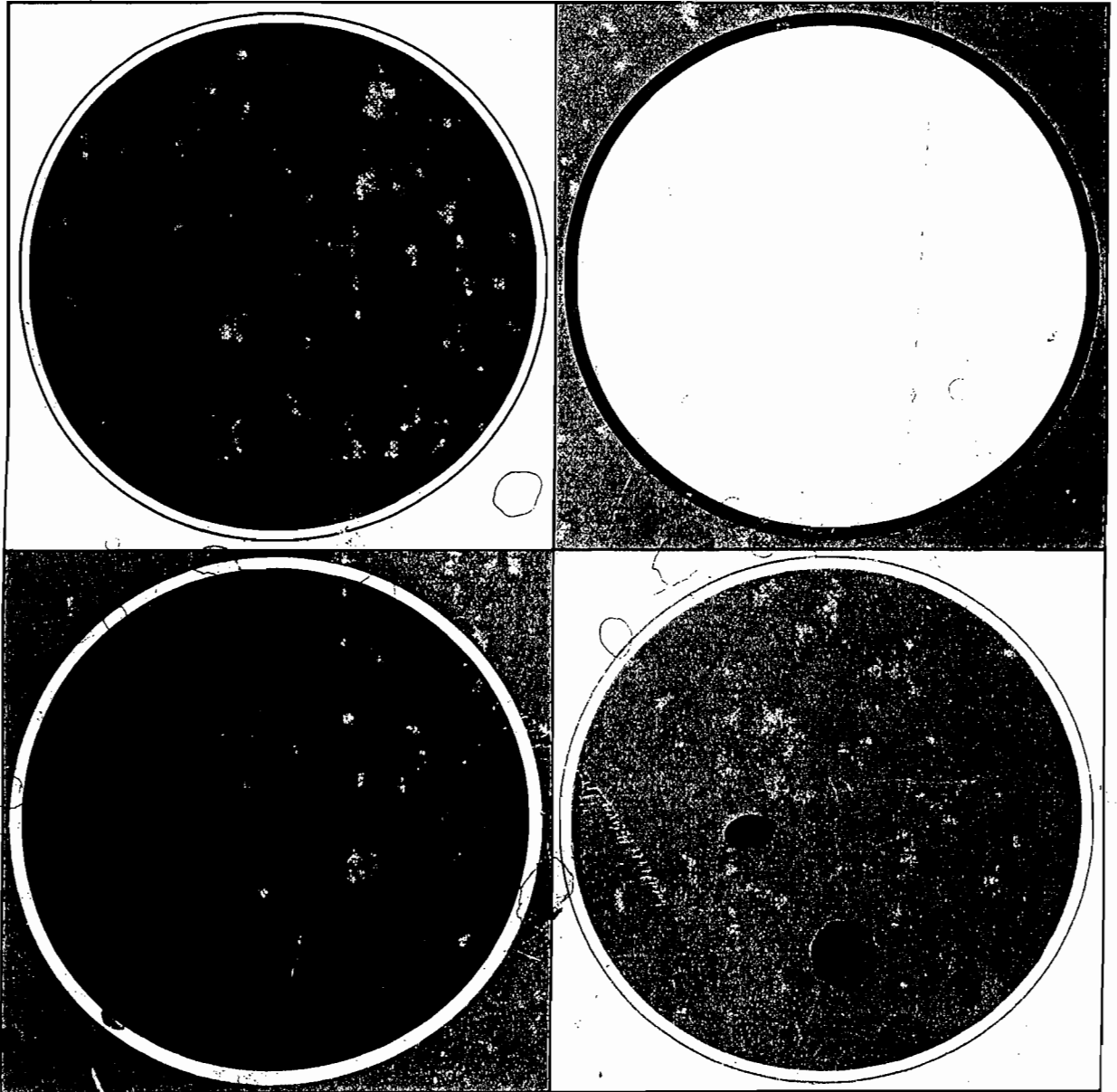


# ECONOMICS

CAMPBELL R. McCONNELL

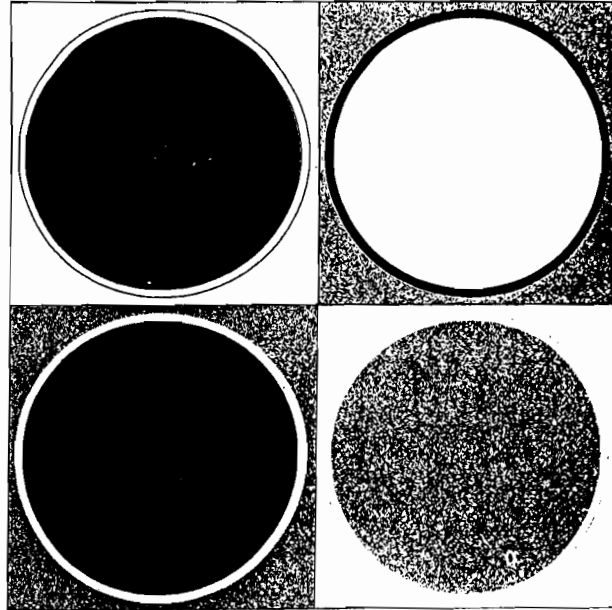
SIXTH EDITION



# ECONOMICS

PRINCIPLES, PROBLEMS, AND POLICIES

SIXTH EDITION



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Reserve Bank will have changed, but total reserves will stay the same.

The point we are making is this: *Whenever a check is drawn against a bank and deposited in another bank, the collection of that check will entail a loss of both reserves and deposits by the bank upon which the check is drawn.* Conversely, if a bank receives a check drawn on another bank, the bank receiving the check will, in the process of collecting it, have its reserves and deposits increased by the amount of the check. In our example, the Wahoo bank loses \$50,000 in both reserves and deposits to the Beaver Crossing bank. But there is no loss of reserves or deposits for the banking system as a whole. What one bank loses another bank gains.

Bringing all the other assets and liabilities back into the picture, the Wahoo bank's balance sheet looks like this at the end of transaction 5:

#### BALANCE SHEET 5: WAHOO BANK Assets

##### Liabilities and net worth

Demand deposits\* \$ 50,000 Capital stock 250,000

Reserves\* \$ 60,000

Property 240,000

The reader should verify that with a 20 percent reserve requirement, the bank's excess reserves now stand at \$50,000.

This transaction indicates the manner in which commercial banks acquire the bulk of their reserves and deposits: from other banks through the check clearing process. Although most of us in our personal dealings with banks think of demand deposits as being created by customer deposits of currency, and of reserves arising as the result of the bank's redepositing some of this currency with the Federal Reserve Banks, this is not actually the case. Most bank deposits and reserves are received from other banks in the way the Beaver Crossing bank has acquired new reserves and deposits in the present transaction.

Transaction 5 is obviously reversible. If a check drawn against another bank is deposited in the

Wahoo bank, the Wahoo bank will receive both reserves and deposits equal to the amount of the check as it is collected.

Let us designate here some of the salient conclusions from the first five transactions we have analyzed:

1. When a bank accepts deposits of cash, the composition of the money supply is changed, but the total supply of money is not directly altered.

2. Commercial banks which are members of the Federal Reserve System are required to keep legal reserve deposits, or simply "reserves," equal to a specified percentage of their own deposit liabilities on deposit with the Federal Reserve Bank of their district. The reserve ratio indicates the size of this "specified percentage." Reserves are a means by which the monetary authorities can control the lending policies of commercial banks. They do this by varying the percentage required as reserves.

3. The amount by which a bank's actual reserves exceed its required reserves is called "excess reserves."

4. Commercial bank reserves are an asset to the commercial bank but a liability to the Federal Reserve Bank holding them.

5. A bank which has a check drawn and collected against it will lose both reserves and deposits equal to the value of the check to the bank receiving the check.

### **Money-creating transactions of a commercial bank**

**The next two transactions are particularly crucial because they explain how a single commercial bank can literally create money by making loans to, and by purchasing government bonds from, individuals and businesses. Though these transactions are similar in many respects, we treat them separately.**

Transaction 6: Granting a loan You will recall that in addition to accepting deposits, commercial banks have a basic function of granting loans to borrowers. What effect does commercial bank lending have upon the balance sheet of a commercial bank?

Suppose that the Grisley Meat Packing Company of Wahoo decides that the time is ripe to expand its facilities. Suppose, too, that the company needs exactly \$50,000—which, by some unexplained coincidence, just happens to be equal to the Wahoo bank's excess reserves—to finance this project.

The company approaches the Wahoo bank and requests a loan for this amount. The Wahoo bank is acquainted with the Grisley company's fine reputation and financial soundness and is convinced of its ability to repay the loan. So the loan is granted. The president of the Grisley company hands a promissory note—a high-class IOU—to the Wahoo bank. The Grisley company, like all other modern firms, is interested in paying its obligations by check. Hence, instead of receiving a bushel basket full of cash from the bank, the Grisley company will get a \$50,000 increase in its demand deposit in the Wahoo bank. From the Wahoo bank's standpoint it has acquired an interest-earning asset (the promissory note) and has created demand deposits to pay for this asset.

In short, the Grisley company has swapped an IOU for the right to draw an additional \$50,000 worth of checks against its demand deposit in the Wahoo bank. Both parties are pleased with themselves. The Wahoo bank now possesses a new asset—an interest-bearing promissory note which it happily files under the general heading of "Loans." The Grisley company, sporting a fattened demand deposit, is now in a position to expand its operations.

At the moment the loan is negotiated, the Wahoo bank's position is shown by balance sheet 6a.

All this looks innocent enough. But a closer examination of the Wahoo bank's balance statement will reveal a startling fact: When a bank makes loans, it creates money. The president of the

BALANCE SHEET 6a: WAHOO BANK (when loan is negotiated)

Assets		Liabilities and net worth	
RESERVES \$	60,000	DEMAND DEPOSITS	\$100,000
Loans	50,000	capital stock	250,000
Property	240,000		

Grisley company went to the bank with something which is not money—his IOU—and walked out with something that is money—a demand deposit.<sup>5</sup> When banks lend, they create demand deposits which are money. By extending credit the Wahoo bank has "monetized" an IOU. The Grisley company and the Wahoo bank have created and then swapped claims. The claim created by the Grisley company and given to the bank is not money; an individual's IOU is not generally acceptable as a medium of exchange. But the claim created by the bank and given to the Grisley company is money; checks drawn against a demand deposit are acceptable as a medium of exchange. It is through the extension of credit by commercial banks that the bulk of the money used in our economy is created.

But there are important forces which circumscribe the ability of a commercial bank to create demand deposits—that is, "bank money"—by lending. In the present case, the Wahoo bank can expect the newly created demand deposit of \$50,000 to be a very active account. The Grisley company would not borrow \$50,000 at, say, 8 or 10 percent for the sheer joy of knowing the funds were available if needed. Let us assume that the Grisley company awards a \$50,000 contract to the Quickbuck Construction Company of Omaha. Quickbuck, true to its name, completes the expansion job and is rewarded with a check for \$50,000 drawn by the Grisley company against its demand deposit in the Wahoo bank. The Quick-