increase by \$80, and the borrower will get an \$80 current deposit. Let us add these figures to bank A's balance sheet ($a_2$).

But now we must invoke our third assumption: The borrower draws a cheque for \$80 – the entire amount of the loan – and gives it to someone who deposits it in another bank, bank B. As we saw in transaction 6, bank A *loses* both reserves and deposits equal to the amount of the loan ($a_3$). The net result of all the transactions is that bank A's reserves now stand at \$20 (= \$100 – \$80), loans at \$80 and current deposits at \$100 (= \$100 + \$80 – \$80). Note that when the dust has settled, bank A is just meeting the 20 per cent reserve ratio.

Recalling transaction 5, bank B *acquires* both the reserves and the deposits which bank A has lost. Bank B's balance sheet looks like this ($b_1$):

**Balance sheet:** Trading Bank B

| Liabilities and net worth | | Assets | |
|---|---|---|---|
| Current deposits | \$+80 ($b_1$) | Reserves | \$+80 ($b_1$) |
| | +64 ($b_2$) | | −64 ($b_3$) |
| | −64 ($b_3$) | Loans | +64 ($b_2$) |

When the cheque is drawn and cleared, bank A *loses* \$80 in reserves and deposits and bank B *gains* \$80 in reserves and deposits. But 20 per cent, or \$16, of bank B's newly acquired reserves must be kept as required reserves against the new \$80 in current deposits. This means that bank B has \$64 (= \$80 – \$16) in excess reserves. It can therefore lend \$64 ($b_2$). When the borrower draws a cheque for the entire amount and deposits it in bank C, the reserves and deposits of bank B both fall by the \$64 ($b_3$). As a result of these transactions, bank B's reserves will now stand at \$16 (= \$80 – \$64), loans at \$64 and demand deposits at \$80 (= \$80 + \$64 – \$64). Note that after all this has occurred, bank B is just meeting the 20 per cent reserve requirement.

We are off and running again. Bank C has acquired the \$64 in reserves and deposits lost by bank B. Its balance statement appears as follows ($c_1$):

**Balance sheet:** Trading Bank C

| Liabilities and net worth | | Assets | |
|---|---|---|---|
| Current deposits | \$+64.00 ($c_1$) | Reserves | \$+64.00 ($c_1$) |
| | +51.20 ($c_2$) | | −51.20 ($c_3$) |
| | −51.20 ($c_3$) | Loans | +51.20 ($c_2$) |

Exactly 20 per cent, or \$12.80, of this new reserve will be required, the remaining \$51.20 being excess reserves. Hence, bank C can safely lend a maximum of \$51.20. Suppose it does ($c_2$). And suppose the borrower draws a cheque for the entire amount and gives it to someone who deposits it in another bank ($c_3$).

Bank D – the bank receiving the \$51.20 in reserves and deposits – now notes these changes on its balance sheet ($d_1$):

**Balance sheet:** Trading Bank D

| Liabilities and net worth | | Assets | |
|---|---|---|---|
| Current deposits | \$+51.20 ($d_1$) | Reserves | \$+51.20 ($d_1$) |
| | +40.96 ($d_2$) | | −40.96 ($d_3$) |
| | −40.96 ($d_3$) | Loans | +40.96 ($d_2$) |

It can now lend \$40.96 ($d_2$). The borrower draws a cheque for the full amount and deposits it in another bank ($d_3$).

Now, if we wanted to be particularly obnoxious, we could go ahead with this procedure by bringing banks E, F, G, H, . . ., N into the picture. We shall merely suggest that you check through computations for banks E, F and G, to ensure that you have the procedure firmly in mind.

The nucleus of this analysis is summarised in Table 15.1. Data for banks E to N are supplied, so you may check your computations. Our conclusion is a rather startling one: On the basis of the \$80 in excess reserves (acquired by the banking system when someone deposited the \$100 received from the sale of a government bond in bank A), the *trading bank system* is able to lend \$400. Lo and behold, the banking system is able to lend by a multiple of 5 when the reserve ratio is 20 per cent! Yet you