

It is the duty of the Bank of Canada to exercise a regulative influence over the total volume of purchasing media in the country, and this is done through the medium of the commercial banks, whose reserves, which the central bank controls directly, consist of their balances with the Bank of Canada or of Bank of Canada notes. The method of control is either through what are known as "open-market" operations, or by changes in the bank rate, or both.

Commercial banks are accustomed to keep a certain proportion of cash as reserves against their deposit liabilities. In Canada, speaking of the banks as a whole, that proportion at present is about ten per cent and by law must be at least five per cent. The banks have the power to vary their cash proportion, as they wish, down to five per cent, but this does not matter very much from a control point of view because pronounced variations are infrequent and the central bank will have a good idea of what to expect.

The central bank can expand or contract these collective reserves at will, always provided that it can buy and sell securities or other suitable assets when it wants to. It is the buying and selling of securities for this purpose that are commonly known as "open-market" operations. Suppose, for example, that the central bank buys two million dollars worth of securities; then no matter from whom it buys these securities, the reserves of the combined chartered banks will rise by that amount; for if it buys from a commercial bank or banks their accounts at the central bank will be credited and those accounts are part of their reserves, and if it buys from someone not a bank then that seller pays the money into his account with some bank and it swells that bank's reserves at the central bank when the cheque is presented by it to be paid by the central bank. Obviously, if each commercial bank has some proportion at which it thinks it should maintain its reserves, the bank or banks which eventually are credited with the additional cash, finding themselves with their proportions increased, will wish to reduce them again. Otherwise they are losing an opportunity of increasing their earnings. Consequently, although they are not obliged to expand, they will usually take steps to increase their own assets and deposit liabilities by amounts sufficient to reduce their cash proportion to near the customary level again. As has been said, the average of that level is at present approximately ten per cent and, in the case of the purchase of the two million dollars worth of securities above mentioned, they would seek to expand their assets and deposits by approximately twenty million dollars. Thus it is that an operation by a central bank tends to have *ten times* the effect on total purchasing media that an operation by a commercial bank has. If the banks can find good borrowers, *i.e.*, if the character of the borrowers, and the purposes for which they want the funds, are satisfactory, the commercial banks will be glad to assume the deposit liabilities contingent on making advances of an additional twenty million dollars in the case given, since this is the most profitable way of employing their money. Otherwise they may buy investments, which will usually earn them a lower return (but perhaps at less risk) or they may expand partly in the one way and partly the other. Either method will increase their collective deposits *pari passu*. Moreover, they will all expand more or less in proportion to their relative size, otherwise some will lose cash reserves to others and find their proportions dropping too low. They tend to move together, maintaining the existing relationship at a higher level, through their own actions and those of their depositors. Conversely, if the central bank sells securities, or contracts its advances and discounts, there will be a corresponding fall in the cash of the banks, a reduction of the collective cash proportion and the eventual need for a collective contraction of deposits. Where the market for government securities,