

2. Role of Financial Intermediaries

Financial intermediaries perform two major economic functions in almost all economies. First, they create money and administer the payments mechanism. In most economies today, a central bank or monetary authority issues currency and depository institutions supply deposit money. Financial intermediaries administer a country's payments mechanism by providing currency notes of desired denominations when and where they are wanted and by transferring deposits, e.g., on instructions in the form of cheques.

Money's primary function is as a medium of exchange. It also serves as a unit of account, a store of value and a standard of deferred or future payment. Money emerged when and only when its use could reduce transactions costs by more than its cost of adoption. The benefits of money over barter transactions are far too well known to bear repeating. Less obvious, perhaps, is the fact that different monies perform their functions more or less efficiently.

Transactions costs are reduced most by a money whose value remains stable over time and which provides an efficient payments mechanism. Inflation erodes several of money's attributes. And money is a less efficient means of payment than it could be if, for example, there is insufficient small change, as seems to be the case frequently in Italy, if notes are so worn out that they disintegrate easily, as is the case in a number of developing countries, if counterfeit notes abound, or if deposit money cannot be transferred accurately and speedily from one party to another. Even some of the richer developing countries, e.g., Turkey, do not possess national cheque clearing facilities. Deposit transfer from one region of the country to another can be an expensive and slow procedure.

Financial intermediaries do not administer a country's payments mechanism efficiently if they have failed to develop a cheap, quick and safe method for inter-regional payments. For all the countries considered here, the same point applies to international payments.

The supply of money and the administration of the payments mechanism is not costless. Efficiency must, therefore, be measured in terms of the benefit/cost ratio. On this criterion, the Maldives may possess the most efficient, albeit the most primitive, system. Clearly, supplying money and administering the payments mechanism incurs social or resource costs. The resource cost of a commodity or full-bodied money equals the total value of the money supply. The costs of producing and maintaining fiat paper money rarely exceeds 5 per cent annually of the value of notes outstanding. They comprise, in the main, costs of replacing worn notes, adding additional notes, and preventing forgery. The costs solely of supplying and maintaining deposit money are far lower. They are only the bookkeeping costs. The domestic or national resource cost of using a foreign fiat money, as in the case of the Maldives' use of the U.S. dollar as money in its tourist areas, is again the total value of the foreign currency in circulation. From the national viewpoint, resource costs of commodity and foreign fiat money are identical.

The resource costs of administering the payments mechanism include the value of resources used up in the process of providing currency of desired denominations when and where it is wanted and in effecting deposit transfers. The Federal Reserve System, for example, incurs resource costs greater than the GNPs of several of the sample countries in running the national cheque clearing system in the U.S. Legal and regulatory restraints have impeded the introduction of a nationwide

electronic funds transfer system, a much more efficient method than cheque clearing for transferring deposits.

For various reasons, a country may not possess the most efficient money and payments system, as measured by the highest attainable benefit/cost ratio. The government may be using money issue as a stop-gap, inefficient revenue source. There may be legal and/or regulatory constraints preventing the adoption of technological innovations, such as electronic funds transfer. A country may choose to produce its currency notes domestically, despite lower costs of notes printed abroad. Similarly, foreign banks could be excluded in favour of indigenous enterprise, despite the fact that multinational banks might bring in technical know-how at very low marginal cost, stimulate competition and facilitate the inflow of foreign capital [Grubel (1977, pp.357-358)]. Infant-industry, dependency or nationalistic arguments would be used to justify the deliberate choice of less than maximum possible economic efficiency in such a case.

Inefficiency may also be unintentional. This is likely to occur with respect to the supply and maintenance of deposit money when the deposit industry is not behaving competitively. Uncompetitive behaviour may be the result of economies of scale: in a very small economy, the banking industry may simply be a natural monopoly. More typically, however, uncompetitive behaviour is caused by reserve requirements and/or interest rate controls.

Reserve requirements and binding loan rate ceilings impose a private cost on deposit suppliers. These involve no resource cost. Hence, private total costs of supplying deposits will exceed the resource or social costs and the supply of deposit money will be suboptimal. Even if required reserve ratios

are deemed necessary for prudential or monetary policy purposes, the welfare distortions can be removed completely by paying a competitive interest rate on required reserves [Fry (1979a, p.641)]. The main welfare costs of deposit and loan rate ceilings spring not from their effect on the supply of deposits but rather from their impact on financial intermediation between savers and investors. It is to this second major function of financial intermediaries that this paper now turns.

Intermediating between savers and investors differentiates financial institutions from all other business enterprises. On the one hand, financial intermediaries' assets consist predominantly of financial claims or financial instruments, i.e., claims against other economic units or ownership in them. On the other hand, financial intermediaries offer their own financial instruments to the public and to other economic enterprises. Banks offer deposits - passbook entries or deposit receipts which represent claims against the bank. Other financial intermediaries offer insurance, pensions, bonds, etc. In each case, a claim is created against the issuer. But the claim may be contingent upon special conditions - death or an accident, reaching retirement age, etc.

Financial intermediaries must attract lenders (depositors or savers) and borrowers (investors) by offering financial claims which are more attractive to savers than those offered directly by investors, and by offering more attractive loan arrangements than investors can get directly from savers. Financial intermediaries can raise the net return to savers and lower the gross cost to investors through specialisation and by reaping the economies of scale in financial transactions, information gathering and portfolio management.

Consider the situation without financial intermediaries. The market rate of interest might be 10 per cent. However, the lender (saver) must subtract from that 10 per cent perhaps 2 per cent for the costs of searching out a suitable borrower and another 2 per cent as a risk premium (the extra interest payment required to compensate for risk). The borrower is faced with costs in addition to the interest payment - the search cost of finding a lender, e.g., 3 per cent, so raising the gross cost to 13 per cent.

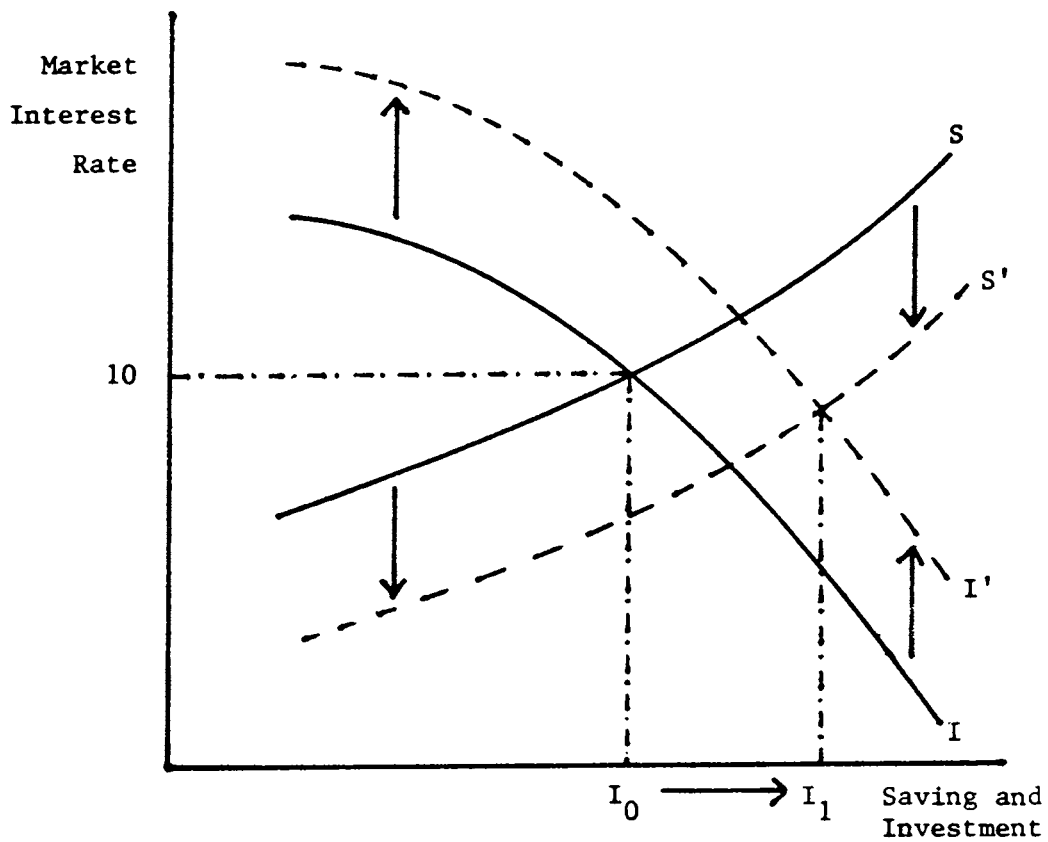
Financial intermediaries reduce search costs for both lenders and borrowers by specialising in an activity subject to economies of scale. They reduce risk to lenders through portfolio diversification, also subject to scale economies. Furthermore, financial intermediaries can use the law of large numbers to offer highly liquid financial claims to lenders while lending to borrowers at long term [Khatkhate and Riechel (1980, pp.510-511)]. This law is also relevant to the provision of insurance services by financial intermediaries.

Returning to the numerical example above, financial intermediaries might reduce both borrowers' and lenders' search costs to 1 per cent, and lenders' risk premium to 1 per cent. If financial intermediaries offered lenders an interest rate of 9 per cent and charged borrowers 11 per cent, lenders' risk-adjusted net yield would be increased from 6 to 7 per cent, while borrowers' gross costs would fall from 13 to 12 per cent. The 2 per cent spread between borrowing and lending rates must cover the financial intermediaries' costs and still leave something over as profit.

The effect of financial intermediation on the volume of saving and investment is illustrated in Figure 1. Without financial intermediaries, saving and

FIGURE 1

Effects of Financial Intermediation
on Saving and Investment



The introduction of financial intermediaries increases the market rate of interest for a given quantity of investment and decreases the market rate needed to draw forth the same quantity of saving. At a fixed market interest rate, financial intermediation increases both saving and investment.

investment of I_0 would take place at the market interest rate of 10 per cent. At a market interest rate of 9 per cent, financial intermediaries would offer savers 6 per cent. In this case, savers would be getting exactly the same risk-adjusted net return as they were before the introduction of financial intermediaries. Therefore, they would save exactly the same amount as before. In Figure 1, this is shown by the downward shift in the saving curve from S to S' - the same quantity of saving occurs at a lower market rate of interest.

Conversely, at a market interest rate of 11 per cent, financial intermediaries would charge borrowers 12 per cent. Borrowers' gross costs would then be 13 per cent, precisely the same as they were before the advent of financial intermediaries. Hence, they would invest the same amount as before. This is illustrated in Figure 1 by the upward shift in the investment function from I to I' - the same quantity of investment takes place at a higher market rate of interest.

Clearly, the market interest rate cannot be both 9 and 11 per cent at the same time. What happens is that saving and investment rise from I_0 to I_1 and the new market interest rate is determined by the intersection of S' and I' . Depending on the relative interest-elasticities of saving and investment, the new equilibrium market interest rate will be above, below or exactly at 10 per cent.

Financial intermediaries emerge and survive if and only if their indirect claims can compete successfully with the market for direct claims. This is dependent, in turn, on their ability to reduce search costs and risk, on the one hand, and the costs of so doing, on the other. As in the case of money supply, efficiency - in this case of financial intermediation - is measured by the benefit/cost ratio. It is to this topic that the paper turns next.