

Two Kinds of Credit Rationing

There is wide agreement among economists that government control of interest rates is undesirable. Two arguments against legal ceilings on interest rates are that they discourage mobilisation of savings and encourage capital intensity. Another is that the resultant excess demand requires credit rationing which is liable to discriminate among borrowers in socially undesirable ways. To quote one recent statement of this latter argument, if “an administratively determined institutional nominal interest rate... holds the real rate... below its equilibrium level,... nonprice rationing of investible funds must occur. This typically takes place on the basis of quality of collateral, political pressures, ‘name’, loan size, and covert benefits to responsible loan officers. These criteria can be counted on to discriminate inefficiently between investment opportunities. Indeed there will be a preference for traditional, low-yielding investments because these appear safest and simplest to finance. Interest rate ceilings discourage risk-taking by the financial institutions; risk premia cannot be charged when ceilings are binding. This itself rations out a large proportion of potential investors”.¹

An obvious objection to this argument against legal ceilings on interest rates is the well known fact that banks ration credit even in the absence of any legal control of interest rates. Indeed, discrimination between borrowers on the basis of collateral and credit rating is a characteristic feature of credit rationing by banks, while some forms of government control of interest rates, such as concessional credit for priority borrowers, can, at least in principle, discriminate among borrowers in a socially more desirable way.

The object of this article is to clear up the confusion by distinguishing more clearly between these two kinds of credit rationing, between

¹ M.J. FRY, “Money and Capital or Financial Deepening in Economic Development?”, *Journal of Money, Credit, and Banking*, (1978), reprinted in W.L. Coats, Jr., and D.R. Khatkhate (eds), *Money and Monetary Policy in Less Developed Countries*, Pergamon Press, Oxford, 1980. The author pleads guilty to having made similar statements; see footnote 18 below.

what, for brevity, might be called “bank rationing” and “government rationing” of credit.²

Bank Rationing

The facts about bank rationing are not in dispute. “In the loan market... sellers (i.e. lenders) classify their customers according to the risk of losing the principal and interest payments, and no single interest rate moves so as to equate the quantities offered and demanded”.³ Or, as Keynes put it in a famous passage, “so far... as banks are concerned, lending does not — in Great Britain at least — take place according to the principles of a perfect market. There is apt to be an unsatisfied fringe of borrowers, the size of which can be expanded or contracted, so that banks can influence the volume of investment by expanding or contracting the volume of their loans, without there being necessarily any change in the level of bank-rate”.⁴

This is not to say that banks charge precisely the same interest rate to all borrowers. Rates on advances “vary according to the nature of the advance, the estimation of risk, and the value of other business brought to the bank by the customer. There are generally, however, ruling rates for advances which are similar for all trading banks and apply to most advances”.⁵ Similarly, the size of the fringe of unsatisfied borrowers is expanded or contracted, not in general by changes in the ruling average loan rate but “through changes in the degree of stringency with which credit is rationed”.⁶ “When they wished to foster an expansion of credit, bankers became more tolerant about raising overdraft limits and more ready to grant accommodation to new borrowers”.⁷

² Thanks for helpful comments on an earlier draft, coupled with the usual disclaimers of responsibility, are due to B. Bolnick, G. Dorrance, M. Dowling, W.E. James and V. Joshi.

³ R.N. MCKEAN, “Liquidity and the National Balance Sheet” in American Economic Association, *Readings in Monetary Theory*, Blakiston, New York, 1951, p. 69.

⁴ J.M. KEYNES, *A Treatise on Money*, Macmillan, London, 1935, Vol. I, p. 212.

⁵ ROYAL COMMISSION ON THE MONETARY AND BANKING SYSTEM OF AUSTRALIA, *Report*, Government Printer, Canberra, 1937, para. 568.

⁶ H.W. ARNDT, *The Australian Trading Banks*, 1st ed., Cheshire, Melbourne, 1957, p. 64. British bankers of the old school were reluctant to admit that this could happen. “That could only be done, however, by lowering the banks’ standards of security and credit-worthiness” (W. MANNING DACEY, *The British Banking Mechanism*, Hutchinson, London, 1951, p. 92).

⁷ C.G.F. SIMKIN, “Banking in New Zealand” in R.S. Sayers (ed.), *Banking in the British Commonwealth*, Clarendon Press, Oxford, 1952, p. 330.

Why do banks ration credit? More precisely, why do banks supply credit at a rate of interest below the rate which would equate supply and demand, so that credit has to be rationed? There is now an extensive theoretical literature on this subject. Most of the explanations follow Stigler in emphasising information costs. "The lender cannot afford to acquire the information to subclassify a given borrower into a more homogeneous risk class, and so this borrower is grouped with a higher-risk man... Information costs are the costs of transportation from ignorance to omniscience, and seldom can a trader afford to take the entire trip".⁸ Unable, beyond a point, to differentiate the riskiness of different borrowers, or finding it uneconomic to try to do so, banks are deterred from raising the loan rate by two considerations which have been called the adverse selection effect and the incentive effect.⁹ The former refers to the fact that those who are willing to pay higher interest rates are likely to be higher-risk borrowers, so that, as interest rates rise, the average riskiness of those who borrow increases, possibly reducing the bank's profits. The latter refers to the fact that higher interest rates, which reduce the return on projects which succeed, are likely to induce firms to undertake projects with lower probability of success but higher payoffs when successful.¹⁰ For either reason, or both, the interest rate which maximises banks' profits will be below the highest rate they could charge, i.e. the rate which would equate supply and demand. Another explanation which used to be popular among bank managers though it does not seem to figure in the theoretical literature is that, if an aspiring borrower's project appears to the bank unlikely to yield an adequate return to cover debt service at the ruling loan rate, it is even less likely to do so at a higher rate.

The trouble with all these explanations of credit rationing is that they focus on banks and ignore the rest of the capital market. Take this statement by McKean: "If customers fell into discrete compartments or risk-categories, this would simply mean that several loan markets and interest rates existed. But even within a single broad risk-category, each borrower presents a different degree of risk; and a loan to one customer

⁸ G.J. STIGLER, "Imperfections in the Capital Market", *Journal of Political Economy*, June 1967, p. 291.

⁹ J.E. STIGLITZ and A. WEISS, "Credit Rationing in Markets with Imperfect Information", *American Economic Review*, June 1981, pp. 393f.

¹⁰ *Ibid.* Keynes took the opposite view. "If a venture is a risky one, the borrower will require a wider margin between his expectation of yield and the rate of interest at which he will think it worth his while to borrow" (J.M. KEYNES, *The General Theory of Employment, Interest and Money*, Macmillan, London, 1936, p. 145).

is a different commodity from a loan to another... Some rationing is inevitable".¹¹ The fact, however, is that, in all countries, the capital market is segmented; several loan markets and interest rates do exist. In less developed countries, besides banks, there is an informal sector of money lenders from whom borrowers excluded by bank rationing can obtain credit at higher rates; and in developed countries, there is a spectrum of non-bank financial intermediaries at the far end of which are fringe institutions which offer credit at high rates to virtually anyone, no questions asked. As the Radcliffe Committee reported, "there was also general agreement among witnesses, from trade organisations and from banks, that firms denied the bank credit they wanted resorted to finance companies (from whom they could borrow either by straight loan or by hire purchase agreements), the accepting houses, and even the discount houses. Such alternative credit was more costly, sometimes much more so".¹² In other words, while it may be true that banks are as a rule unwilling to supply credit to borrowers of varying degree of perceived riskiness at varying interest rates sufficient to cover the extra risk in each case, this is not true of the capital markets as a whole, or not to nearly the same degree. A special explanation is needed to account for the difference of behaviour between banks and less conservative financial intermediaries.

Two explanations suggest themselves. One is the need of deposit banks to maintain the confidence of holders of demand deposits. "For deposit banks are, of all concerns, the least adapted to the bearing of serious risks".¹³ If a deposit bank showed itself willing to lend to any borrowers, however risky, provided they were willing to pay a rate of interest high enough to cover the bank's lender's risk, its depositors might take these very interest rates as worrying evidence that the bank was taking more risks in its lending policy than was prudent for a deposit bank. Another possible explanation is that deposit banks are more susceptible to the moral pressure exerted by public anti-usury sentiment which is widely prevalent in most countries. Respectable banks do not want to appear as "loan sharks".

So much for the positive economics of bank rationing. What about its welfare effects? Economists seem agreed that credit rationing by

¹¹ R.N. MCKEAN, *op. cit.*, p. 69.

¹² COMMITTEE ON THE WORKING OF THE MONETARY SYSTEM, *Report*, HMSO, London, 1963, para. 457.

¹³ W. MANNING DACEY, *op. cit.*, p. 91.

banks is unlikely to lead to the most desirable allocation of credit. "It is not at all sure that [banks] have an incentive to behave in a socially optimum way".¹⁴ This has not always been the conventional wisdom. Adam Smith favoured usury legislation precisely because a ceiling on interest rates would exclude high-risk borrowers. "If the legal rate... was fixed so high as 8-10 per cent, the greater part of the money which was to be lent, would be lent to prodigals and projectors, who alone would be willing to give this high rate".¹⁵ By "prodigals" Smith probably meant both spendthrifts liable to squander money on frivolous consumption and borrowers who had little if any intention to repay. By "projectors" he probably meant optimists who had unwarranted confidence in the economic prospects of their projects. These are clearly two categories of high-risk borrowers whom any bank would hope to avoid, and if bank rationing normally excluded only these two categories it would be difficult to object to it on welfare grounds.

In practice, however, bank rationing is generally believed to operate as a socially inefficient allocative mechanism. "Restrictive credit rationing almost certainly discriminates in favour of the bank's existing customers against newcomers and probably also in favour of valuable (and that almost certainly means large) customers of the bank".¹⁶ "Banks may look at the creditworthiness of their customers primarily in terms of their net worth, which might not be correlated with the productivity of their investments".¹⁷ "The easiest criteria available to bank managers for rationing credit, the quality of collateral the borrower can offer and his credit standing both tend to favour the well-to-do".¹⁸ Particularly in less developed countries, the typical criteria for nonprice rationing, as Fry has put it rather strongly, "can be counted on to discriminate inefficiently between investment opportunities".¹⁹ In other words, bank rationing which seeks to eliminate high-risk borrowers by allocating credit on the basis of collateral and credit standing is liable to discriminate against smaller, poorer, newer and more enterprising borrowers among whom there may be many who

¹⁴ V. GALBIS, "Financial Intermediation and Economic Growth in Less Developed Countries: A Theoretical Approach", *Journal of Development Studies*, January 1977, reprinted in W.L. Coats and D.R. Khatkhate, *op. cit.*, p. 82.

¹⁵ ADAM SMITH, *Wealth of Nations*, Modern Library, New York, 1973, p. 339.

¹⁶ H.W. ARNDT, *op. cit.*, p. 65.

¹⁷ V. GALBIS, *op. cit.*, p. 82.

¹⁸ H.W. ARNDT, "Monetary Policy Instruments in Indonesia", *Bulletin of Indonesian Economic Studies*, November 1979, p. 119.

¹⁹ M.J. FRY, *loc. cit.*

would make good use of credit, able and willing to service debt at higher than ruling bank loan rates (but below those of fringe institutions and money lenders which usually include an element of monopoly profit and have to cover high transaction costs).

Government Rationing

In order to assess the economic significance of credit rationing which arises from government control of interest rates, it is necessary to distinguish between two quite distinct forms of control. The first consists of overall legal ceilings on interest rates which may be confined to bank (loan and/or deposit) rates or may extend to all interest rates. The second takes the form of concessional credit for defined target groups of borrowers.

Legal ceilings on interest rates are sometimes justified on questionable economic grounds — high interest rates add to costs and are therefore “inflationary” — or on vaguely distributional grounds, to safeguard borrowers against “exploitation” by banks. (Anti-usury sentiment, reflected in outright condemnation of interest on moral grounds by the Catholic church in medieval Europe and by adherents of strict versions of Islam, such as the Khomeini regime in Iran, presumably rests largely on such distributional grounds.) Adam Smith, as we saw, approved of interest ceilings to avoid squandering of scarce capital by “prodigals” and “projectors”.

For our purposes, it is enough to note that overall legal ceilings on bank lending rates which leave the allocation of credit to the banks may be assumed to result in discrimination between borrowers on broadly the same criteria as bank rationing without controls. The effect of the offer of credit at lower interest rates is to swell the fringe of unsatisfied borrowers and thus to require more stringent rationing by the banks. The effect is the same as that of more stringent rationing necessitated by a decline in bank liquidity, except that in the case of interest control the customers most likely to be rationed out are the new ones attracted by lower rates, while in the case of reduced bank liquidity the axe has to fall on some of the banks' regular customers.

Interest ceilings can also have other undesirable effects. Attempts to limit interest rates through “cheap money” policies inhibit adequate

control of money supply. In less developed countries, legal ceilings on lending rates, which are often reinforced by legal ceilings on deposit rates (and in any case motivate banks to keep down deposit rates), discourage the mobilisation of savings if either the public's saving rate or its currency-deposit ratio is at all interest elastic; they constitute "financial repression".²⁰ Legal ceilings on lending rates are also liable to encourage inappropriately capital-intensive techniques and patterns of industry. Legal ceilings on bank deposit rates alone, leaving lending rates uncontrolled, allow scope for oligopolistic behaviour by banks, increasing bank profits through a widening of spreads.²¹ Again, if legal ceilings on deposit and lending rates are confined to banks, they have the effect of diverting funds to other uncontrolled sectors of the capital market. But none of these other effects detracts from the similarity between this form of government rationing and bank rationing as regards the allocation of credit among borrowers.

There is no such similarity between bank rationing and the other form of government rationing, that implied in the provision of credit on concessional terms to categories of borrowers who, it is believed, cannot afford or for other reasons should not be made to pay market rates of interest.²² In developed countries, target groups for concessional credit usually include applicants for housing loans, but also often such categories as war veterans, age pensioners and other disadvantaged groups. In developing countries, the most important categories of "priority" borrowers are usually farmers and small-scale firms. The objective may merely be to correct the socially undesirable discrimination which is believed to result from bank rationing on the assumption, which may or may not be warranted, that the authorities are better able to make a socially optimal selection. In this case, all that is needed is to earmark specified amounts of credit for target groups but at the ruling lending rates. Beyond this, credit on concessional terms, i.e. below ruling bank lending rates, could be justified on any of the usual welfare-economic grounds for intervention in the market — externalities, protection and distributional considerations.

If widespread home ownership is believed to be in the national interest, the case for government intervention could be based on the

²⁰ R.I. MCKINNON, *Money and Capital in Economic Development*, Brookings, Washington, 1973; E.S. SHAW, *Financial Deepening in Economic Development*, OUP, New York, 1973.

²¹ V. GALBIS, *op. cit.*, pp. 72, 83.

²² Cf., e.g., C.H. HANUMANTHA RAO, "Farm Size and Credit Policy", *Economic and Political Weekly*, December 1970, reprinted in W.L. Coats and D.R. Khatkhate, *op. cit.*; B. BOLNICK, "Concessional Credit for Small-Scale Enterprise", *Bulletin of Indonesian Economic Studies*, July 1982.

external economies of concessional credit to home buyers; similarly, if in developing countries it is thought important to encourage farmers to buy fertiliser to expand food production. The case for concessional credit to small-scale industry could be based on the argument for infant industry protection, to help such firms on their feet. (Imperfections of the capital market, after all, can serve to justify infant industry protection even where economies of scale accrue internally to the firm.) The same argument might also be applied to farmers, for example, if there are grounds for believing that, once they recognise the beneficial effects of fertiliser application on their yields, and once their incomes begin to rise in consequence, they can do without concessional credit. With respect to pensioners in developed countries, but also to low-income farmers in developing countries, concessional credit might be justified on straight welfare grounds, as the most administratively practicable and effective method of income redistribution.

All these, it should be emphasised, are only *prima facie* justifications for concessional credit. The benefits of such credit may be outweighed by social costs and may in any case not go to those for whom they are intended.

Much depends on the manner in which concessional credit is financed. If concessional loan rates are financed by controlled deposit rates (in effect, by a tax on depositors), they have all the adverse effects of financial repression. It was this situation that Shaw had in mind when he declared the subsidised loan rate to represent "repression at its worst".²³ Concessional credit subsidised, overtly or covertly, by the central bank, e.g. by central bank refinance of commercial bank credit on concessional terms, as is the practice in Indonesia, may be hardly less undesirable if it operates as an inflation tax.²⁴ On the other hand, one can conceive of concessional credit schemes subsidised from the government budget which, provided they do not add too greatly to the overall tax burden, would, at least in principle, not be open to these objections.

In practice, loopholes and the operations of the political market are liable to distort the allocation of credit in greater or less degree. If the intended beneficiaries of concessional credit on-lend at commercial rates to others who can make more profitable use of it, at least the distributional, though not the allocative, purpose of the scheme may be

²³ E.S. SHAW, *op. cit.*, p. 86.

²⁴ H.W. ARNDT, *op. cit.*, (BIES).

served. But very often the actual beneficiaries turn out to be not the poor but those with political clout — relatively affluent aspirants for housing loans, farmers or industrial pressure groups in developed countries and village elites or politically influential urban interests in developing countries. Nevertheless, while bank rationing in its nature favours the better-off, government rationing in the form of concessional credit for target groups can in principle benefit low-income borrowers; how far it will do so in practice depends on the integrity and efficiency of the bureaucracy and on the working of the political process.

Conclusion

Advocates of financial development, following the lead given by Shaw and McKinnon, have made a powerful case against government control of interest rates. Our quarrel is not with the policy conclusion but with one frequently used argument. Statements which rest the case on the discriminatory effects of credit rationing have confused the issues by attributing to government controls the consequences which normally flow from credit rationing by banks even in the absence of government control. As Drake has recently pointed out, even complete abolition of government control of bank interest rates may not achieve the objectives hoped for by advocates of financial development if banks act collectively as a cartel and refrain from raising deposit rates and if they, in conformity with normal banking practice, discriminate in lending against the less creditworthy borrowers, which may in practice mean “against small-scale producers, peasant farmers, certain ethnic groups, females, the uneducated and so forth”.²⁵

Credit rationing involved in concessional credit to priority categories of borrowers can in principle alleviate some of the adverse effects of credit rationing by banks. Whether it always, or usually, does so in practice is much more doubtful. There is room for legitimate differences of opinion, here as in many other areas of economic policy, about the relative likelihood and seriousness of market failure and government failure.

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²⁵ P.J. DRAKE, *Money, Finance and Development*, Robertson, Oxford, 1981, p. 225.