ISLAMIC FINANCE: A WESTERN PERSPECTIVE

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There is a great deal in Western Literature that focuses upon the major issues in the Islamic economic paradigm, such as, the prohibition of interest and the causes of the business cycle. There is much to be gained from utilizing also the empirical approach of Western economic literature. Rather than develop in isolation from Western literature, Islamic scholars would do well to exploit the wealth of supportive arguments found in Western Literature.

1. Introduction and Background

The new Islamic economics paradigm has developed almost in isolation of contemporary Western economic literature. Islamic economics and finance has so far failed to capture the interest of Western writers. Unfortunately also Islamic writers have focused upon the Koran and mainly Asian literature without utilising a wide body of literature in the West which would assist with the development of the Islamic paradigm. This article begins to rectify the latter deficiency by exploring three key issues -support for the prohibition of interest in Western literature, the blame attached to interest based systems in the creation of business cycles in capitalist economies and empirical evidence on attitudes towards Islamic finance.

In seeking to achieve an economic system based upon fairness and justice, Islam dictates that prohibition of rib a (interest) must be established. All incomes, from whatever source, whether it be provision of land, labour, capital or enterprise, must be determined by the supply of work effort associated with the factors of production. If money is lent for interest then capital is augmented without effort; money is unable to create surplus value by itself. In the context of money, work effort is defined to include the taking of risk in whatever project that money is invested; hence Islam decrees that it is fairer if the provider, of capital shares in the profit or loss of the project in which the borrower invests the capital rather than receiving a fixed return which is independent of the use to which that capital is put.

The Islamic literature employs a number of arguments to justify prohibition of interest, some of which are also a feature of Western literature. First, interest as a reward for saving is not considered to have any moral foundation or justification. Second, abstinence from consuming out of present income is not regarded as being sufficient reason to merit a financial reward. Third, a' distinction is made between money and capital; money in essence becomes potential capital; to transform money to capital requires the application of enterprise, that is the risk taking and the knowledge required to bring factors of production together in order to create profit (or loss). [Presley 1988, pp.68-9]. If the lender provides enterprise in whatever form, he justifies a profit (loss) share, but not a fixed or guaranteed return; the reward, that is the profit share, is determined by contribution in terms of enterprise. The creditor/debtor relationship is redefined in Islam with the creditor becoming a partner in the project, not distanced from the use to which the money is employed. Fourth, it is fairer for both creditor and debtor that they each have a share of profits or losses; a profit share, for example, may exceed the market rate of interest and be more in keeping with the input of the creditor. Therefore profit shares not only serve the debtor more fairly but also the creditor.

Lending money represents a transfer of property rights (Presley, 1988, p.70); unless the loan is used to generate incremental wealth there is no claim to additional property rights to either borrower or lender; the creation of incremental wealth justifies a claim from both borrower and lender to a share of that additional wealth, but not a fixed return irrespective of the additional wealth guaranteed.

2. The Treatment of Riba in Western Literature

Central to the Islamic Economic System is the prohibition of the payment of interest in the borrower- lender relationship and its replacement by profit/loss sharing financial instruments. Generally, there has been an implicit assumption by Islamic writers that the prohibition of interest is unique to Islamic literature.

In truth, its advocacy has been a feature of both religious teachings and nonreligious literature over several decades. This section proceeds by classifying the major arguments against interest in Western literature in terms of the relationship between interest, charitable deeds and social divisions, the preferred use of money, the effects upon work effort and the time dimension. In truth, there is little in contemporary economic literature which is fundamentally opposed to interest payments. This largely results from the divorce of ethics from questions of economics, particularly in the second part of this century; economic arguments against interest have not in any case dominated the literature; religious, moral, theoretical and practical considerations have more often been to the fore.

Historically, interest has been opposed on the grounds of the social divisions it creates and the hardship to borrowers. There are countless examples of this. The Old Testament recommends loans to the poor (Deuteronomy 15:7-9), with loans free of interest and with loans to be cancelled every seventh year (Deuteronomy 15:4,5,1-3), except loans to foreigners. The Old Testament in turn was a major influence upon Jewish and Christian opposition to interest and may have been, many centuries ago, the original reason for the Koran's dismissal of usury (Stein, 1956, p.142).

Interest is often equated with the exploitation of those in need, since by definition a borrower must be in need hence. Now lending on interest is a blameworthy action, for a person who borrows is not living on a superabundance of means, but is obviously in need, and since he is compelled to pay the interest as well as the capital, he must necessarily be in the utmost straits. (Philo, De specialibus legibus, 2.74-77; cited in Maloney, 1971, p.105)

It also wants to divorce the borrower from the lender. Indeed, the modern day financial system functions through financial intermediaries, where the borrower may not know the identity of the ultimate lender. Again, Judaeo-Christian thought over the centuries has recognised that as such it does little for economic brotherhood and the sharing of risks. Often interest free loans have been a feature of tribal systems, with interest chargeable only on loans to one's enemies. Typically, there has been a view that interest charges are not justified between co-religionists; although even this has been extended to the Christian teaching to 'love thine enemies' to embrace a universal prohibition of interest.

There has also been a recognition in Western literature that interest is unearned income in the sense that no work effort is required. Although Brunner saw the indisputability of interest in the economic system, she regarded interest as encouraging a 'parasitical existence' (Brunner, 1937, p.437); and, of course, a common theme of socialism was the condemnation of interest, rent and pure profit as the fruits of exploitation of the working classes.

Less convincing an argument against interest is the view, found for example in Aristotle, that money should only function as a medium of exchange and not also as a store of value (Cannon et al., 1992). This view is also present in Aquinas; interest undermines the stability of money as a measure of value, by ascribing different, time-dependent values to the money supply. Others have more recently accused interest as creating instability in the velocity of circulation of money, of affecting aggregate spending and adding to economic fluctuations (see Section2).

The whole usury debate turns on our attitude towards time. The justification of interest entails the claim that, quite literally, 'time is money'. Since the mere passage of time supposedly alters the value of

assets, money and satisfaction automatically, their forfeiture over time (through a loan) automatically justifies , interest as compensation. The opponents of interest would dissent. Since nothing is certain in time, we ought not to act as though it is. Contingent profit-share and rental contracts allow for positive returns to be made, and the services of durables to be enjoyed, over time. But they do not presume that-the mere passage of time necessarily affects anything. Hence; it is unwarranted to justify discounting through positive time preference.

3. Interest Rates and the Business Cycles

Whilst stopping short of the advocacy of a non-interest system, economists of many persuasions in Western literature have identified linkages between interest rates and the kinds of macroeconomic instabilities which afflict most capitalist economies -inflation, unemployment, negative growth. Again, Islamic scholars have failed to exploit this literature in their support for profit and loss sharing.

An increasing number of economists from the early part of the twentieth century onwards attempted to explain cyclical fluctuations in terms of a divergence between the natural and the market rate of interest. The idea of a natural rate of interest is to be found in early classical writings. Although not explicitly stated, the classical definition of a natural rate of interest would be that rate which in the long-run yields the equality of voluntary saving and investment; this equality would result in an equilibrium level of income. Essentially, the difference between market and natural rates of interest is that the former is determined by monetary forces in the loanable funds market, for example, money supply growth and bank credit creation, and the natural rate is determined by the profitability of investment. Clearly, it would not be too bold a leap to suggest that the natural rate could be 'associated' with appropriate profit shares at the micro level, whereas the market rate of interest is that fixed rate actually charged in the market place. If market and natural rates of interest do not coincide over time, some would claim that cyclical fluctuation must result.

In the long-run, the quantity of money cannot influence the rate of interest. Adam Smith wrote that an increase in the quantity of money would increase prices but because it did not affect the rate of profit it could not affect the rate or interest (Adam Smith, 1904, p.337). Similarly, John Stuart Mill was disposed to write that the most common error of the businessman was to suppose that changes in the quantity of money brought with it changes in interest (Mill, 1826, p.646). In general, most classical writers felt that in the short-run the market rate of interest could be influenced by monetary forces. Those economists who recognised the forced saving doctrine also generally accepted that in the short-run there could be a difference between the natural and market rates of interest, brought about by banking operations; although, as Ricardo argued, whatever the volume of loans by the banks, it 'would not permanently alter the market rate of interest' (see Wilson, 1942, p.9). The regulation of the rate of profit to be made by employing capital. It is the natural rate of interest which is commonly held as the dominant rate, pulling the market rate of interest towards it. The market rate of interest may be under the influence of monetary forces in the short-run. Marget refers to the sophisticated understanding of economists from Thornton to Marshall of the way in which changes in the quantity of money affect prices through the rate of interest; but most felt that the rate of interest could not be held for very long by monetary policy at any rate other than the natural rate.

Patinkin has interpreted the classical and neoclassical economists in a different fashion. He suggests that because of the forced saving doctrine, they were quite prepared to accept the permanent influence of monetary changes on the rate of 'interest (Patinkin, 1965, p.631). This may be true of the neoclassical economists, but it is not typically true of the classical economist. The work of T. Joplin is a good example of this; He clearly saw that forced saving would interfere with the equality of saving and investment. If changes in productivity or thrift occurred, shifting the saving and investment schedules, the natural rate of interest would change. But if the market or actual rate of interest is prevented from moving by changes in credit creation. Joplin believed that the likely consequences would be fluctuations in economic activity not in the rate of interest (Joplin, 1826). Saving could be cancelled or manufactured by the banks, and consequently the actual' rate may be above or below the natural rate.

However, two economists above all others captured the role of the interest rate as the cause of the business cycle in their work: K Wicksell and F. Hayek.

Wicksell was inspired by the work of Thornton, Malthus, Ricardo and Joplin. His own theory was developed fully within the Swedish school, in the writings of Ohlin, Lindahl, Myrdal and B. Hansen. It also influenced the Austrian school approach to trade cycle theory, particularly the work of Hayek. The innovation in Wicksellian theory was the application of interest theory to the cumulative processes of expansion and contraction. Wicksell described fluctuations in terms of the divergence between the natural (or normal) rate and the market (or money) rate of interest; any divergence would show itself in fluctuations in prices, not in output and employment; but he did not suggest that this divergence was a cause of price fluctuations. Indeed, he was at pains to point out that real causes were responsible for the price cycle, not the divergence of natural and market rates (Wicksell, 1935, p.209).

It was left to Hayek to argue a stronger case for linking interest rates and the cycle; Hayek's 'additional credit theory' placed the cause of the divergence between the natural and market rates upon newly created money. This, in the face of the increased, anticipated profit from investment in an expansion, .and the subsequent increased demand for loan capital, increases the supply of loan capital with little or no increase in the market rate of interest. Investment therefore surpasses the amount of voluntary saving taking place and a cumulative expansion results. Initially, the increased investment changes the relative prices of capital and consumer goods in favour of the former; the structure of production consequently changes in favour of capital goods. In the latter stages of expansion, factor incomes rise, bringing a rise in the demand for consumer goods; this may lead to increased withdrawals from bank accounts driving up the market rate or interest and leaving some investment projects already begun unprofitable. This will bring a turnabout in the structure of production; relative prices now move in favour of consumer good industries and against expansion in capital good production.

Wicksell had assumed full employment in his model; Hayek was to do the same in his earlier writings. Later, he dropped this assumption {Hayek, 1939) and examined the Wicksellian cumulative process in terms of the fluctuations in output and employment that it might generate over the cycle. The conclusion he reached was in contrast to that of Wicksell. A stable price level will not provide a total disappearance of cyclical fluctuations (Hayek, 1939, p.188). This could only occur if bank deposits could be kept stable, but such a policy was not justifiable in Hayek's thesis. Stability would be at the expense of economic progress; innovation would be hindered and the psychological forces working for progress would disappear. If economic progress was to be encouraged, banks could not remain inactive and credit must be used to supplement voluntary saving (Hayek, 1939, ch.4). Wicksell had given priority to maintaining a stable economy. Hayek had seen the need for economic progress. Different objectives required different banking policies.

The monetary theories of the trade cycle associated with Wicksell and Hayek are supported by the 'financial instability hypothesis' in emphasising the role of interest rates in promoting economic instability. Prominent amongst this school of thought were Veblen (1904), Keynes (1931) and Irving Fisher (1933).

John Maynard Keynes, arguably the greatest economist of all times, in his pre-General Theory phase, was critical of the part played by interest rates and bank credit in the cyclical process, The Treatise of Money (1931) saw the cycle as arising from fluctuations in the rate of investment relative to the rate of saving, that is in the inequality of saving and investment (Klein, 1965, p.21). As with Wicksell's cumulative process, investment increases when the natural rate of interest exceeds the market rate and vice-versa; the divergence between the two rates is responsible for price movements. If saving and investment could be continually equated by maintaining the equality of market and natural rates of interest, prices need never move. Entrepreneurs would neither be encouraged nor discouraged to expand or contract their scale of operation. The Treatise was no more therefore than an attempt to spell out the appropriate banking policy which could maintain this monetary equilibrium.

The 'financial instability hypothesis' marries an analysis of conventional banking, stressing the procyclical nature of lending policies, with an examination of the vulnerability of an economy when investment is financed by issuing liabilities which have a fixed nominal value (i.e. interest-bearing debt).

Fisher gives little explanation of why 'over-indebtedness' occurs during the upswing, but focuses on its role in exacerbating the downswing. Once profit and asset price rises begin to decelerate, for whatever reason, highly leveraged firms and speculators find themselves with debt servicing commitments that place too high a burden on available cash-flows. This initiates a general movement to liquidate assets to meet and relieve debt-service commitments. This has two distinct results. First, distress selling reduces asset values, leading to a loss of confidence (due to declining personal net wealth), the hoarding of currency and the elimination of debt-financed speculation. Falling asset prices also lower collateral values, making banks wary of rolling over loans. Secondly, the repayment or defaulting of bank loans, and the hoarding of cash, leads to a multiplied contraction in the money supply due to the fractional reserve system, resulting in declining profits and prices. Consequently, real interest rates may rise, despite nominal base rates falling. The process ('debt-deflation') is self-reinforcing as higher levels of real debt induce further bankruptcies and distress asset sales, depressing prices even more. Thus, individually rational acts of foreclosure and distress selling yield a collectively detrimental result (the 'Fisher Paradox').

For Fisher, the primary problem was the combination of debt contracts fixed in nominal value, and a falling price level. The main task of the monetary authorities was to stabilise prices, through monetary injections, so that real interest rates did not exceed nominal ones (e.g. 1933b, p.39). Bond contracts should be indexed to the price level and open to renegotiation by the borrower when repayment falls due in the depression (1933b, p.118). Although Fisher's analysis was simplistic in automatically linking changes in the money stock to those in the price level, there is validity in the proposition that debt finance is potentially destabilising (Haberler, 1937, pp.115-6, 331-6).

More recently, Minsky (1963, 1977, 1985), Greenwald and Stiglitz (1988a, 1988b, 1990), Bernante and Gertler (1989, 1990) have all put forward theories which in one way or another give interest rates a major part in the explanation of cyclical fluctuations. In essence, therefore, there is almost a 'tradition' in Western economic literature, albeit not mainstream, which blames interest rates and associated bank credit expansions and contractions for many of the economic evils of our time. Yet again, there has been a failure by Islamic scholars to exploit this literature in pursuing their recommendations for a non-interest system.

4. Islamic Finance: Theory and Practice

The theoretical treatment of Islamic finance offers much support for its introduction (Presley and Sessions, 1994); however it has proven extremely difficult to implement in practice. Here again much could be learnt from a Western approach which values empirical investigation as a means to testing the 'realisability' of economic theory. With a concentration upon what the Koran dictates, there has been a reluctance amongst Islamic scholars to undertake empirical testing.

There are parallels between the development of Western and Islamic economic thought; modern Western economics has its foundation in classical economics. The classical economists argued on the basis of a perfect world, perfect knowledge in all markets, perfect mobility, perfectly competitive industries with wages reflecting marginal productivity and equilibrium achieved through the free interaction of supply and demand. However, western economies have progressed as a result of the recognition that the real world, as much as we might wish it to be, is not like this. Keynes in the General Theory (1936) was trying to explain how real people, as suppliers of labour or as consumers, behave in a real world. Neoclassical macroeconomics is progressing by accepting uncertainty and imperfection and by analysing the behaviour of the rational economic agent and its implications for the achievement of economic objectives. The underlying basis of modern Western economic thought is that in reality man is selfish, groups act in self interest, indeed individual governments act in self interest, and even groups of countries (like the European Union) in the main act in their own interests -occasionally to the detriment of other countries.

This is the reality of the world, but it is not a feature of Islamic economic theory. The standpoint is totally different; Islamic theory describes" how people, groups or governments should act in a perfect Islamic community; how the Koran expects them to behave. The reality is that they do not act in this way; though they may be increasingly persuaded to do so.

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The Moslem population in the United Kingdom is a very significant proportion of the total population. Estimates in 1997 put the total Moslem population at around two million people; with one million adult Moslems. Regional concentrations appear to be in the south east (45.2%), +north west (10.5%), east midlands (6.2%) and the west midlands (14.5%). Over 47% of Moslems originate from either Pakistan or Bangladesh; but India, Iran, Kenya, Cyprus (Turkish Cypriot) and the Middle East each provide more than 4% of the total UK Moslem population.

It was this population which Omer (1992) sought to question about attitudes to Islamic finance, through direct personal interviews in selected locations. Out of 300 interviews, 269 were usable in the analysis.

There are interesting results in the sample population itself in a number of respects. 77% of those questioned were married and 80% were male. The educational level of those interviewed was extremely high. 68% of those interviewed had a higher educational qualification either from Britain or overseas, 31% had a higher degree of some description. This is also reflected in the occupational breakdown of the sample; over 28% were either students, researchers or lecturers, over 5% were physicians and 16% were self-employed (indicating the business/individual split of the sample); 4.1% were unemployed. Although all were Muslims, the frequency of worship at a mosque was variable. 48% visited a mosque frequently, 29% occasionally and over 21% either rarely or never. This must be indicative to some extent of religious commitment.

One perspective adopted by the study was to consider current banking habits of the Moslem population and, in particular, their attitude towards the payment or receipt of interest. 66% of those interviewed did not borrow money, 33% did and were prepared to pay interest (1% refused to answer this question). Of those that did not borrow only 23% said that this was because they were opposed to the use of interest payments. This could be interpreted as showing only a very slight reluctance to the use of interest. But care must be exercised in this interpretation; 45% refused to give a reason for not borrowing and 24% said they did not need to borrow. A high proportion of these may also be opposed to paying or receiving interest.

Even so one-third of the sample population were still prepared to pay interest. In addition 70% of the sample population held current accounts, very few in Islamic financial institutions and 23% held interest bearing savings accounts. Only 50% of the interviewees knew of the existence of Islamic banking facilities in the UK at the time of the survey.

A further perspective of the study was the interviewees' potential response to the opening up of Islamic financial institutions in their locality. Here the response was positive towards Islamic financial institutions. Only 10% would keep their account with their existing bank; 29% would hold two accounts, by opening up a second with the Islamic bank; one-third would close existing accounts and bank exclusively with the new Islamic bank.

82% of respondents believed that they lacked Islamic financial instruments in the UK only 12% were satisfied with the existing availability of financial instruments in the UK. As to what is lacking, 55% believed that Islamically acceptable housing loans would be welcomed, and 54% sought an access card issued by an Islamic bank; profit and loss sharing instruments were demanded less, although 40% regarded such facilities as worthwhile.

Again it is difficult to draw precise conclusions given the nature of the survey, but there are a number of tentative hypotheses which are not inconsistent with other studies in Loughborough and elsewhere. There

is a general ignorance, even amongst an educated population, as to what constitutes acceptable Islamic finance. A high proportion of the sample were prepared to use interest, even in the presence of non-interest banking, Indeed only 17% of those attending mosque frequently' said that they would withdraw from interest bearing accounts and open up accounts with an Islamic bank, if such a bank existed in their locality.

The results of Omer (1992) have been confirmed by a more recent research project (Al Ahmad, 1996) which concluded: there is a general interest in the use of Islamic banks. The results also reveal deep divisions existing amongst Muslims based on differences in citizenship, level of education etc., -the higher the level of education, the greater is the (perceived) need for Islamic financial institutions. (Al Ahmad, 1996, p.71)

Here the lesson to be learnt from the Western approach is to extend analysis beyond the theoretical debate and, through empiricism, explore the differences between the perfect Islamic system and the current aspirations and views of Muslims around the world and to ascertain how best Islamic practices can be instituted.

5. Conclusion

Essentially, there are two key points in this article: firstly, there is a great deal in Western literature which focuses upon the major issues in the Islamic economic paradigm and, indeed, reaches similar conclusions. Here we have seen it in relation to the prohibition of interest and the causes of the business cycle. There is much to be gained from utilising also the empirical approach of Western economic literature. Secondly, rather than develop in isolation from Western literature, Islamic scholars would do well to exploit the wealth of supportive argument to be found in Western literature. This would also encourage greater focus in the West upon the new Islamic paradigm as a topic for research.

6. References

Al Ahmad, A. Y. (1996) "The Islamic Financial Instruments Utilisation;" M.Sc. Dissertation, Loughborough University, 1996.

Bernanke, B.S. and Gertler, M. (1987) "Banking and MacroEquilibrium", in W.A. Barnett and K.J. Singleton (eds), New Approaches to Monetary Economics, Cambridge: Cambridge University Press, 89-

Bernanke, B.S. and Gertl~r, M. (1989) " Agency Costs, Net Worth, and Business Fluctuations", American Economic 14-31.

Bernanke, B.S, and Gertler, M. (1990) "Financial Fragility and "Economic Performance", Quarterly Journal of Economics (105), 87-114. Brunner, E. (1937) The Divine Imperative (translated by 0. Wyon), London: Lutterworth Press.

Cannan, E., Ross, W.D., Bonar, J. and Wicksteed, J.P. (1922) "Who Said 'Barren Metal'?", Economica (I), 105-111.

Fisher, I. (1930) The Theory of Interest, New York: Macmillan.

Fisher, I. (I933a) "The Debt-Deflation Theory of Great Depressions", Econometrica (I), 337-357.

Fisher, I, (1993b) Booms and Depressions, London: George Allen & Unwin.

Fisher, I. (1935) 100% Money, New York: Adelphi.

Gilbert, C.L. (1989) "The Impact of Exchange Rates and Developing Country Debt on Commodity Prices", Eco-

- Greenwald, B.C. and Stiglitz, J.E. (1988a) "Imperfect Information, Finance Constraints and Business Fluctuations", in M. Kohn and S.-C. Tsiang (eds), Finance Constraints, Expectations and Macro-economics, Oxford: Clarendon Press, 103-140.
- Greenwald, B.C. and Stiglitz, J.E. (1988b) "Money, Imperfect Information and Economic Fluctuations", in M. Kohn and S.-C. Tsiang (eds), Finance Constraints, Expectations and Afacroeconomics, Oxford: Clarendon press, 141-165.
- Greenwald, B.C. and Stiglitz, J.E. (1990) "Macroeconomic Models with Equity and Credit Rationing", in R.G. Hubbard (ed.), Asymmetric Information, Corporate Finance and Investment, Chicago: University of Chicago Press, 15-42.
- Haberler, G. (1937) Prosperity and Depression, London: George Allen & Unwin.
- Hayek, F. von (1939) Profit and Interest and Investment.
- Hayek, F. von (1933) Monetary Theory and the Trade Cycle, London: Jonathan Cape.
- Joplin, T. (1826) Views on the Currency, London.
- Klein, L. (1965) The Keynesian Revolution, London: Macmillan.
- Maloney, R.P. (1971) "Usury in Greek, Roman and Rabbinic Thought", Traditio, 79-109.
- Mill, J. S. (1826) The Parliamentary History and Review, London.
- Minsky, H.P. (1963) "Can 'It' Happen Again?", in D. Carson (ed.), Banking and Monetary Studies, Homewood, Illiriois: R.D. Irwin, 101-111.
- Minsky, H.P. (1977) " A Theory of Systematic Fragility", il) E.I. Altmaq and A. W. Sametz (eds), Financial Crises -Institutions and Jvfarkets in a Fragile Environment, New York: John Wiley & Sons. Minsky, H.P. (1985) "The Financial Instability Hypothesis: A Restatement". in P, Arestis and T. Skouras (eds), Post-Keynesian Economic Thought, Brighton: Wheatsheaf Books, 24-55.
- Omer, H. S. H. (1992) "The Implications of Islamic Beliefs and Practice on the Islamic Financial Institutions in the UK." Ph.D. Dissertation. Loughborough University, 1992
- Patinkin. D. (1965) Money, Interest and Prices, New York: Harper and Row.
- Presley, J.R. (1988) Directory of Islamic Financial Institutions, Beckenham: Croom Helm.
- Presley, J.R. and Sessions, J.G. (1994) "Islamic Economics: The Emergence of a New Paradigm", Economic Journal (104), 584-596.
- Sarker, M. (1991) "Debt Crisis of the Less Developed Countries and the Transfer Debate Once Again", Journal of Development Studies, July, 84-101.
- Smith, A. (1904) Wealth of Nations, London edition.
- Stein, S. (1956) "Interest Taken by Jews from Gentiles", Journal of Semitic Studies, 141-164.
- Wicksell, K. (1935) Lectures on Political Economy, London: Routledge and Kegan Paul.
- Wilson, T. (1942) Fluctuations in Income and Employment, London: Pitman.