

## A Theory of Multinational Banking

Multinational banking involves the ownership of banking facilities in one country by the citizens of another. It has been described and analysed broadly in a number of books [Baker and Bradford (1974), Baum (1974), Lees (1974 and 1976), Robinson (1972)]. Specific and more narrowly defined problems related to multinational banking have been analysed in a sizeable number of journal articles, most of which are noted in the appended bibliography.<sup>1</sup>

This paper represents a first attempt to develop a general theory of multinational banking capable of explaining the phenomenon with the help of a few price-theoretic principles. Such theorizing is useful in the discussion of policy issues raised by the recent rapid growth of multinational banking and by proposed U.S. legislation designed to curb it.<sup>2</sup>

The growth of multinational banking is reflected in some U.S. statistics. In 1965 foreign banks had 19 branches in the United States. By 1974 their number had increased to 39. During this period the assets of branches and agencies of these foreign banks in the United States rose from 1.4 per cent to 5.4 per cent of total U.S. bank assets. At the same time, 13 U.S. banks with 211 branches abroad grew to 129 banks and 737 foreign branches. The assets of these U.S. banks abroad represented 2.6 per cent and 17.7 per cent of total U.S. banking assets at the beginning and end of the period, respectively.<sup>3</sup>

The growth of multinational banking involved all countries,

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<sup>1</sup> The *Columbia Journal of World Business* had a special issue devoted to multinational banking (Winter 1975) containing papers by ALIBER, CARSON, EDWARDS and ZWICK, FRANKEL, HUTTON, PERKINS, RUCKDESCHEL and WELSH. A special issue on the subject was also issued by the *Federal Reserve Bank of San Francisco Economic Review* (Spring 1976), containing papers by ALIBER and JOHNSTON. Two of the earliest and important papers, drawing on previously unavailable official statistics are by BRIMMER (1975) and KLOPSTOCK (1973).

<sup>2</sup> The U.S. legislation has been discussed by EDWARDS (1974), GARROE (1975), DEAN and GRUBEL (forthcoming), as well as by several of the authors cited in footnote one.

<sup>3</sup> These statistics were taken from ALIBER (1975), p. 10 and BRIMMER (1975), p. 345.

though data are difficult to obtain and present. However, Lees (1974, p. 15) shows for the year 1968-69 a  $14 \times 10$  matrix listing the nationality of the parent banks and the region of their foreign banking activity along the horizontal and vertical axes, respectively. In this matrix, about 70 per cent of all cells are filled with a total of 2,744 entries. As the U.S. data indicate, since 1969 there has been further rapid growth in the activity.

Multinational banks are attracting the attention of law-makers because in most countries they have escaped the regulation and supervision to which their domestic rivals are subjected and because their activities can be argued to entail negative externalities through absence of requirements to publish adequate information, the lack of deposit insurance and lenders of last resort and their functioning as a conduit for international short-term capital flows which reduce national monetary sovereignty.

The basic analytical question to be answered by a theory of multinational banking is identical to that present in the case of direct foreign investment:<sup>4</sup> What is the source of comparative advantage accruing to a U.S. bank in a place like Singapore, which is in competition with local banks having obvious advantages in their familiarity with local customers, capital markets, employees and the government? Put differently and applied to the special problem of banking, the basic phenomenon to be explained by the theory of multinational banking is why a bank abroad can profitably offer lower lending *and* higher borrowing rates than its domestic competitors and thus attract customers away from them.

The theory of multinational banking to be presented in the next three parts of this paper distinguishes three analytically distinct functions of such banks, which in practice may or may not be undertaken by the same firm. Thus, in succession I analyse the phenomenon of multinational retail, service and wholesale banking. The paper closes with a brief sketch of welfare and policy implications derived from the theoretical analysis.

### I. Multinational Retail Banking

In California, Canadian, British and Japanese banks have opened branches serving local customers by providing the same deposit and

<sup>4</sup> See, for example, CAVES (1971), KINDLEBERGER (1969) and VERNON (1966).

loan facilities as the branches of the Bank of America and other commercial banks. Branches of U.S. and Canadian banks have constituted for many years the only network of commercial banks in the Caribbean and some South American countries.<sup>5</sup> The Chase Manhattan Bank once was in the retail banking business in Great Britain through a chain of "Money Boutiques".

Retail banking by foreign-owned firms is a relatively unimportant phenomenon quantitatively, though it is growing in California. It is declining rapidly in Latin America and the Money Boutiques in London were closed after they had been in operation only a few years.

The theoretical explanation of multinational retail banking is almost identical to that of direct foreign investment in manufacturing advanced by Kindleberger (1969), Vernon (1966) and Caves (1971). These banks use management technology and marketing know-how developed for domestic uses at very low marginal cost abroad. Of special importance is the marketing know-how necessary to penetrate domestic markets in which banks offer slightly differentiated packages of services appealing to chosen groups of customers. The location of branches and advertising are important components of marketing strategies in this field.

The growth of U.S. and Canadian retail banking in Latin America was based on these principles in an extreme form, as the banks entered the countries at early stages of economic development and there was no domestic competition to speak of. The growth of foreign retail banks in California and the episode of those Money Boutiques in London, on the other hand, seems almost purely to be based on the product differentiation principles of oligopolistic markets noted above.

Multinational retail banking in developing countries has diminished sharply as policies motivated by economic nationalism led to restrictive legislation and take-over by nationals. Competitive advantage based purely on product differentiation is rather precarious and can easily be curtailed by innovative responses from the domestic industry, as has happened in Britain where local banks entered previously unserved loan fields and forced the closure of the Money Boutiques. The management technology of banking is relatively stable and modern systems built on the use of computers, which are marketed internationally by specialized firms rather than developed by every

<sup>5</sup> A detailed study of this type of Banking is found in BAUM (1974).

bank individually, so that this source of comparative advantage in multinational retail banking is minor.

As a final motive for multinational retail banking and the other forms of multinational banking discussed below are the benefits from geographic diversification manifesting themselves in more stable earnings. These benefits arise from the less than perfect synchronization of business cycles throughout the world and the absence of price arbitrage on non-tradable factor inputs, such as labor, where costs fluctuate in response to largely local random influences. As Rugman (1976) has shown for the case of banks and a growing literature in international finance explains,<sup>6</sup> these benefits from diversification can be substantial and are prized by wealthholders.

## II. Multinational Service Banking

The rapid growth of direct foreign investment in the world since the end of the second World War is well known and documented. Multinational banking has grown in parallel with this direct investment as the banks tried to meet the demand for banking services of these firms abroad. Bankers describe this move abroad as a defensive measure necessary to assure the continued business with the domestic parents of the foreign subsidiaries. Failure to accompany the subsidiaries abroad would force them to turn to foreign banks or domestic rivals with branches abroad for deposits, loans and other services. Eventually, such growing commercial relationships might expand to where domestic business is taken over by local or foreign banking competitors.

This explanation of motives by bankers can be interpreted in price-theoretic terms. The continuous business carried on between, for example a U.S. bank and U.S. manufacturing firm in the United States, is made highly efficient by the use of informal operations procedures built on trust, which in turn is based on continuous personal contacts and the resultant flow of information vital for decision-making. The continuous commercial contacts between the bank and manufacturing firm permit the bank to have access to information about the firm's financial conditions at such a low cost and high speed that it is in a better position than any other competitor to evaluate and respond to the firm's demand for loans.

<sup>6</sup> One of the earliest empirical studies of this phenomenon is GRUBEL (1968).

The ability to draw on the information and personal contacts between the bank's and manufacturing firm's parents in the United States at very low marginal cost represents the main source of comparative advantage that the bank's foreign branch has in dealing with the firm's subsidiary abroad in competition with the local banks. Failure to use this comparative advantage leads to the development of information capital and personal relationships between foreign-owned manufacturing subsidiaries and local banks which can eventually be used to take away business from the U.S. bank in dealing with the manufacturing firm in the United States and its subsidiaries in other countries. Because of this risk, the move abroad is "defensive".

The preceding analysis of motives for multinational service banking explains the phenomena that all industrial countries' banks have penetrated each others' markets along with their national manufacturing firms. Combined with the fact that U.S. multinational manufacturing firms are the most important source of direct investment, the preceding analysis also explains the relative dominance of U.S. multinational banks. For the same reason, of course, British multinational banking had been dominant in the period before the second World War.

Multinational service banks also do some business with local firms and wealthy individuals by offering them specialized services and information required for trade and capital market dealings with their native countries. These local firms and wealthy individuals often are attracted to the large multinational banks by their prestige and the perceived high liquidity and safety of deposits with these banks. Furthermore, the banks provide convenient opportunities for diversification of portfolios.

Finally, it should be mentioned that multinational service banks do business with tourists and travelling business men. The banking divisions of the American Express Company are best known for their activities in this field. The motive for this type of business and the implicit source of comparative advantage is very similar to that found in connection with service banking for multinational enterprises: The banks can draw on knowledge of tourists' and business men's domestic banking connections and tastes and preferences. Tourists and business men are attracted to multinational service banks because of the greater assurance that their specific needs are known and met and because familiarity with the bank's business methods lowers im-

licit transactions costs for them. The banks' offering of services to tourists and business men tend to be at least in part defensive in connection with the lucrative business of issuing travellers' checks. If it were not possible to cash or obtain new checks from U.S. banks in key tourist centers abroad, their users might turn to and continue to use competitive substitutes provided by foreign banks. The importance of this fact is evidenced by the supply of free tourist services by American Express banks abroad — mail deposits, clean rest-rooms — designed to attract the U.S. tourists.

### III. Multinational Wholesale Banking

Multinational wholesale banking provides an efficient network for international capital flows. It leads to the arbitrage of funds between countries of relatively tight and easy monetary policy, functioning mainly through the institution of the Euro-dollar<sup>7</sup> market and international loan consortia. Individual banks typically carry on simultaneously the service and wholesale banking functions, but because the two functions are based on different motives and have different welfare effects, it is useful to discuss them separately.

An analysis of the Euro-dollar market and the role of multinational banks in it can best be undertaken by focusing on explanations of the following phenomenon introduced above in a slightly different form: Why would residents of France (individuals, French companies, multinational companies) deposit with and borrow dollars from a multinational bank in Paris rather than deposit with and borrow francs from a French bank?

The answer to this question is a truism, but nevertheless important to spell out. French depositors of dollars receive a higher return and French borrowers of dollars pay a lower price than they do by dealing in their domestic currency. In other words, the spread between effective lending and borrowing rates in the Euro-dollar market must be narrower than that in the domestic currency market. This particular description of the phenomenon leads us to the analysis of the following three basic causes of this narrower spread.

<sup>7</sup> Banks deal in currencies other than just dollars, but to keep the exposition simple, only Euro-dollars will be mentioned in this paper. For the most comprehensive analysis of the Euro-dollar market see LITTLE (1975). For the « new view » of Euro-dollar markets see HEWSON (1975).

First, the dollars may have attached to them an intrinsic service of value, which would make it cheaper to borrow and give of a higher real yield even if the nominal borrowing and lending rates on dollar and French francs in Paris were the same. Implicit service values of this sort arise from the dollar's use as the key currency in international trade and finance. For example, firms having export and import dealings denominated in dollars may find themselves with temporary excess supplies or demand for dollars. By lending or borrowing these dollars the firms save transactions costs and eliminate exchange risks.

There are some additional intrinsic benefits from holding and borrowing dollars already mentioned in connection with the multinational service bank functions: portfolio diversification against risk of loss due to interest and exchange rate changes and default and the greater liquidity of dollar assets.

Second, historically most important in the development of the Euro-dollar market and multinational wholesale banking have been government policies resulting in lower costs of operation and permitting multinational banks to operate on narrower spreads between borrowing and lending rates than their domestic counterparts. In this category of policies are the absence of legal minimum reserve requirements on deposits denominated in foreign currencies,<sup>8</sup> and of compulsory deposit insurance.

Since in most countries there are interest payments on minimum reserves and only a small fraction of them serve as a liquidity buffer, minimum reserve requirements constitute an implicit tax on domestic but not Euro-dollar business.<sup>9</sup> Compulsory deposit insurance similarly has a differential impact on the cost of the two types of banking business, though the advantage to multinational banks in operating costs should at least in part be offset by the greater riskiness of deposits with them, suggesting the need for the payment of marginally higher rates on deposits.<sup>10</sup>

Two government regulations favoring multinational wholesale banks in the United States are the prohibition of nationwide branching and of merchant banking activities by regular commercial banks. Since

<sup>8</sup> Germany has a minimum reserve requirement on foreign currency deposits of German banks.

<sup>9</sup> These issues are discussed by TOBIN (1960) and JOHNSON (1976), together with proposals for institutional changes.

<sup>10</sup> Most countries have an upper limit on the size of deposits insured, so that with these kinds of deposits there is no need to pay a compensatory rate.

foreign banks are not covered by this prohibition, they gain a competitive advantage permitting them to operate on narrower profit margins. In many European countries, but especially Britain, banking business with domestic residents is burdened and made more expensive by foreign exchange controls. Euro-currency dealings and business with non-residents is relatively free from such controls and can therefore be operated at lower cost.

Third, multinational wholesale banks have sources of comparative advantage arising from a type of product differentiation they offer. They tend to deal only with large customers and among themselves, thus avoiding the high marginal costs associated with retail banking. In a sense, they act not as banks but primarily as brokers between lenders and borrowers.

The deals with large customers take place through loan consortia and typically are denominated in Euro-dollars. They have as ultimate borrowers and lenders, governments, quasi-governmental agencies and utilities and large multinational corporations. The operation through consortia and dollars enable individual banks to diversify their risks, keep placement costs low and avoid legal limitations on loans to individual customers. The multinational wholesale banking business is very efficient, transmitting large sums of funds around the world from areas with temporary excess liquidity to those with temporary shortages, dealing in large sums per transaction on extremely small margins. The speed and low cost of these transactions is made possible because the banks are well known to each other and for the strength and prestige of their parents, so that they can forego costly credit investigation.

Recent studies of Euro-dollar banks balance sheets in Britain by Hewson (1975) have shown that these banks typically have nearly matched amounts of assets and liabilities in every maturity class.<sup>11</sup> Furthermore, they have adjustable interest rates on both loans and deposits. As a result of these characteristics of their portfolios, these banks do not engage in the maturity transformation typical of normal commercial banks or many other financial intermediaries. They therefore analytically are behaving more like brokers and do not have the liquidity and exchange risks of normal banks. The implication of these facts for our purposes of analysis is that the multi-

<sup>11</sup> This may be a statistical illusion, as is argued by MAYER (1976). Many short-term loans are rolled over almost automatically and for all practical purposes are long term.

national wholesale banks' business is less risky and can be operated on a narrower spread between lending and borrowing rates than that of regular banks whose gross profit margin must cover a larger rate of expected losses.

The preceding analysis implies that the special wholesale type of business in which the multinational banks specialize can as well be taken up by regular domestic banks. In most countries this is indeed the case, but the multinationals as a group have an additional function. They represent the conduit for capital flows among nations by drawing on special knowledge capital. For example, a small French firm in the provinces may have a temporary excess supply of funds which it deposits with its local bank. The provincial bank then may place the funds with one of its correspondent multinational French banks which in turn deposits them with one of the branches of an American multinational bank. Sometimes going through a number of banks in the multinational wholesale market, the excess funds originating in a French province may eventually end up as a loan to a small Japanese borrower dealing with a relatively unknown provincial Japanese bank.

All of the dealings in the chain of lending just described are done quickly and at low cost since in each link of the chain the partners in the transactions know each other very well and are in normal, regular business contact. In a sense, the multinational wholesale banking network represents the equivalent of a global federal funds market, assuring an efficient use of the existing stock of money capital, giving rise to the well-known large quantity of inter-bank deposits and raising the velocity of circulation of money.

#### IV. Welfare Effects of Multinational Banking

The benefits from multinational banking appear in three forms. First, in countries where retail banking by foreign banks is permitted legally, the multinationals constitute an actual or potential source of competition, reducing the power and wastes of the typical national banking oligopolies. Second, the multinational banks are using existing stocks of knowledge capital at very low marginal cost to provide socially valuable services. This type of welfare effect is the same as that brought about by multinational manufacturing enterprises.

Third, the multinational banks increase the efficiency of capital flows, especially through the speed with which capital moves and the types of customers that are served.

The costs of multinational banking can also be considered to take three basic forms. Stated uncritically and in the strongest way possible, they are as follows. First, there are those arising from the discriminatory treatment of multinational and other banks by government regulations, which were designed to eliminate certain perceived externalities. For example, the U.S. prohibitions on merchant banking and nation-wide branching were instituted to prevent the excessive concentration of financial power. Compulsory deposit insurance in many countries was designed to prevent runs on banks. Compulsory membership in a national banking system with minimum reserve requirements, a lender of last resort and disclosure regulations were instituted to reduce the incidence of financial crises to which banking systems used to the subject. By being excluded from these regulations, multinational banks can produce externalities which were considered worth eliminating through the control of domestic banks.

Second, a special type of externalities which national banking systems attempt to eliminate through compulsory minimum reserve requirements and control over the reserve base are those arising from cyclical fluctuations in the money supply, income, employment, prices and the balance of payments. Since foreign currency deposits of domestic and multinational banks in most countries are not subject to minimum reserve requirements, the monetary authorities do not have effective control over the liquidity created by these institutions, especially through the Euro-dollar market.

Multinational banks as conduits of international short-term capital flows have made it more difficult for national monetary authorities to set interest rates or control the quantity of credit and money for optimal national demand management. Multinational banks therefore have contributed to the loss of national monetary sovereignty through both the creation of additional liquidity and the intensification of disturbing capital flows.

Third, multinational banks have caused inflation throughout the world by increasing liquidity through the multiple expansion of deposits in the Euro-dollar market. Furthermore, by the increased efficiency in the use of existing capital, they have raised the global velocity of money and created inflationary pressures in all countries.

## V. Policy Implications of the Analysis

At the simplest level the policy issue surrounding the development of multinational banking is whether it should be brought under the regulations umbrella of national and perhaps an international agency, such that the discriminatory exclusion of multinational banks from national regulation noted above is terminated. Proposed U.S. legislation is aimed at the establishment of neutrality in the effects of regulation on domestic and multinational banks and the enactment of this legislation "...will inevitably have repercussions in other countries and may be used as a precedent for new legislation elsewhere." [Hutton (1975), p. 109]. Without going into details about the legislation, the issues can be sketched briefly.

The arguments in favour of controls are that they would curtail the costs noted in the preceding section without reducing appreciably the benefits. The existence of domestic banking legislation is evidence of the fact that countries wish to have the benefits from the internalization of externalities they were designed to bring about, even if experts are not fully agreed on the net benefits after costs from these policies. Until such agreement is reached among experts and policies are changed for domestic banks, it is sensible to attempt the elimination analogous externalities brought on by multinational banks. The real economic advantages of these banks noted above are strong enough to assure their continued existence even after they have ceased to be the beneficiaries of favourable, discriminatory legislative treatment.

The arguments against any controls on multinational banking are that they yield great benefits in terms of increased capital-market efficiency noted above, while the alleged costs are small or non-existent. The probability of development of concentrated financial power in the United States through nation-wide branch-banking and merchant-banking activities by multinationals is extremely small, since competition among financial intermediaries is so strong that it would be very unlikely that new, foreign-owned banks can make great inroads even with the legislative advantages they now possess.

In the United States, the Euro-dollar business is not important. Recent studies of Euro-dollar markets in the rest of the world have shown that they are unlikely to have resulted in a multiplication of original dollar deposits, primarily because of leakages and the balance-

sheet characteristics noted above. Therefore, they probably have added little to net world liquidity and increased velocity of circulation.

Whatever the ultimate conclusion will be concerning the ability of multinational banks to create money through the Euro-dollar market, even if they could create quite large amounts, their activities do not necessarily cause inflation. Like in the case of technical innovations in domestic money markets which increase the velocity of circulation, central banks can and do adjust their policies to reach assigned demand management objectives. Making correct monetary policy may be more difficult as a result of the exogenous growth of new financial institutions, but it is not made ineffective.<sup>12</sup>

The loss of national monetary sovereignty through international short-term capital flows has been worsened only marginally by the operation of multinational banks. It is quite certain that if they were eliminated, new institutions would quickly take their place. At the same time, the alleged loss of monetary sovereignty discussed so widely during the 1960s and early 70s has been curtailed through the abandonment of the parity exchange rate system and may never have been serious. Recent research has shown that Germany, the most important country that allegedly had lost its sovereignty, in fact had retained effective control over its money base, except during a few isolated episodes of extremely heavy speculative capital inflows. [See Herring and Marston (1977)].

At a most fundamental level, moreover, serious doubts are arising over the benefits of having national monetary sovereignty. During the sixties it was believed that such sovereignty was necessary to reach independently chosen national targets on the inflation-unemployment trade-off curve. Failure to reach these targets was blamed on fixed exchange rates and short-term capital flows. Recent research suggests, however, that this blame for the failure to attain Phillips-curve targets has been due to the basic absence of a longer-run inflation-unemployment trade-off. If this analysis is correct, then the primary argument for increased control over multinational banks as conduits for short-term capital flows has lost its merit.

<sup>12</sup> This appears to have been the conclusion reached by most analysts after the Radcliffe Committee Report in Britain and the book by J. Gurley and E. Shaw in the 1950s in the United States had argued that all financial intermediaries need to be treated in almost the same way as commercial banks in order to retain control over aggregate demand through monetary policy.

While the proposed controls over multinational banks are likely to yield few benefits, they can be expected to result in additional costs and a resultant curtailment of the benefits brought by the multinational banks. The imposition of minimum reserve requirements raises the cost of banking in all countries where no interest or below-market interest rates are paid on these reserves. The tax on multinational banking implicit in such reserve requirements can thus be expected to decrease its size. Compulsory deposit insurance raises important problems of moral hazard,<sup>13</sup> which may be especially serious in the case of multinational banks which typically deal in large deposits. The creation of a lender of last resort specifically for multinational banks will create the opportunity for the abuse of discount facilities, which in national banking systems has complicated monetary control.

Finally, one of the inevitable results of government control of banks appears to be the strengthening of oligopolistic market structures, as regulatory authorities are influenced by the industry and tacit agreements between the authorities and the industry result in restrictions on entry in return for ready compliance.

## VI. Summary and Conclusions

In this paper I have analysed the nature of the activities undertaken by multinational banks in the retail, service and wholesale business. This analysis has provided the price-theoretic background for the presentation of the social benefits created by multinational banks. The welfare costs of these banks' activities were seen to arise primarily from their exclusion from national policies designed to capture externalities from banking generally, but especially those arising from financial instability, inflation and control over the money supply.

The broad sketch of arguments for and against the regulation and control of multinational banking has to be modified to account for the special circumstances of individual countries. Yet, the basic arguments are likely to be the same in all countries. They are clear

<sup>13</sup> For a discussion of these issues see EDWARDS and SCOTT (1977).

in principle, but extremely difficult to evaluate in practice. The case for the control of multinational banks is weakened considerably if in fact Euro-dollar markets do not create liquidity and national monetary sovereignty is irrelevant for the pursuit of independent national unemployment-inflation targets.

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REFERENCES

- ALIBER, R. Z., "International Banking: Growth and Regulation," *Columbia Journal of World Business*, Winter 1975.
- ALIBER, R. Z., "Towards a Theory of International Banking," *Federal Reserve Bank of San Francisco Economic Review*, Spring 1976.
- BAKER, J. C. and M. G. BRADFORD, *American Banks Abroad: Edge Act Companies and Multinational Banking* (New York: Praeger Publishers), 1974.
- BAUM, J. D. *The Banks of Canada in the Commonwealth Caribbean* (New York: Praeger Publishers), 1974.
- BRIMMER, A. F., "Growth of American International Banking: Implications for Public Policy," *Journal of Finance*, May 1975.
- CARSON, D., "Government Policies and the Eurodollar Market," *Columbia Journal of World Business*, Winter 1975.
- CAVES, R. E., "International Corporations: The Industrial Economics of Foreign Investment," *Economica*, 1971.
- DEAN, J. and H. G. GRUBEL, "Regulatory Issues and the Theory of Multinational Banking" in *Issues in Financial Regulation*, F. Edwards, ed. New York: Columbia University Press, forthcoming.
- EDWARDS, F., "Regulation of Foreign Banking in the United States: International Reciprocity and Federal-State Conflicts," *Columbia Transnational Law Review*, 13, 2, 1974.
- EDWARDS, F. and J. ZWICK, "Activities and Regulatory Issues: Foreign Banks in the United States," *Columbia Journal of World Business*, Spring 1975.
- EDWARDS, F. R. and J. SCOTT, "Regulating the Solvency of Depository Institutions: A Perspective for Reform," Columbia University, Graduate School of Business, Discussion Paper, 1977.
- FRANKEL, A. F., "The Lender of Last Resort Facility in the Context of Multinational Banking," *Columbia Journal of World Business*, Winter 1975.
- GANOE C., "Controlling the Foreign Banks in the U. S.," *Euromoney*, June 1975.
- GRUBEL, H. G., "Internationally Diversified Portfolios: Welfare Gains and Capital Flows," *American Economic Review*, December 1968.
- HELLER, H. R., "International Reserves and World Wide Inflation," *IMF Staff Papers*, March 1976.
- HERRING, R. and S. MARSTON, *National Monetary Policies and International Financial Markets*, (Amsterdam: North Holland), 1977.

- HEWSON, J., *Liquidity Creation and Distribution in the Eurocurrency Markets*, (Lexington, Mass.: D. C. Heath and Co.), 1975.
- HUTTON, H. R., "The Regulation of Foreign Banks - A European Viewpoint," *Columbia Journal of World Business*, Winter 1975.
- JOHNSON, H. G., "Reserve Requirements and Monetary Control," Economic Council of Canada, Discussion Paper #66, 1976.
- JOHNSTON, R. A., "Proposals for Federal Control of Foreign Banks," *Federal Reserve Bank of San Francisco Economic Review*, Spring 1976.
- KINDLEBERGER, C. P., *American Business Abroad*, (New Haven, Conn.: Yale University Press), 1969.
- KLOPSTOCK, F., "Foreign Banks in the United States: Scope and Growth of Operations," *Federal Reserve Bank of New York, Monthly Review*, June 1973.
- LEES, F. A., *International Banking and Finance*, (New York: John Wiley and Sons), 1974.
- LEES, F. A., *Foreign Banking and Investment in the United States: Issues and Alternatives*, (London: Macmillan), 1976.
- LITTLE, J. S., *Euro-Dollars: The Money Market Gypsies*, (New York: Harper and Row), 1975.
- MAYER, H., "The BIS Concept of the Net Size of the Euro-Currency Market, and its Relation to the World Money Supply," *Euromoney*, 1976.
- PERKINS, J. H., "The Regulation of Foreign Banking in the United States," *Columbia Journal of World Business*, Winter 1975.
- ROBINSON, S. W. Jr., *Multinational Banking*, (Leiden, A. W. Sijthoff), 1972.
- RUCKDESCHEL, F. B., "Risk in Foreign and Domestic Lending Activities of U. S. Banks," *Columbia Journal of World Business*, Winter 1975.
- RUGMAN, A. M., "Multinational Banks have Stable Earnings," Discussion Paper of University of Winnipeg, Manitoba, 1976.
- TOBIN, J., "Towards Improving the Efficiency of the Monetary Mechanism," *Review of Economics and Statistics*, 42, August, 1960.
- VERNON, R., "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics*, May 1966.
- WELSH, G. M., "The Case for Federal Regulation of Foreign Bank Operations in the United States," *Columbia Journal of World Business*, Winter 1975.