Comparative Advantage in Trade in Financial Services

In the past decade there has been a great increase in interest in trade in services, both in academic and official circles, largely because the comparative advantage of the United States is believed to be shifting towards service trade. But what is almost certainly the fastest growing and possibly the largest component of international trade in services, trade in financial services, has received little attention in this connection. A major reason is that the volume of trade in financial services is difficult to measure. But the very concept of international trade in financial services is elusive and subject to a good deal of confusion. An earlier article has dealt with the problem of measurement (Arndt, 1984). The object of this article is to clarify the concept and to show that the pattern of trade in financial services is as amenable to explanation, in terms of comparative advantage and distortions, as trade in manufactures.*

The concept of trade in financial Services

A country's exports of manufactures consist of that part of its manufacturing industries' output that is sold to non-residents. By analogy, a country's exports of financial services consist of that part of the output of its finance industry, in the form of financial services of all kinds, that is sold to non-residents. Among them are the payment and transfer facilities provided to depositors, including spot and forward facilities in the foreign exchange market, all the services in the long

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chain of intermediation between ultimate lenders and final borrowers rendered by banks and non-bank financial intermediaries, as well as brokerage and advisory services and life and other insurance. These are all non-factor services, as distinct from the factor services provided by capital which generate interest or dividends. Before examining the list more closely, it will help clarify the concept if, to start with, trade in financial services is distinguished from *a)* international capital movements and property income, *b)* direct foreign investment in banks and other financial institutions and *c)* growth of international financial centres.

a) International capital movements and property income. The object of trade theory is to explain the location of industries and the pattern of trade as determined by comparative advantage, not the initial factor endowment of different countries and the way in which this may be modified by international factor movements. The theory of international trade, therefore, is concerned with trade in outputs, not inputs, in other words with trade in goods and non-factor services, not with international movements, or with earnings, of factors of production, labour and capital. It is true that, in a general equilibrium model of economic activity, the distinction between factor and non-factor services loses importance because there is little reason for distinguishing between the labour component of value added (a factor service) and labour services purchased as intermediate products from other firms (non-factor services). One can easily think of borderline cases in trade in services, such as the architect from country A who renders a factor service if he goes to country B as a consultant, but contributes to a non-factor service if he does the same work as employee of a firm in A which sells its consultancy services under a contract with its customer in B. But in the context of international trade theory the distinction is crucial. Thus, in terms of the balance of payments accounts, the theory of international trade concerns itself with activity reflected in receipts and payments on account of exports and imports of goods and non-factor services, not with the capital account or with factor income, such as interest and dividends or migrant labour remittances.

The difficulty in the case of trade in financial services is that for a considerable part of their output of non-factor services banks do not charge customers directly but recoup themselves in the form of factor income, *i.e.* net interest earned (interest received on loans less interest

paid out on deposits); even their receipts from trading margins in foreign exchange business tend, in banking statistics, to be lumped in with their (gross) interest receipts. This difficulty greatly complicates measurement but does not invalidate the commonsense definition of trade in financial services.

b) Direct foreign investment in financial enterprises. What is often referred to as the "internationalisation of banking" covers two distinct though interrelated developments. One is the expansion of international business by a country's banks, that is sale of their services to non-residents. The other is the establishment by a country's banks of branches or subsidiaries abroad, for business with residents or non-residents of the host country. In relation to goods, such as manufactures, the distinction between trade and direct foreign investment (DFI) is familiar and fairly clearcut (though even here there are problems in defining "residents"). The theory of international trade seeks to explain the pattern of trade in terms of the natural comparative advantage of a country's manufacturing industries and in terms of barriers and inducements through government intervention. The theory of DFI seeks to explain why manufacturing companies establish subsidiaries to produce their products in foreign countries rather than export them to these countries.

Conceptually, the distinction is just as relevant to banking as to manufacturing, and it seems desirable to distinguish between a country's comparative advantage in trade in financial services and a bank's motives for going "multinational". In relation to banking, however, the distinction is less familiar and often blurred in the literature, and there are at least two reasons for this.

One is that in banking international trade and investment tend to be complementary rather than, as in the case of manufacturing, alternatives. In principle, given modern telecommunications technology, one could imagine all international banking services being supplied by one or more banks in a single international financial centre, dealing with customers in other countries directly or through purely domestic banks. In practice, quite apart from the diseconomies of such extreme concentration, banks have always felt the need for a more substantial presence than through "corresponding banks" in major foreign markets for their services. Even nineteenth century imperial banks, engaged in trade finance and other traditional international banking from their home bases in London, Amsterdam or Paris, set up overseas branches,

whether to conduct domestic business in the absence of (or in competition with) local banks or for international business, because they felt the need for local contacts and knowledge. In the twentieth century, multinational banking has spread partly for the same reasons as multinational manufacturing, to defend markets against host or third country competition (Grubel, 1983). But in banking, distortions such as those which have given rise to the Eurodollar market and other offshore banking have probably had even more influence on the pattern of trade and DFI than in manufacturing.

The other reason relates back to the problem of measurement. The receipts from exports of financial services and the returns on international investment in financial enterprises are inextricably mixed up in the banks' own accounts and in any national statistics. If it is difficult to estimate the contributions made to British earnings of foreign exchange by exports of financial services by purely British banks trading from London, it is even more awkward for those made by a British bank operating in the Singapore offshore currency market. In principle, the situation in the latter case is exactly analogous to that of a British manufacturing subsidiary in Singapore which contributes to Singapore's export earnings but whose profits constitute an offsetting debit item in Singapore's, and credit item in the British, current account. But since the export earnings, in the case of banking services, themselves largely accrue as interest income, the distinction is harder to maintain.

c) International financial centres. There is a large literature on the growth of international financial centres (*e.g.* Kindleberger, 1974; Reid, 1981). But trade in financial services rarely receives any explicit mention in this literature, even though much of the business of international financial centres consists of such trade and the explanation of the growth of international financial centres is largely to be found in international trade theory. There are a number of reasons for this, apart from the general elusiveness and neglect of the subject.

Some of the interest in international financial centres is in the role of the single world centre, London or New York, as the key or reserve currency centre and lender of last resort of the international monetary system, analogous to the domestic role of the central bank (*e.g.* Kindleberger, 1974, pp. 61ff.). This role clearly has more to do with monetary than with trade theory.

Even when the focus is on the role of international financial centres as providers of financial services, there are differences. Centres are by definition cities, not — with obvious exceptions of city states, such as Hong Kong and Singapore — countries; their external transactions therefore are not necessarily international. In any case, much of the business of the major international financial centres, such as London, New York or Zurich, or even Singapore, is domestic business within the city which does not involve international, or even interregional, trade. More important, all countries have some international trade in financial services, but only a handful have international financial centres.

For all these reasons, the literature on international financial centres cannot be expected to give an adequate account of the nature and determinants of international trade in financial services. But there is enough overlap to make this literature a useful source.

Having decided what international trade in financial services is not, it is time to look more closely at its nature and composition.

Definitions

Our earlier preliminary definition — that a country's exports of financial services consist of that part of the output of its finance industry, in the form of financial services of all kinds, that is sold to non-residents — has several loose ends.

The bulk of financial services consists of services of financial intermediation, lending and borrowing (other than lending by ultimate savers and borrowing by ultimate investors). But international finance also involves the provision of payments and transfer facilities, in the form of drafts, travellers cheques, credit cards, etc., and the sale and purchase of foreign exchange, spot and forward, swap and hedge transactions. A broader definition, therefore, would be trade in paper assets, if this can be taken to include both currency and book entries in bank ledgers (or computers).

This definition clearly includes the international business of security brokers and money market dealers, and of leasing, factoring and other such finance companies. It is more debatable whether one should also include trade in commodity futures or the sale of life and other insurance policies which both combine financial intermediation with distinct risk-cover services. Certainly, many ancillary services provided by banks and other financial enterprises, such as safe deposit, account-

keeping, travel, investment-advisory and other consultancy services, are not financial services in this sense, and such services rendered to non-residents would not properly be part of a country's trade in financial services.

For similar reasons, it is not easy to give a precise definition of financial enterprises, and familar problems attach to the precise definition of "non-residents". Do the international transactions of a country's central bank constitute part of its trade in financial services? What about a bank's transactions with its own representative offices or branches abroad, or with an overseas bank in which it has a 26 or 49 or 51 per cent equity interest? But, except for statistical purposes where these fine points have to be settled somehow, there is no need to split hairs. It seems reasonable to assume that the largest part of international trade in financial services is conducted by banks and consists of financial intermediation business. It is the pattern of this dominant component that one wants to explain. It is also for this dominant component that we can put some figures to the pattern of international trade in financial services.

Statistics

The IMF in its *International Financial Statistics* regularly publishes data on international bank lending under the headings of "cross-border interbank claims" and "cross-border bank credit to nonbanks", both by country of residence of lending bank. Table 1 shows totals outstanding at the end of 1978, 1984 and (where available) 1986 for the major lending countries. Between them, these accounted in 1984 for over 90 per cent of the world total.

At first sight, the twenty countries seem to fall readily into two categories, industrial countries with highly developed financial systems and less developed countries with offshore currency markets or surplus petro-dollars. Closer inspection, however, shows this to be an oversimplification. Table 2, which ranks the twenty countries according to the ratio of total (interbank and nonbank) cross-border bank credit (CBBC) outstandings to domestic money supply (M_1) at the end of 1984, shows that there were five distinguishable categories:

1) Industrial countries with relatively small CBBC (USA, Japan, Germany, Italy, Spain).

TABLE 1

CROSS-BORDER CREDIT BY RESIDENCE OF LENDING BANK

End of period	$-US billion								
	1978			1984			1986		
	Interbank	To Non-Bank Borrowers	Total	Interbank	To Non-Bank Borrowers	Total	Interbank	To Non-Bank Borrowers	Total
United Kingdom	150	68	218	345	145	490	527	188	715
United States	97	33	130	324	119	443	397	110	507
Japan	23	11	34	90	37	127	260	85	345
Belgium-Luxembourg	61	48	109	99	74	173	177	114	291
Switzerland	68	24	92	133	28	161	205	49	254
Cayman Islands	13	6	19	83	60	143	102[a]	72[a]	174[a]
Germany	40	34	74	43	32	75	117	61	178
Singapore	22	7	29	69	36	105	131	41	172
France	69	29	98	94	56	150	n.a.	n.a.	n.a.
Bahamas	70	36	106	108	39	147	114	42	156
Hong Kong	12	8	20	60	19	79	133	23	156
Netherlands	36	11	47	43	15	58	63	28	91
Bahrain	15	6	21	38	18	56	38	14	52
Canada	17	4	21	34	8	42	42	8	50
Saudi Arabia	29	1	30	49	..	49	n.a.	3	n.a.
Italy	n.a.	n.a.	n.a.	34[b]	..	34[b]	n.a.	n.a.	n.a.
Austria	7	7	14	15	15	30	24	25	49
Spain	17	2	19	23	6	29	29	8	37
Panama	7	12	19	9	23	32	10[c]	23[c]	33[c]
United Arab Emirates	3	1	4	12	2	14	14	3	17
Netherlands Antilles	1	2	3	4	4	8	3[c]	3[c]	6[c]
Venezuela	n.a.	n.a.	n.a.	6	..	6	4	..	4
Total (excl. Comecon)	842	356	1,298	1,924	761	2,680	2,895	1,001	3,896

Notes: [a] 1985; [b] 1983; [c] 1986 (II).
Countries with total outstandings of less than $-US 5 billion at end of 1984 have been omitted.
Source: IMF, *International Financial Statistics*.

TABLE 2

RATIO OF CROSS BORDER BANK CREDIT TO MONEY SUPPLY, END OF 1984

< 1		1-5	
Italy	0.23	Canada	1.06
Japan	0.37	France	1.36
USA	0.78	Saudi Arabia	2.11
Germany	0.80	Netherlands	2.42
Spain	0.88	Austria	3.75
5-100		**> 100**	
UAE	5.78	Bahamas	773.4
UK	8.12	Panama	839.9
Belgium-Luxembourg	10.88	Bahrain	875.0
Hong Kong	17.40	Cayman Islands	
Singapore	25.80		
Switzerland	54.89		

Source: IMF, *International Financial Statistics*.

2) Industrial countries with more substantial but moderate CBBC (Canada, France, Netherlands, Austria).

3. Industrial countries (and NICs) with very large CBBC (UK, Belgium-Luxembourg, Switzerland, Singapore, Hong Kong).

4. Booking or reporting centres (Bahamas, Bahrain, Cayman Islands, Panama).

5) Oil exporters with surplus petro-dollars (Saudi Arabia, UAE).

This suggests that, while the countries in the first two categories have been responsible for bank lending abroad more or less in proportion to the relative size of their financial systems, those in the three latter categories have, in one way or another, specialised in international bank lending.

One might suppose that CBBC by countries in the first two categories would be preponderantly to nonbank borrowers and CBBC by countries in the latter three countries interbank credit. This turns out not to be the case, as the figures in Table 3 show. The oil exporters, not surprisingly, lent their petro-dollars almost exclusively to banks. But there were countries in the first two categories with relatively high proportions of interbank lending (Canada, Spain, but also USA and Netherlands) and countries in the third and fourth categories with surprisingly low ones (Belgium-Luxembourg, Singapore, Panama, Cayman Islands).

TABLE 3

RATIO OF INTERBANK TO TOTAL CROSS BORDER BANK CREDIT, END OF 1986

	%		%
Saudi Arabia	100[a]	Bahamas	73.0
Venezuela	100	Bahrain	73.0
Hong Kong	85.3	Netherlands	69.2
Canada	84.0	Germany	65.7
United Arab Emirates	82.4	France	62.7[a]
Switzerland	80.7	Belgium-Luxembourg	60.8
Spain	78.4	Cayman Islands	56.8
United States	78.3	Netherlands Antilles	50.0
Singapore	76.2	Austria	49.0
Japan	75.4	Panama	30.3
United Kingdom	73.7		

Note: [a] 1984.
Source: Table 1.

This is as far as available statistics take us in identifying "revealed comparative advantage" in trade in financial services and, for all the reasons given before, it is not very far.

CBBC outstandings measure assets of lending banks. Even year-to-year changes in these could be accepted as a proxy for the banks' exports of financial intermediation services only if net lending could be assumed to be proportionate to gross lending and if the latter provided a reliable indicator of the value of financial services provided by the lending banks to the foreign borrowers. This would still leave out of account the value of all other financial services provided by banks to non-residents, such as payment and foreign exchange facilities and all the other ancillary services mentioned before, as well as financial services to non-residents by non-bank financial intermediaries, insurance companies, etc. Until, if ever, the problems of measuring all these kinds of trade in financial services can be overcome, the pattern indicated by CBBC is probably as close as we can get towards identifying the major trade flows.

There is yet another complication. Any attempt to explain the pattern of trade in financial services needs to allow not only for the great

variety of such services other than those of financial intermediation services captured by CBBC but also for the fact that international financial intermediation itself covers a range of activities which differ in many respects relevant to different countries' comparative advantage.

Demattè has distinguished five roles and five functions of banks in the chain of international financial intermediation, each requiring specific kinds of expertise and capacities (Demattè, 1981). At the beginning of the chain, banks perform a collecting role, collecting funds from ultimate surplus units almost on a retail scale. At the end of the chain, they perform a final lending role which requires local knowledge of borrowing areas and expertise in credit evaluation. In between, there is the interbank intermediation role which can involve maturity, risk and currency transformation, as well as a "packaging" function (raising funds in certain amounts and placing them in larger or smaller amounts) and a spatial transmission function (funding in one geographical interbank market and lending in another). This classification provides a useful guide to likely determinants of comparative advantage.[1]

Comparative advantage

What determines the pattern of international trade in financial services? In principle, the answer should be found in texbook theory of international trade. The explanations most relevant to financial services will differ from those relevant to textiles, but so will those relevant to cereals and pharmaceuticals. It is, however, important at the outset to emphasise once more that we are concerned with the determinants of trade in financial services, not with those of international capital movements or DFI in banking.

Of course, much of the international business of financial enterprises is connected with international lending and borrowing, so that one would expect important links between the two patterns. But international banks handle purely domestic business in their home and foreign

[1] Demattè also identifies a "transmission" role which, unlike the transmission function incidental to financial intermediation, is undertaken, independently of any intermediation, by financial enterprises acting merely as brokers and a "speculation" role presumably on the assumption that speculation by financial intermediaries is, on balance, stabilising (DEMATTÈ, 1981, p. 98).

countries, and the concentration of international financial centres by no means corresponds to the patterns of international capital flows. Shipping services provide an analogy. Shipping industries naturally grew first, and are still dominant, in countries with large foreign trade requiring shipping services; their large home market has provided a natural base for export of shipping services. But there are countries, such as Greece and Norway, which have specialised in shipping and have developed shipping industries far out of proportion to their own demand; and there are countries, such as Panama and Liberia, which have secured a modest foreign exchange income from the provision of flags of convenience. In finance, Britain, the USA, France and Germany correspond to the first category of maritime nations; Switzerland, Luxembourg, Hong Kong and Singapore to the second; the Bahamas and Cayman Islands to the third.

Manufacturing, as we suggested before, provides the better analogy for the distinction between trade in financial services and multinational banking. Trade in manufactures occurs when a firm in country A sells its products to residents of country B; direct foreign investment occurs when the firm decides instead to produce its product in country B, whether for the domestic market in B or for export. The same holds for financial services. The factors giving a country a comparative advantage in trade in financial services, as explained in the theory of international trade, differ from those which induce and enable individual banks to establish branches or subsidiaries abroad, as explained in the theory of direct foreign investment (Grubel, 1983). But here, too, there are links since the conditions which make a country a major exporter of financial services overlap with those which make it a major source of direct foreign investment by and in financial enterprises.

As in the theory of merchandise trade, it will be useful to divide the discussion of determinants of the pattern of trade in financial services into two parts: first, the basic determinants of comparative advantage in a free competitive market and, secondly, the effects of market power and government intervention; or, as it is sometimes put, "natural" comparative advantage and "distortions".

"Natural" comparative advantage

The standard neo-classical explanation of comparative advantage, the Heckscher-Ohlin explanation in terms of different factor endowments among countries and different factor proportions among products, has little relevance to trade in financial services. The reason why countries with abundant capital have a comparative advantage in trade in financial services is not that the banking industry is capital-intensive. It is true that a comparative advantage in financial intermediation has normally developed where there was an initial concentration of wealth, such as to give rise to a domestic banking system and capital market. In all the major financial-service exporting countries, international banking grew out of domestic banking which, in turn, had developed in rich cities — Florence, Amsterdam, Paris, London, New York, Zurich, Frankfurt (Kindleberger, 1974; Reid, 1981). But the source of comparative advantage was not a cost advantage due to abundance of capital but a large domestic market for financial services and consequent economies of scale and development of specialised skills.

Nor, rather obviously, is the extension of the factor-proportions explanation to natural resource endowment which is so important for a large part of commodity trade (Garnaut-Anderson, 1980) of much use here. But it is not entirely irrelevant. Just as a waterfront is obviously crucial to a country's comparative advantage in shipping, so location can be significant for comparative advantage in trade in financial services. Proximity is important at the retail ends of the chain of services. Proximity is important at the retail ends of the chain of financial intermediation, both in fund-collecting and in ultimate lending (Johnson, 1976; Demattè, 1981); and Singapore's offshore currency market owes its existence in part to Singapore's time-zone advantage, the fact that its business hours overlap with those on the US West Coast and Tokyo and for an hour or two with London (Hewson, 1982).

But this is something of a *curiosum*. Much more important for a country's comparative advantage in trade in financial services is its endowment with man-made conditions and resources favourable or necessary to efficient performance of financial services. Among the conditions are political stability, including peace and effective law enforcement, economic stability and a good infrastructure of complementary services. Paris is said to have lost its pre-eminence as a financial centre to London when France suspended specie payment during the 1870/1 war (Kindleberger, 1974, p. 61); and the Philippines' efforts to develop an offshore currency market in the 1970s failed, and Hong Kong lost some of its comparative advantage in the 1980s, partly because of political uncertainties. Among aspects of economic stability sometimes mentioned as relevant to comparative advantage in international financial intermediation is exchange rate stability (Johnson, 1976, p. 2; Reid, 1981, p. 5; Kindleberger, 1974, p. 7), but this is debatable. Important elements of a good infrastructure of complementary services are, most obviously, telecommunications, but also accounting and specialised legal services. Hong Kong had an advantage over Singapore in developing loan syndication because it had the requisite legal skills (Lee, 1986, p. 216).

But however much the Heckscher-Ohlin factor-proportions explanation is stretched, it clearly cannot adequately account for comparative advantage in trade in financial services, any more than in intra-industry trade in manufactures, and for similar reasons (Grubel-Lloyd, 1975; Giersch, 1979). As Corden has pointed out, it makes little sense to say that "Switzerland has a comparative advantage in watches because she is watchmaker-intensive... Factor proportions theory refers to factors of production that are generally available to be used in the production of many different products and are (allowing for adjustment lags) available to be used in the production of many different products. It does not apply to factors specific to one activity" (Corden, 1979, pp. 5, 8).

As in the case of intra-industry trade in manufactures, the main explanation of "natural" comparative advantage in trade in financial services has to be sought elsewhere, chiefly in economies of scale combined with product differentiation (Grubel-Lloyd, 1975; Corden, 1979). In banking, the major sources of immense economies of scale are the possibility of clearing of debits and credits, and of centralised decision-making through modern telecommunications technology. Another contributing factor is the fact that international trade in financial services is largely wholesale trade (Demattè, 1981, p. 95). In addition, it reaps economies of scale from a large domestic market, *i.e.* demand by residents for banking and other financial services. Specialisation, whether or not based on product differentiation, yields further scale economies and promotes the development of a wide range of specialised skills.

Economies of scale may be offset by countervailing factors. Local knowledge is essential at the final lending end of the intermediation chain and will usually favour DFI (the establishment of local branches of foreign banks) rather than trade in financial services. For somewhat

similar reasons, there may be diseconomies of centralisation in international banking, and advances in telecommunications technology may be reducing economies of scale in some respects (Kindleberger, 1974, p. 54; Reid, 1981, p. 2).

Individual banks and other financial enterprises may achieve competitive superiority through links with trading and manufacturing companies, through the provision of ancillary (payment, travel, advisory) services and through goodwill based on reputation for soundness and efficiency and on skilful marketing. If these qualities characterise the average, or leading, financial enterprises of a country, they will collectively give the country a comparative advantage in trade in financial services.

Whether product cycle theory (Vernon, 1966) is also relevant to trade in financial services is perhaps more doubtful. Innovations in financial service techniques and instruments have revolutionised international trade in financial services in recent times, but few if any are patentable. Comparative advantage based on temporary technological superiority must therefore be rare in this field.

"Distortions"

So far we have assumed a free competitive market (already somewhat qualified by references to product differentiation and patents). In the real world, the pattern of international trade, in financial services as in merchandise trade, is modified or "distorted" by private market power and government intervention. It is not easy to think of examples of open resort to private market power, in the form of cartels or restrictions on entry, in international finance. It is a highly competitive, though oligopolistic-competitive, industry. But banks are powerful and are therefore often able to invoke the help of government to protect their interests. Governments, moreover, have their own motives for intervention. Private market power is therefore a much less important influence on the pattern of trade in financial services than government intervention. Such intervention can be classified under two headings, barriers to trade and inducements to trade. Since DFI is often an alternative to trade in financial services, and both are often complementary, the distinction between government intervention, whether barriers or inducements, aimed at the one or the other is not always clearcut.

Barriers to Trade. Barriers to trade in financial services, as to trade in manufactures, are mainly protectionist in intent; but some of the protection is of a special kind.

There is, first, straightforward protection of the domestic banking industry from foreign competition. This can take the form of partial or complete prohibition of entry of foreign banks into domestic banking or into the foreign exchange market (as until recently in Australia) or into domestic banking outside the national capital (as still in Indonesia). The instruments of intervention may be licensing (equivalent to QRs) or discriminatory taxation (equivalent to tariffs). There is, secondly, protection of the national monetary authorities (or, in their view, of the national interest) from external shocks or other undesirable market developments. Examples are the use of foreign exchange controls to insulate domestic money supply and the exchange rate from volatile international capital movements or to support an overvalued currency by restrictions on capital outflow, and the often unintended effects on international trade in financial services of domestic monetary and banking policies.

The effects of such intervention on international trade in financial services may be to inhibit, to distort or even to stimulate it. Protection of domestic banks from foreign competition undoubtedly limits direct foreign investment in banking; whether it necessarily reduces the volume of international trade in financial services (*i.e.* the sale of such services to non-residents by domestic or foreign financial intermediaries) is perhaps more doubtful. The use of exchange control to prevent destabilising short-term international capital movements has generally met with limited success, being easily undermined or evaded by "leads and lags" and other devices. The effect of the emergence of grey or black markets is to distort the pattern of trade in financial services, rather than to reduce its volume. In the years preceding deregulation in Australia, the Australian trading banks were not permitted to hold foreign currency, beyond minimum working balances (so they established overseas branches which were able to participate in loan syndication); foreign banks were excluded from domestic banking business in Australia (so they established merchant bank subsidiaries which were able to do everything except to accept deposits) and from the spot and forward foreign exchange market (so, through merchant bank subsidiaries, they promoted the Australian hedge market).

More significant for the growth and pattern of international trade in financial services in recent times than either of these two kinds of

deliberately restrictive intervention have been the unintended consequences of domestic monetary policy measures. The most striking example, of course, is the emergence of the Eurodollar market in the late 1950s because British banks were prohibited from lending sterling abroad (so they began to lend dollars) and because the US banks were subjected to restraints on lending abroad and to interest ceilings at home (so they set up branches in London which were free from both restraints).[2] But these are only specific instances of what McKinnon has called the more general phenomenon of "regulatory imbalance" whereby domestic lending by banks is constrained through reserve requirements and other instruments of domestic monetary policy which do not apply to foreign operations (McKinnon, 1984; also Grubel, 1983). The result has been a wholly unintended enormous increase in the volume of international trade in financial services, as well as major changes in the geographic and institutional pattern of this trade, with a much larger role for banks in long-term capital flows than in earlier times (McKinnon, 1984; Arndt-Drake, 1985).

Inducements to trade. Governments have also in some cases offered special inducements to both trade and investment in financial services. The usual method to attract foreign banks, as in the case of other direct foreign investment, has been the use of special tax concessions and exemption from controls, such as reserve requirements, applicable to domestic banks. Examples have been the efforts of many governments in small countries to foster an offshore currency market, whether as in the case of Singapore to strengthen an already considerable comparative advantage in this field (Hewson, 1982) or to conjure a tax-haven industry into existence, as in various West Indies and Pacific island booking centres. Other countries — Luxembourg and Hong Kong are outstanding examples — have successfully promoted a vigorous export-oriented finance industry by creating a congenial environment in the form of "liberal banking laws" (Johnson, 1976, p. 262).

[2] KINDLEBERGER (1974, p. 58) mentions that British foreign lending at short-term was stimulated by the usury laws of 1571.

Conclusion

The purpose of this and the preceding paper on trade in financial services has not been to make policy recommendations. It has been to carve a small niche in positive economics for an important but hitherto neglected component of world trade, both in balance of payments statistics and in trade theory.

As regards trade theory, it appears that the theory developed to explain the pattern of trade in terms of natural comparative advantage is as applicable to trade in financial services as to trade in goods. But because distortions of trade in financial services are frequently by-products of policies with other objectives, such as domestic monetary policy, trade in financial services, unlike trade in goods, is not necessarily reduced by such distortions but often merely diverted or even expanded.

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