Measuring Trade in Financial Services

There has always been trade in financial services.[1] Bankers have provided financial intermediation, foreign exchange market and other financial services across national boundaries. But the importance of such trade has increased greatly in the past two decades with the internationalisation of banking and the growth of international financial centres as the bases for offshore currency markets and other activities linking national capital markets. The question naturally arises how to measure the value and growth of this trade in financial services. The issues involved in this question are closely related to the difficulties that have been encountered in the treatment of financial enterprises in social accounts for national economies. It is best approached by going back to these issues.

Financial Services in Closed Economies

The crux of the problem was clearly explained in the 1947 memorandum by Richard Stone which laid the foundations for the original United Nations system of national accounts. "If we treated banks (and other financial intermediaries) like ordinary businesses, we should show as their sales proceeds simply their charges to customers and, as a consequence, a deficit rather than a surplus would appear on the other side of the operating account. In practice, this deficit would be so large that the property income generated in banking and even perhaps the whole income generated in banking would appear to be negative. This is clearly unsatisfactory".[2]

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[1] This paper deals with financial services other than insurance.

[2] *Measurement of National Income and the Construction of Social Accounts*, "Appendix: Definition and Measurement of the National Income and Related Totals" by RICHARD STONE, United Nations, Geneva, 1947 (hereafter cited as "Stone Memorandum"), p. 40.

The solutions to this conundrum which have been adopted by social accountants fall into three classes corresponding to the three main functions of banks, the creation of money, the provision of a payments mechanism and related services, and financial intermediation; or, in the words of an early contributor to the debate, "loan services, clearance or transfer of circulating medium services, and the creation and maintenance of circulating medium".[3] Those who have put the emphasis on the creation of money function have regarded the services of banks as being provided to the community at large and have treated them, by analogy with government services, as final products and thus as contributing to gross domestic product (GDP). Those who have emphasised the payments mechanism function have regarded the services of banks as being rendered primarily to depositors and have divided them into those rendered to households, considered as final products and therefore included in GDP, and those rendered to enterprises, considered as intermediate products and therefore excluded from GDP. Those, finally, who have focused on the intermediation function have viewed bank services as being rendered mainly to borrowers and have therefore treated them wholly as intermediate products used as inputs by enterprises (except sometimes for those associated with consumer loans, considered as a service to households).[4]

Services to the Community. The first approach has not been widely used. But it was proposed in Australia by H.P. Brown and was employed in the Australian national accounts from 1947 until 1972.[5]

[3] CLARK WARBURTON, "Financial Intermediaries" in National Bureau of Economic Research, *Studies in Income and Wealth*, vol. 22, Princeton University Press, 1958, p. 511.

[4] There have also been suggestions for dealing with the problem by doing away with the distinction between factor and non-factor services. Industrial economists using an input-output approach to the study of the service sector tend to treat all non-factor service incomes as though they were factor incomes (e.g. Bureau of Industry Economics, *Features of the Australian Service Sector*, AGPS, Canberra, 1980), while there has also been a proposal, on the contrary, to treat all interest as a non-factor service income (P.T. SUNGA, "An Alternative to the Current Treatment of Interest as Transfer in the United States and Canadian System of National Accounts", IARIW 18th General Conference, Luxembourg, August 1983). This would seem to be a case of throwing out the baby with the bath water. The distinction between output of enterprises (consisting of goods or services) and the services of factors of production which constitute the ultimate inputs of such enterprises, even though it breaks down in marginal cases, seems of sufficient importance not to be lightly jettisoned.

[5] See H.P. BROWN, "Some Aspects of Social Accounting - Interest and Banks", *Economic Record*, August 1949; also B.D. HAIG, "The Treatment of Banks in the Social Accounts", *Economic Record*, December 1973 and comment by A.W. ROCHE and reply by B.D. HAIG, *Economic Record*, March 1975.

Brown argued that the function of banks was essentially similar to a major function of government, "oiling the wheels of industry and the community generally".[6] He therefore proposed that "as for governments, the contribution of banks to the national income is equal to the wages and salaries paid by banks".[7] In effect, though not in rationale, Brown's approach was similar to the "aggregation of individuals" approach originally proposed by Kuznets and used by the US Department of Commerce until 1947, except that Brown excluded bank profits on the ground that they were merely a channel through which surplus of trading enterprises was passed on to shareholder-depositors, so that their inclusion would have involved double counting.[8] The crucial feature of both versions was that the output of banks, valued at factor incomes (including or excluding profits) in banking, was included in national income without any deductions in other parts of the economy. In treating the whole output of financial enterprises as final products, this approach certainly involved double counting (though not more so than in the case of government services) and has therefore been generally discarded.

Services to Depositors. The second approach was first worked out in the US Department of Commerce and then adopted in the first United Nations system of national accounts on the recommendation of a committee chaired by Richard Stone. Its rationale was explained by Stone as follows: "Financial enterprises require special treatment in view of the different functions they perform and the method they adopt in charging for services. Consider commercial banks as a typical example. On the one hand, they provide services to their customers in the form of keeping their accounts for them and providing advice on various financial matters. For this they make a charge which, in many cases, is inadequate. On the other hand, they lend the money deposited with them, whether as a result of their own activities or not, and from this receive a net return large enough to enable them to subsidise the other aspect of their business".[9]

To overcome this difficulty, he proposed the following procedure: "An income is imputed to bank depositors for the use of their money

[6] H.P. Brown, cited B.D. HAIG, *Economic Record*, December 1973, p. 625.

[7] *Ibid.*

[8] *Ibid.*, p. 626. For references to earlier literature on the subject, see R.E. SPEAGLE & L. SILVERMAN, "The Banking Income Dilemma", *Review of Economics & Statistics*, vol. 35, 1953, pp. 139.

[9] "Stone Memorandum", p. 40.

equal to the excess of interest and dividends received by banks over interest paid out and this income is assumed to be used in 'paying' for uncharged banking services. In the case of persons, this imputed income and outlay appears on either side of the revenue account of persons, but, in the case of enterprises of all kinds, the imputed outlay is charged to operating account, thus diminishing the surplus of the enterprise, while the imputed income is credited to the appropriation account, thus restricting the effects of the adjustment to the operating surplus alone... The allocation of the total amount imputed between persons and businesses can only be based on knowledge of the bank expenses incurred in respect of, but not charged to, these two types of depositor".[10] In effect, depositors were regarded as receiving, in return for depositing their money with banks, an income in kind in the form of payments mechanism and other services, in much the same way as factory workers may receive, in addition to their cash wages, free canteen meals.

When this approach was adopted by the US Department of Commerce the allocation of the imputed bank service charge between households and enterprises, and thus between final and intermediate products, was based on deposit ownership.[11] When the same approach was adopted in the first UN system of national accounts (SNA), the same procedure was recommended, though the difficulty of inadequate statistics of deposit ownership in many countries was acknowledged. "The contribution of banks, etc. to gross domestic product is here evaluated by imputing to depositors a service charge equal to the excess of investment income accruing to these institutions and by imputing at the same time a corresponding amount of income to depositors. Thus these imputations do not change the income of banks or of other enterprises, but they result in a change in the industrial classification of domestic product (from other enterprises to banks) in so far as the imputation is made in respect of business deposits, and in an increase in the domestic product to the extent that the imputation is made in respect of the deposits of households, etc. The main problem in applying this rule is of a statistical character, but the total amount involved in most countries is small" and inaccuracies hardly serious.[12]

[10] *Ibid.*, p. 41.

[11] U.S. DEPARTMENT OF COMMERCE, *National Income 1951 Edition*, cited R.E. SPEAGLE & L. SILVERMAN, *op. cit.*, p. 130.

[12] *A System of National Accounts and Supporting Tables*, UNITED NATIONS, New York, 1953, [ST/STAT/SER F./No. 2], p. 32.

In the following years, the second approach came under heavy criticism, chiefly on the ground that it misconceived the functions of banks. One exposition of this view criticised the Department of Commerce interpretation of the banking function as "primarily a matter of keeping accounts for depositors, including the mechanical operation of monetary transfers... As far as these lending institutions are concerned, lending and investing functions are performed free of charge to borrowers. The creation of purchasing power through the lending process is passed over."[13] In the view of these critics, "the chief business of commercial banks... consists of two things: the expert management and investment of funds belonging to the banks' owners and creditors and, of equal importance under a fractional reserve system, the simultaneous creation of money." Since the capacity of banks to provide credit depends on their ability to maintain the convertibility of deposits, even "the expense of an elaborate clearing machinery set up expressly to keep deposit money freely convertible" should be regarded as part, indeed "a major part of lending costs".[14]

Apart from its complexity and its neglect of bank services to borrowers, the Department of Commerce (and old SNA) approach was criticised also on the ground that ownership of deposits was a very inadequate guide to the relative costs of services provided by banks to household and business depositors, if only because of economies of scale.[15]

Services to Borrowers. The third view, that bank services should be regarded as rendered primarily to borrowers rather than to depositors, because the primary function of banks is financial intermediation, prevailed in the 1960s. In 1968 it was incorporated in a revised UN system of national accounts. "The imputed service charge is to be treated as intermediate consumption of industries for a number of reasons" of which the first was that "a key service performed by banks and similar institutions is to channel the savings of other economic agents into loans to industries".[16] Or, as it was put by the Australian government stati-

[13] R.E. SPEAGLE & L. SILVERMAN, *op. cit.*, pp. 131f.

[14] *Ibid.*, p. 131.

[15] G. JASZI, "The Conceptual Basis of the Accounts: A Re-Examination" in NBER, *op. cit.*, p. 63.

[16] *A System of National Accounts (Rev. 3)*, UNITED NATIONS, New York, 1968. Other reasons given for the change were the statistical difficulty of allocating the imputed service charge among industries and the advantage that under the new system, unlike the old, "the value of gross domestic product... is not inflated by assigning part of the service charge to final consumption expenditure" (*ibid.* p. 97). For reasons which are not clear, it was also argued that, in principle, the imputed bank service charge should be equated to net investment income of banks arising from loans and other investments "made from the deposits they hold" but not "from their own funds" (*ibid.*).

stician who changed over to the new SNA procedure in 1973, the imputed bank service charge "measures the expenses associated with organising borrowing and lending".[17]

The Australian explanation gives a clear account of the mechanics of this approach. "Interest received is viewed as consisting of a pure interest component and a service charge for organising the funds. It is not practicable to allocate all the service charge to customers [i.e. among borrowers by industry]. The part relating to consumer loans (including hire-purchase) is treated as being paid by the customer and included in private consumption expenditure. The remainder, termed the imputed bank service charge, is not allocated to customers but treated as being paid by a 'nominal industry' which accordingly has a negative operating surplus of this amount".[18]

Thus, whereas on the second approach the output of banks (other than services explicitly charged for) is divided between final products (included in GDP) and intermediate products (excluded from GDP) in proportion to household and business ownership of deposits, on this third approach, most of the output of banks (and other financial intermediaries) is treated as consisting of intermediate products which enter into the costs of enterprises and are therefore excluded from GDP, the only exceptions being services to household depositors for which banks make explicit charges and services to household borrowers for which banks receive interest on consumer loans.

The Primacy of the Financial Intermediation Function. Two surprising facts stand out from this summary history of the treatment of financial enterprises in national accounts. One is that each school of thought focused on only one of the three major functions of banks, *either* services rendered to the community at large, such as the creation of money, *or* services to depositors, such as keeping accounts and providing payments facilities, *or* services to borrowers, such as financial intermediation. It would seem obvious that banks perform all three functions and, more particularly, provide services to both depositors and borrowers. Ideally, therefore, one would look for an allocation of the imputed bank service charge between these two main categories of bank customers and then, within each category, between services which

[17] *Australian National Accounts: Concepts, Sources and Methods*, AUSTRALIAN BUREAU OF STATISTICS, Canberra, p. 108.

[18] *Ibid.*, p. 109.

meet final demand and thus contribute to GDP, such as those rendered to households, and those which enter into the costs of production of enterprises (and government) and should therefore be excluded from GDP as intermediate products. If this makes unmanageable demands on statistical services, it becomes a question of which simplification is conceptually to be preferred.

The old SNA approach of treating bank services as being rendered to depositors, although usually explained by reference to the payments mechanism functions of banks (keeping accounts, cheque facilities, clearing machinery, etc.) had its original rationale in the old-fashioned notion that banks merely lend out money they have borrowed from depositors. The services rendered by banks to depositors were therefore viewed as "financed from interest received to the account of depositors but retained by the banks rather than actually credited or remitted to their customers",[19] and when an income equal to the banks' net investment income was imputed to depositors to enable them to pay the imputed bank service charge it was "for the use of *their* money".[20]

The most obvious reason why this rationale of the net investment income of banks is difficult to accept is that it is applied in the national accounts equally to banks *and other financial enterprises*, yet non-bank financial intermediaries have a net investment income without rendering any payments mechanism services to demand depositors. Clearly, at the very least, not *all* net investment of income of banks represents payment for services rendered to depositors. The rationale of the old SNA derived what plausibility it had from too exclusive concentration on deposit banks.

There is of course a difference between deposit banks and non-bank financial intermediaries (NFI) in that the former secure a large part of their deposits interest free, and thus pay a lower average rate of interest on their deposits, and instead attract demand deposits by the provision of cheque and other facilities. To this extent, deposit banks must, *cet. par.*, be assumed to have a larger net investment income per dollar of funds employed, balanced by larger administrative costs, than NFI. It is reasonable to assume that deposit banks, as profit-maximising firms, have provided services to demand depositors to the extent they have judged necessary to attract demand deposits, not least in competition with one another. Thus, there is a case for treating

[19] R.E. SPEAGLE & L. SILVERMAN, *op. cit.*, p. 130.

[20] "Stone Memorandum", p. 41; italics supplied.

some part of the cost of bank administration as a payment to demand depositors in lieu of interest.

However, there has been a marked tendency in recent years for deposit banks to charge explicitly for an increasing proportion of the services rendered to depositors, such as keeping accounts, providing cheque facilities, making transfers, etc., without any evident shift of depositors' funds to time deposits or currency holdings or any decline in the banks' net investment income. It is not unlikely that the payments mechanism facilities provided by banks are so valuable to demand depositors that they would be willing to pay for them in full in explicit charges. While there might be some drift of funds from demand deposits to time deposits or currency, it would probably be slight and temporary, at least in countries in which the cheque habit is well established. In that case, the rationale for an imputed bank service charge *to depositors* would disappear, yet the banks' net investment income would not diminish significantly.

The conclusion to which this argument points is that all of the net investment income of NFI and a large and increasing proportion of the net investment income of deposit banks is appropriately regarded as payment for financial intermediation rather than for payments mechanism services, in other words, for services to borrowers rather than to depositors. Since the bulk of bank credit is to enterprises rather than to households, the argument supports the new rather than the old SNA treatment of financial enterprises. There remains, however, the second surprising feature of the traditional social accounting treatment of financial enterprises. This is the assumption of a closed economy.

The Closed Economy Assumption. The assumption was made quite explicitly by Stone in his 1947 memorandum. "This example relates to a closed economy with no public authorities".[21] Others as best mentioned in passing "deposits held by governmental bodies, foreigners and individuals".[22] Generally, in all the discussions of the treatment of financial enterprises in national accounts, the assumption was implicit – international aspects of the problem were simply ignored. Yet, there is here a major difference between a closed and an open economy. For the conclusion of the preceding argument, that most services of banks and other financial intermediaries are rendered to business enterprises and

[21] *Ibid.*, p. 89. Public authorities which have also been neglected should, of course, be treated like enterprises; banking services rended to them are intermediate products.

[22] R.E. SPEAGLE & L. SILVERMAN, *op. cit.*, p. 130.

must *therefore* be treated as intermediate products, while valid for the closed economy, is clearly invalid for an open one. Services rendered to non-residents represent final products, whether the customers are business enterprises or not. They are in this respect on a par with services rendered to domestic households. The consequence is that the new SNA treatment understates GNP to the extent that financial services are exported.

This defect has not mattered very much for countries with very large finance sectors only a small proportion of whose business has been with the rest of the world, and the same still applies to the majority of countries in varying degree. But with increasing internationalisation of banking the error has become significant for a good many countries, and for some it has become very large indeed. And it is of course central to the measurement of trade in financial services, the subject of this paper.

Before examining possible ways of handling this problem, it is worth noting that the assumption of a closed economy has also led to complete neglect of another function of banks which, in countries like Australia, has provided a considerable part of bank profits. This is their role as dealers in foreign exchange. The income which banks derive from the provision of spot (and in some countries forward) exchange market services is distinct both from explicit charges and from the net investment income which finances the imputed bank service charge. It consists of trading margins (spreads between buying and selling rates) analogous to the income of shopkeepers and other traders. But, partly because much foreign exchange business takes the form of discounting usance bills where the foreign exchange trading margin enters into the discount rate, the banks' receipts from foreign exchange trading margins are not usually itemised separately in statistics for financial enterprises but included in their net investment income.

Trade in Financial Services

Table 1 shows, for all countries for which the data are available in the UN *Yearbook of National Accounts Statistics*, the imputed bank service charge as a percentage of GDP in 1970 and 1979. In 1970 the (unweighted) average percentage for the developed countries was 2.5

TABLE 1

IMPUTED BANK SERVICE CHARGE AS PERCENT OF GDP, 1970, 1979

%

	1970	1979
I.		
Australia	2.2	2.5
Austria	3.1	4.6
Belgium	0.9	1.5
Canada	0.7	0.7
Finland	1.5	2.2
France	2.8	3.5
Germany, F.R.	2.3	3.3
Italy	2.8	4.1
Japan	4.4	4.3
Luxembourg	4.6	26.7 [af]
Netherlands	2.1	3.5
UK	2.8	4.1
USA	2.2	2.5
average (unweighted)	*2.5*	*4.8*
		3.1 [d]
II.		
Ghana	1.2	1.7 [a]
Ivory Coast	1.2	2.0 [b]
Kenya	1.8	1.9
Malaysia	1.1 [c]	1.2 [a]
Mexico	1.1	1.1
Saudi Arabia	0.2	1.0 [b]
Singapore	1.9	4.3
Sri Lanka	0.3	0.3
Venezuela	2.1	6.8
average (unweighted)	*1.2*	*2.3*
		1.7 [e]

a 1977.
b 1978.
c 1972.
d Excluding Luxembourg.
e Excluding Venezuela.
f Since 1977, on revised definition, excluding exports of financial services (see text), 1977: 12.4; 1979: 8.0 (*Comptes Nationaux 1960-1980*, Luxembourg, September 1982).

Source: UN Yearbook of National Accounts Statistics 1980.

and for less developed countries 1.2. By 1979 it had risen to 3.1 for developed countries (excluding Luxembourg) and to 1.7 per cent for less developed countries (excluding Venezuela). Most striking, however, are the figures for Luxembourg and, to a less extent, for Venezuela and Singapore. For Luxembourg, the percentage, already 4.6 in 1970, had by 1977 risen to 26.7 per cent. In other words, close to a quarter of the country's GDP was omitted because of the treatment of financial services as intermediate products. In the case of Singapore, the rise was from 1.9 to 4.3 per cent in 1977; by 1981, it had reached 6.8 per cent.[23] Unfortunately, no such data are available for the pre-eminent international financial centres, Switzerland and Hong Kong. But it is worth noting that Austria, the United Kingdom and (rather surprisingly) Italy and Japan have relatively high percentages. It would be interesting to know how far these are accounted for by international financial business.

The inappropriateness of the SNA treatment of financial enterprises for countries with large international financial business has been raised for discussion in OECD and other fora by the government statistical service of Luxembourg.

Luxembourg. In a memorandum presented to an OECD conference in May 1982, the government statistical service of Luxembourg argued that the SNA treatment of financial services "is not well suited for analysing the activities of an international financial sector, whose banks export their services and so produce a 'final' output".[24] "The growing contribution of the banking sector to the economy of Luxembourg, and to economic progress in general, could not be brought out by GDP statistics compiled according to the rules of the ESA [the European version of the SNA], since the effect of these rules was to conceal the contribution from the banking sector. We were in the paradoxical position that the most prosperous branch of the economy appeared to have no effect on the structure of production".[25]

The solution adopted in Luxembourg "consisted in making a distinction between those banking services provided to residents and

[23] *Economic Survey of Singapore 1981*, Singapore, 1982, Table 1.2.
[24] "Imputed Bank Services", Note prepared by the Central Office of Statistics and Economic Studies of the Grand Duchy of Luxembourg (mimeo), OECD, Paris, May 1982, p. 7; French version printed in *Comptes Nationaux 1960-1980*, MINISTÈRE DE L'ECONOMIE, STATEC, Luxembourg, September 1982.
[25] *Ibid.*, p. 8.

those provided to foreigners, these latter being estimated on the basis of the percentage of [banks'] liabilities towards non-residents to total liabilities".[26] The memorandum added that "recently, other countries which find themselves in a similar situation (Singapore, Bahrein, Kuwait) have proposed that the accounting system of the United Nations... should be revised regarding the treatment of banks".[27]

The memorandum does not give reasons for the decision to allocate bank services between those rendered to residents and non-residents, or in effect between exports and production for the home market, on the basis of deposit ownership. Ideally, the allocation, as Stone pointed out in his 1947 memorandum, "can only be based on knowledge of the bank expenses incurred in respect of... these two types of" customers.[28] It seems most unlikely that the share of non-residents in the business of Luxembourg financial enterprises is correctly measured by their share in the deposits (or even total liabilities) of Luxembourg banks. If the procedure has been adopted simply on the precedent of the US Department of Commerce practice, it is even less appropriate in relation to exports of banking services than we have shown it to be in a closed economy. For in international banking business, the financial intermediation function clearly predominates over the payments mechanism function even more than in domestic banking, if only because so much of it is inter-bank business. The real explanation for the Luxembourg procedure is probably the pragmatic one that no better statistical data for distinguishing between export and home-market business of Luxembourg banks are available.

The Luxembourg memorandum also points out that the decision to include a part of the imputed bank service charge in GDP as exports of bank services requires consequential adjustments in the social accounts.[29] Three adjustments are necessary. First, in the balance of payments accounts, there has to be a transfer from factor service to non-factor service receipts (which, of course, leaves the balance on current account unaffected). Secondly, in the sector accounts for financial enterprises, there has to be a transfer from interest received to operating surplus (the increase in the latter taking the form of a reduction in the imputed bank service charge by the amount treated as receipts from exports of bank services). Thirdly, net property income received from abroad (which is added to GDP to give GNP) includes the banks' net investment income from abroad, part of which is now to be treated as receipts from export of non-factor services; if it is thought desirable to retain the whole of the banks' investment income from abroad in the total of the country's net property income received from abroad, a negative adjustment is necessary. All these adjustments are required in order to avoid an apparent increase in domestic savings as a result of the inclusion of exports of banking services in GDP. Corresponding adjustments would be needed if bank services rendered to domestic households were also treated as meeting final, not intermediate, demand.

[26] *Ibid.*; the English version refers to "assets", the French to "*engagements*".
[27] *Ibid.*
[28] "Stone Memorandum", p. 41.
[29] *Op. cit.*, p. 11.

Singapore. In international financial centres, such as Singapore, where banks and merchant banks operating in the offshore currency market as Asian Currency Units (ACUs) are required to keep separate accounts, the measurement of exports of financial services may be easier. Although ACUs provide some financial intermediation services to resident Singapore borrowers, the great bulk of their business is with non-residents. Conversely, the bulk of the business of Singapore banks, whether locally or foreign owned, is with residents. As a first approximation, therefore, it may be legitimate to equate Singapore's exports of financial services with explicit charges by Singapore financial enterprises to non-resident *plus* the net investment income of its ACUs. The latter amount (including profit from foreign exchange trading) has been estimated at about $ US 196-233 million (or 1.1-1.3 per cent of GDP) in 1979.[30] This may be compared with the imputed bank service charge for Singapore of $ US 881 million in the same year[31] and an estimated contribution of financial institutions to GDP of about $ US 1,115 million.[32] This would suggest that the services measured by the imputed bank service charge accounted for about four-fifths of the contribution of financial institutions to Singapore's GDP (the balance being due presumably to services charged for explicitly); and that about one-quarter of the imputed bank service charge was accounted for by

[30] J.R. Hewson, "Offshore Banking in Australia" in Australian Financial System Inquiry, *Commissioned Studies and Selected Papers*, Part 2, Macroeconomic Policy: External Policy, AGPS, Canberra, 1982, p. 529.
[31] *Economic Survey of Singapore, loc. cit.*
[32] J.R. Hewson, *op. cit.*, p. 528.

exports of financial services (i.e. the contribution of the offshore currency market).[33]

These, of course, are very rough figures. But they may serve to indicate how trade in financial services might be measured in the relatively straightforward case of offshore currency markets with separate accounts.

Australia. What of the majority of countries, such as Australia, which are not major international financial centres and not, as such, clearly net exporters of financial services?

Two of the main categories of what Australian banks would regard as their foreign business do not give rise to Australian exports of financial services. One of these is most income from foreign exchange trading margins. For the bulk of foreign exchange bought by Australian banks is bought from Australian residents (exporters) and most foreign exchange sold is sold to Australian residents (importers). None of this is business with non-residents. It is true that there were, even before the recent abolition of exchange control, certain exceptions to the general prohibition on non-resident holdings of $A balances.[34] Among them were working balances held by foreign banks and $A balances held temporarily in connection with capital (portfolio and direct investment) transactions which had received exchange control approval. Australian banks, therefore, derive some income from foreign exchange dealings with non-residents in connection with capital account transactions. But this probably accounts for only a small part of their foreign exchange business. Statistically, all bank income from foreign exchange trading, whether with residents or non-residents, appears to be included in the banks' investment income. Special returns by banks would be needed to separate it out, and even the banks themselves would have difficulty in distinguishing business with non-residents.

The second category of foreign business which does not statistically give rise to exports of financial services by Australian banks is the large proportion of such business which is handled by the Australian banks' overseas branches, whether operating as Singapore ACUs or as branches in Hong Kong, London, New York and other financial centres. Such business includes net investment income of overseas branches, income from their foreign exchange trading, commissions on loan syndications, bank charges, fees, etc. Since these branches operate as financial enterprises of the countries in which they are domiciled, their output and exports of financial services enter into the national accounts of these countries. Only their net profits which accrue to the parent banks enter the Australian balance of payments and national accounts. In effect, a large part of the business of Australian banks is analogous to that of Australian manufacturing companies which, instead of exporting their products from Australia, set up subsidiaries to produce offshore. The implication is that part of the net investment income of the overseas branches would, on the SNA treatment of financial enterprises, be included in the imputed bank service charge (i.e. as income from the sale of non-factor services) of the countries in which they are located. But by the time the net profits enter the Australian statistics they have become pure factor income.

This is not to say that none of the business of Australian banks and other financial enterprises is of a character that its output would properly be regarded as exports of financial services. Such exports are of three kinds.

The first is income from explicit charges, such as bank and brokerage charges, fees and commissions, for services rendered by Australian financial enterprises (as contrasted with their overseas branches) to non-resident customers. Such income is recognised in the national accounts as explicit bank charges and in the balance of payments accounts as receipt from non-factor services among current transactions. There is, secondly, such income from foreign exchange trading margins as arises from business of Australian banks with non-residents; as we noted above, this probably constitutes a small part of the banks' foreign exchange trading income and is in the statistics lumped in with investment income. There is, thirdly, net foreign investment income of Australian banks, i.e. income received on foreign assets less interest paid out on foreign-owned deposits, which in the national accounts is at present included in the imputed bank service charge and mostly excluded from GDP. By far the largest component of this is probably the interest earned by the Reserve Bank on its foreign exchange reserves. But Australian banks also hold working balances in foreign exchange and there may be other foreign investment income by Australian financial enterprises, on some of which they earn some

[33] It is worth mentioning that Singapore has not yet followed the example of Luxembourg in adapting its social accounts to its new role as a major international financial centre. One reason may be that Singapore is not anxious to see an upward adjustment in its per capita income which would hasten the day of its "graduation" out of the category of developing countries.

[34] Since 12 December 1983, this prohibition has been confined to foreign governments and banks.

interest. All such deposit interest income of banks, as contrasted with loan interest, doubtfully qualifies for treatment as a return on bank (non-factor) services. A central bank, for example, hardly renders services of financial intermediation to foreign banks with which it holds its foreign exchange reserves. But since such receipts are included in the net investment income which is treated as the imputed bank service charge, they should logically be regarded, like interest on consumer loans, as payment for final (not intermediate) products.

Australia is also a large importer of capital. Some of this capital is obtained from foreign banks, and the interest paid on this external debt, by enterprises, governments or households, enters into the net investment income of these foreign banks and, under SNA procedure, into the imputed bank service charge in the national accounts of the home countries of these banks. Such interest income, which at present is included in the Australian national and balance of payments accounts as "property income to overseas", i.e. as factor income, should be regarded as imports of financial services, i.e. as payment for non-factor services of financial intermediation.

Obviously, for none of these components of Australian exports and imports of financial services are adequate statistical data available, and it is doubtful whether in Australia's case the amounts are large and significant enough to warrant the cost of collection and processing. But there may be such trade in financial services in countries which, without being major international financial centres, export or import financial services on a scale significant relative to their GDP or their current account balance of payments.

Conclusions

The conclusions of the preceding discussion of the conceptual problems of measuring trade in financial services may be summarised as follows.

First, the new SNA treatment of financial services which regards the imputed bank service charge as a charge for services of financial intermediation to borrowers is conceptually superior for a closed economy to the old SNA treatment which regarded it as a charge for payments mechanism and related services to depositors. But even on

this interpretation, services to household borrowers (personal loans) should be treated as final, not as intermediate, output and therefore included in GDP.

Secondly, in an open economy, even bank services to enterprises must be regarded as final output if the enterprises are non-residents. For countries, such as Luxembourg, where exports of financial services represent a large sector of the economy, it is essential to include the value of exports of financial services in GDP. Conceptually, ownership of deposits is not a suitable criterion for allocation of this output between residents (strictly, enterprises and public authorities) and non-residents, unless there are reasons to believe that the value of financial intermediation services rendered to borrowers is roughly proportionate to their ownership of deposits. In practice, no better statistical measure may be available.

Thirdly, for countries, such as Singapore, where most exports of financial services are provided by statistically distinct units of an offshore currency market, the net investment income of these units, together with their receipts from explicit charges, may be an adequate measure of exports of financial services.

Fourthly, for all other countries, where trade in financial services is not large relative to the economy as a whole, it may not be worth going to the trouble of collecting and extracting the statistics that would be needed to measure exports and imports of financial services. But it is desirable to secure agreement, for such purposes as internationally comparable national and balance of payments accounts, on what, ideally, should be measured. Exports of financial services should be taken to include that part of the net investment income of financial enterprises which is received from abroad, together with explicit charges to non-residents by financial enterprises. Where local banks provide a significant volume of foreign exchange market services to non-residents, it would be desirable to include an appropriate part of bank receipts from foreign exchange trading margins. Imports of financial services, conversely, should consist of that part of (net) interest on external debt that is paid to foreign financial enterprises, together with payments to such enterprises in the form of explicit charges. It is unlikely that the contribution of nationals to the income of foreign banks from foreign exchange trading margins could ever be identified.

Canberra

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