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Expenditure on R & D and Imported Technology –
A Cross – Section Study

D.V.S. Sastry[*]

In this paper, an empirical analysis was undertaken to find out whether the manufacturing companies in India are self reliant in technology. The paper also attempted to probe whether the expenditure on adaptive R & D are different among companies and industries. The results pertained to 1984-85 based on the available data from the RBI's studies on company finances.

THE level of technology in any activity can largely be a function of domestic Research and Development (R & D) in that activity, technology imports and a relation between the two. However such a relation between imported and domestic technologies, if it exists, is a complex one (Blumenthal 1979). Firms, recognising the importance of technical progress for improving their products and performance, follow a strategy that entails the use of imported as well as indigenous technology. Generally, enterprises import technology and then undertake research and development (R & D) to adapt these technologies to local environment. This is so because, there is a favourable time-cost trade off in favour of imported technology than indigenous technology. R & D is then required, as the imported technology has to be modified and adapted so as to suit the domestic market factor prices and consumer choices. This type of strategy is called import and adapt technology (IAT) strategy. The IAT strategy was followed in India for a relatively long period and the Government of India is keen to attain self-sufficiency in technology. In this regard various pronouncements were made by the Government and specifically through the Technology Policy Statement 1983. The intention is that local technology should gradually replace imported technology.

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* Dr. D.V.S. Sastry is Assistant Adviser in the Department of Statistical Analysis and Computer Services.

The IAT strategy is sometimes criticised on the grounds that it hampers development of the indigenous technology capability and secondly makes the country completely dependent on the foreign technology. However, at the beginning of industrialisation, the country requires imported technology, and with the expertise gained subsequently, tries to become 'self-reliant'. However, the definition of self-reliance is debatable. A simple definition is that an enterprise (country) has 'caught up' with the level of technology in foreign countries. This implicitly implies that the level of technology in the foreign countries is constant and views the technological self reliance as absolute achievement. As the level of technology in other countries is also advancing, the catching up may also be taken to mean an improvement in the enterprise's technological efforts relative to improvements in foreign technology. That is to say that, over a period of time, its expenditure on imported technology decreases relative to its expenditure on R & D.

Desai (1980) pointed out that the technology and research developed in the national laboratories remains unutilised. Eventhough a number of firms are undertaking in-house R & D activities, they are mainly towards adaptation of imported technology or quality control; but are not a source of technology. Thus expenditure on R & D starts with problem-solving exercises, i.e., to overcome the problems in break-down of machinery, shortage of imported components etc. and leads to a better understanding of technology. Initially, therefore, the ratio of R & D to imported technology will be low and will increase in later years. An increase in the propensity to increase R & D expenditure can be interpreted as an indicator of self sufficiency in technology for the enterprise. Suppose an enterprise thinks of producing a new product, then with its experience already achieved in purchasing technology and adapting it to local conditions, it increases its expenditure on R & D and thus increases its propensity to adapt. Thus, empirically speaking, if R & M are expenditures respectively on R & D and imported technology, then the regression equation gives their relationship as

$$\text{Log } R = a_1 + b_1 \log M \qquad\qquad (1)$$

If $b_1 > 1$, one can interpret it as an evidence of increasing self sufficiency in technology and if $b_1 < 1$, it is an evidence of imported technology.

Another important factor that influences expenditure on R & D is the size of the enterprise. The literature on industrial economics suggests two types of argument. One is that large enterprises, because of their greater access to large amount of financial resources and/or enjoying economies of scale, spend more on R & D. Another argument is that large enterprises which influence market conditions spend less on R & D. In the Indian context Katrak (1980) pointed out that there is some presumption that large enterprises spend proportionately lower expenditures on adaptive R & D. To ascertain the effect of size (S), as measured by sales, on expenditure on R & D, we have the following regression set up

$$\text{Log } (R) = a_2 + b_2 \log M + c_2 \log S. \tag{2}$$

If $c_2 < 1$, we infer that large enterprises have proportionately less expenditure on R & D.

If we try to argue that the economic performance of the enterprise will depend on its imported technology as well as its expenditure on R & D, the effect of size can be examined through the regression set up :

$$\text{Log } (R+M) = a_3 + c_3 \text{ Log } S \tag{3}$$

Our interest will be whether or not c_3 exceeds unity. In the Indian context, import of technology is industry specific. For example, the "Drugs and Pharmaceuticals", the industry which is more dependent on foreign technology, not only imports technology but also its expenditure on R & D will be high. In the case of "Machinery and Equipment", the imported technology in the form of capital goods will be high as also the local R & D so as to adapt and use it. In order to capture the impact of this, we have used two dummy variables - one for "Drugs & Pharmaceutical" industry and another for "Machinery & Equipment".

Data source and limitations

The empirical tests ideally require a time series on enterprises' expenditure on R & D and imported technology. However, such a series is not available so far, as it is not statutory for a company to present its expenditure on R & D in its Annual Report unless it exceeds Rs.5,000 or 1 per cent of the total expenditure, whichever is higher. All the companies also do not follow a uniform procedure for reporting the expenditure on such items. With the recent amendment in the Company Rules, companies will hereafter declare their expenditure on R & D as a part of their Annual Report. The studies on Company Finances published by the Reserve Bank of India, present data on two variants of imported technology namely, (i) import of capital goods, and (ii) expenses on royalty and technical fees. These data are published at the industry level and do not give the number of companies that have reported such information. In the absence of such vital information the results may be misleading. The Department of Science and Technology (DST) publishes data only for those enterprises which undertake R & D but do not publish data on expenditures on Royalty and Technical Fees.

For the purpose of the present study, data collected from the Annual Reports of medium and large public limited companies which have consistently reported foreign exchange earnings during the period 1980-81 to 1984-85 have been utilised. Of the 590 companies , those companies which had reported expenditure on R & D as well as import of capital goods in 1984-85 are used for the present study. The number of such companies is 91. There are companies which reported expenditure on R & D but did not report expenditure on imported technology and vice-versa. Such companies have been excluded for the purpose of the study. Only those companies which belong to manufacturing sector are considered. Thus companies belonging to agriculture & plantation and trading are excluded. Companies with the same or similar products are combined and grouped under an industry. There are 33 such industries and they are further grouped into six major groups. At the industry level, the impact of imported technology is assessed through the regression set up given earlier. As the aggregates get affected by the number of companies in the industry, number of

companies (n) is also used as one of the explanatory variables in order to isolate this effect. The estimated equations are :

1. $\text{Log R} = 1.09 + 0.20n^* + 0.39 \text{ Log M}^*$
    't'   3.5   2.6

    $\bar{R}^2 = 0.40$ SEE $= 0.57$ Mean $= 3.3$

2. $\text{Log R} = -1.90 + 0.11n^* + 0.24 \text{ Log M} + 0.63 \text{ Log S}^*$
    't'   2.0   1.6   2.7

    $\bar{R}^2 = 0.52$ SEE $= 0.52$

* indicates significance of the variable at 5 percent level.

The above equations confirm the hypothesis that expenditure on R & D are positively related to imported technology. The number of companies in an industry has an impact, and size has a positive role in the expenditure on R & D. The imported technology is significant in the first equation whereas size is significant in the second equation. The positive sign of these variables suggests that expenditures on R & D are complementary to the imported technology. This confirms the strategy of 'import and adapt' technology. A positive relationship between R & D and imported technology is also reported by Blumenthal (1976), Katrak (1985) and Lall (1983).

Considering royalty and technical fees paid as a variant of imported technology, we have the following empirical results.

3. $\text{Log R} = 2.27 + 0.17n^* + 0.20 \text{ Log Roy}^*$
    't'   2.83   2.5

    $\bar{R}^2 = 0.41$ SEE $= 0.57$ Mean $= 3.14$

4. $\text{Log R} = -4.04 + 0.07n + 0.13 \text{ Log Roy} + 8.59 \text{ Log S}^*$
    't'   1.17   1.63   2.70

    $\bar{R}^2 = 0.52$ SEE $= 0.54$

At the industry level, it can be seen from the above equations that a variant of imported technology, namely, expenditure on royalty and technical fee payments have shown the appropriate sign. The number of companies in an industry is significant at 5 per cent level in equation (3), and when imported technology and size are included, the size has a dominant role in determining expenditure on R & D.

Company level data

Table 1 gives the empirical results of the regression equation for some major groups and at all companies level. The equations are in the log linear form. Equations for the other major groups are not presented because of either low R^{-2} or wrong signs.

The results clearly bring out the impact of sales on the R & D expenditure. The dummy variables are significant. However, the sign of imported technology is different for different industry groups. In order to assess this we have tried regression equations with only import of capital goods as the explanatory variables. The co-efficient of the variable showed a positive sign, but R^{-2} is very low. Thus the negative sign may be due to its relation with size of the industry and/or due to aggregation.

A slight variation in the specification allows us to assess the impact of size of the enterprise on the combined expenditures of R & D and imported technology. The estimated results of loglinear form equations wherein the dependent variable is R + M, are presented in Table 2.

Except in the case of miscellaneous industries the impact of size on the combined expenditure of R & D and imported technology is properly explained. The co-efficient is significant at 1 per cent level in the case of "chemicals group" and "machinery equipment", and at the "all companies" level. But the dummy for chemical industry could not explain properly. The positive impact of size suggests that larger enterprises though have an advantage in R & D do not undertake proportionate expenditure on R & D.

Table-1

Major groups	No. of cos.	Intercept	M	S	DUM 1	DUM 2	$\bar{R}^2$	SEE
1.	2.	3.	4.	5.	6.	7.	8.	9.
Food products and Tobacco products	17	-2.66	0.08	0.88*	-	-	0.31	0.54
Ferrous and non-ferrous metal products	11	0.29	-0.11	0.52	-	-	0.15	0.39
Chemicals and pharmaceuticals	18	-0.35	0.17	0.48	-	-	0.26	0.55
Equipments	27	-0.25	-0.16	0.63*	-	-	0.10	0.65
All Companies	91	-0.69	0.09	0.55*	-	-	0.15	0.73
All Companies	91	-1.29	0.12	0.60*	0.45*	0.36*	0.18	0.71

* :   Indicates significance at 5 per cent level
M :   Import of capital goods
S :   Sales
DUM 1 :   Dummy for chemical industry
DUM 2 :   Dummy for equipment industry
Dependent Variable : R

Table-2

Major groups	No. of cos.	Constant	S	DUM 1	DUM 2	$\bar{R}^2$	SEE
1	2.	3.	4.	5.	6.	7.	8.
Food products and Tobacco products	17	-6.55	1.75	-	-	0.19	0.91
Ferrous and non-ferrous metal products	11	-0.77	0.72	-	-	0.18	0.59
Chemicals and pharmaceuticals	18	0.76	0.52	-	-	0.16	0.49
Equipments	27	-1.73	0.90*	-	-	0.63	0.40
All Companies	91	-0.89	0.78*	-	-	0.33	0.58
All Companies	91	-0.78	0.76*	-0.18	0.06	0.32	0.58

Dependent Variable R + M

There can be many other determinants which influence the local R & D such as the nature of R & D, the role played by the Govern-. ment in supporting high risk projects, the availability of foreign technology and the Government's policy towards it, the industry structure, and the mode of technology. For example, the influence of imported technology on R & D will be different between a firm which imports technology under licensing (purely technical collaboration) and a firm which imports through a package of direct investment. In the later case the technology supplier partly or wholly controls the local enterprise. In such a case investment decision including R & D is taken in consonance with the corporate strategy responsive to global opportunities.

In order to assess such a diversity, companies are classified as local and foreign controlled rupee companies. A company is considered to be foreign controlled rupee company if 25 per cent or more of its equity capital is held by a foreign company on its nominee, or 40 per cent or more of the equity capital is held abroad in any are country or it is a subsidiary of foreign company. There are 12 such companies in our study. Regression equations are separately got for the two sets of companies and the results are as follows.

(A) Foreign Controlled Rupee (FCR) Companies :

$$\text{Log R} = 1.99 - 0.15 \ \text{Log M} + 0.97 \ \text{Log S}^*$$
$$\text{'t'} \qquad \quad 0.65 \qquad \qquad 2.02$$

$$\bar{R}^2 = 0.29 \quad \text{SEE} = 0.66 \qquad \text{Mean} = 2.93$$

(B) Local Companies

$$\text{Log R} = -0.6 + 0.15 \ \text{Log M} + 0.49 \ \text{Log S}^*$$
$$\text{'t'} \qquad \quad 1.36 \qquad \qquad 2.58$$

$$\bar{R}^2 = 0.15 \quad \text{SEE} = 0.73 \qquad \text{Mean} = 2.62$$

It can be seen from the above equations that the effect of imported technology is substitutable in FCR companies and

complementary in the case of local companies, thereby corroborating our earlier argument. Based on the above empirical results, we can draw the following conclusions.

There is a positive relationship between the import of technology and the expenditure on R & D incurred by the enterprise, implying the complementary nature. Both the variants of the imported technology, namely, import of capital goods and payments towards royalty and technical fees have shown similar impacts. Size of an enterprise (industry) has a significant impact on R & D and large companies eventhough have an advantage in R & D have not proportionately undertaken expenditure on R & D. The effect of imported technology has been complementary in nature to R & D in the case of local companies and substitutable in foreign controlled rupee companies.

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Foreign Banks in India – Recent Performance

A.K. Nag and K. Shivaswamy**

The performance of foreign banks in recent years stand out distinctly in terms of several performance indicators, when compared with the working of the Indian segment of the banking industry. This raises a question as to whether the proximate causes for such differential performance could be located in the management practices of foreign banks or could be due to presence of certain externalities facilitating the working of foreign banks. This paper is mainly concerned with the latter aspect of the question. Towards this aim, the paper tries to collate information on various aspects of functioning of foreign banks in India. In doing so, the foreign banks' achievements are compared with those of Indian scheduled commercial banks wherever relevant. The paper also identifies three segments of this group of banks in India and compares their assets and liabilities portfolio as well as traces the differential growth performance of the three segments. Finally, some of the factors that have helped to improve the performance of foreign banks as a major group are also delineated.

THE high rates of growth in deposits and loans of foreign banks in India in the last five to six years and the favourable performance of these banks in terms of several other'indicators, stand out distinctly when compared with the working of the Indian segment of the banking industry. This raises among others questions as to whether the foregin banks have adopted management practices, procedures and policies of day to day nature that are different from most of their Indian counterparts, and whether there have been special factors at work to facilitate the foreign banks posting relatively good performance. In this paper, we would bestow our attention mainly to the latter aspect. In doing so, we would compare. foreign banks' achievements with those of Indian scheduled commercial banks, in particular of the metropolitan branches of Indian scheduled commercial banks wherever relevant. The paper has

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** Dr. A.K. Nag is Assistant Adviser, and Shri K. Shivaswamy is Research Officer, both in the Department of Statistical Analysis and Computer Services. The authors are grateful to Shri W.S. Saraf, Dr. A. Vasudevan and Shri S.H. Saoji for their encouragement and guidance in the preparation of the paper.

three sections, the first of which provides the position of foreign banks as a group in the Indian banking industry in quantitative terms. The second section deals with the performance of some groups of foreign banks. In the final section, some of the important factors that have helped to improve the performance of foreign banks as a major group are delineated.

I

Many of the present day foreign banks in India, which were originally established [1] to finance India's foreign trade, are confined mostly to port towns and metropolitan cities. At the end of December, 1989, the number of foreign banks stood at 22, with 136 branches, as against 128 branches of 13 banks at the time of the nationalisation of fourteen major Indian Scheduled Commercial Banks in 1969. The addition of eight branches is in respect of some new foreign banks during the 25 years since 1969[2]. This was rendered possible by the policy of reciprocity, as per which foreign banks are allowed to set up a branch in India if the country of origin of the concerned foreign bank allows an Indian bank to open a branch office in its home country.

Deposits, credit and investments of foreign banks increased sharply during the decade of 1980s as compared with the previous decade (Statement 1). In recent years, deposits have been growing at very high rates of over 25 per cent, reaching in fact the record level of 49.4 per cent in 1989. Total credit growth hovered between 20 and 30 per cent per annum in the last six years. The credit-deposit ratios of foreign banks have also been high, indicating thereby the possible use of large amount of borrowed funds to augment the size of advances portfolio In certain years, the credit-deposit ratio of foreign banks had been over 70 per cent, and had even touched the high level of 87.5 per cent in 1984[3].

Reflecting the strong growth in deposits and credit of foreign banks in the 1980s, the total profits of these banks have also risen substantially. The share of foreign banks in the total profits of all scheduled commercial banks has moved up from 17.65 per cent in 1979 to 27.59 per cent in 1984 (Statement 2). The share of foreign banks in profits is much higher than their shares in total

deposits, credit and working fund[4] of the banking system.

To appreciate the performance of foreign banks in a proper manner, it would be necessary to compare the movements in the different indicators relating to foreign banks with those of the metropolitan branches of Indian scheduled commercial banks (to be henceforth referred to as "metropolitan branches" for the sake of simplicity). In Statement 3 such a comparison was made in respect of two major indicators, viz., aggregate deposits and credit from 1983 onwards. The statement shows that the share of foreign banks in respect of both the indicators have been rising faster since 1984. The share, however, has been higher in regard to credit than in respect of aggregate deposits. These shares of foreign banks would be still higher if four major metropolitan centers, where 90 per cent of foreign bank branches are concentrated, are alone considered. For example, in Bombay, foreign banks accounted for as much as 25.6 per cent of deposits and 22.6 per cent of credit in 1990. In 1987, the share of foreign banks' deposits and credit in Bombay were lower at 14.9 per cent and 16.6 per cent, respectively. This is reflective of the distinct preference of bank customers to bank with foreign banks, notwithstanding the fact that foreign banks stipulate relatively high levels of minimum amounts to be maintained as deposits with them, and charge relatively high interest rates and service costs. In respect of deposit supplies, foreign banks' strategy had been to procure from a segmented part of the total supplies' deposits of large-size from a relatively small number of depositors.

The composition of deposits of foreign banks reveals that while fixed deposits have gained in their share of the total, current deposits still continue to form a sizable proportion of the total deposits of these banks (20-30 per cent). Statement 4 which gives details on this aspect shows that amongst all the bankgroups, foreign banks had more of their deposits in the form of current deposits than all the other bank groups. This indicates that the interest cost in respect of funded business is relatively less for foreign banks.

The ownership pattern of deposits of foreign banks and of "metropolitan branches" furnished in Table 1 gives some interesting

Table 1 : Percentage Distribution of Ownership Pattern of Deposits in Metropolitan Center for Foreign Banks and
All Scheduled Commercial Banks (As at end March)

Type of Ownership	1982		1984		1986		1988	
	Foreign Banks	All Sch. Comm. Banks	Foreign Banks	All Sch. Comm. Banks	Foreign Banks	All Sch. Comm. Banks	Foreign Banks	All Sch. Comm. Banks
1. Government Sector	11.3	8.3	5.5	10.4	5.8	9.1	1.4	6.5
2. Corporate Sector (Non-financial)	18.5	5.4	23.9	9.4	25.7	10.1	18.3	10.9
3 Corporate Sector (Financial)	7.7	5.8	4.8	8.9	4.1	8.0	6.4	5.7
4. Other Institutions	12.1	13.0	12.3	13.9	10.3	13.1	5.3	12.4
5. Individuals including Hindu Undivided Families	50.4	67.5	53.5	57.4	54.1	59.7	68.6	64.5
TOTAL	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0

Source · BSR-4, Survey on Composition and Ownership Pattern of Bank Deposits.

information. Individuals and non-financial private corporate sector owned 68.9 per cent of deposits of foreign banks compared with 72.9 per cent of deposits of "metropolitan branches" in 1982. This trend was reversed by 1988 in the sense that individuals and corporate sector owned 86.9 per cent of foreign banks' deposits and 75.4 per cent of deposits of "metropolitan branches". Statement 6 gives more details in this regard. It shows that foreign non-financial corporate sector prefers to hold their deposits in foreign banks than in Indian scheduled commercial banks. Again, of the individuals' deposits with foreign banks, the share of non-residents was as high as 51 percent in 1988, having moved up from 20 per cent in 1982. Non-residents' deposits formed about 10.0 per cent of individuals' deposits with public sector banks[5].

[The large accretion of non-resident deposits with foreign banks is mainly because of the familiarity of the Indian foreign banks' names to the banks abroad. Moreover, most of the foreign banks have correspondent relationships with banks abroad. Many foreign banks have assiduously built up the reputation of being sensitive to the needs of non-resident Indians by being very quick in responding to the queries of non-residents through the most rapid means of communications wherever feasible.]

To the extent that short and medium term deposits of non-residents are not debited[6] they partake the nature of long term fixed deposits. These deposits enable foreign banks to be in a, better position than the Indian scheduled commercial banks, to create claims on others without fear of withdrawals of funds across the counter.

(Given the spatial concentration of branches and the composition of deposit owners of foreign banks, it is only natural that there is a bias in regard to credit deployment towards industry and trade. The data given in Statement 7 shows that around 80 per cent of credit outstanding in respect of foreign banks has been advanced to industry and trade. The share of these two occupational groups are much higher in the advances portfolios of foreign banks than their shares in the advances portfolios of other group of banks. It is also observed that the per account amount outstanding in respect of foreign banks is much higher than the corresponding figure in

respect of Indian scheduled commercial banks. For example, while the average amount per account in respect of Indian banks for the broad occupational group "industry" ranged between Rs. 99,000 and Rs. 95,000 between the years 1984 and 1988, the corresponding figure in respect of foreign banks moved up from Rs. 19.30 lakhs in 1984 to a figure as high as Rs.36.89 lakhs in the year 1988. Even in respect of small scale industry, it was found that the foreign banks have been financing the relatively larger ones among them as indicated by the average amount per account. If the comparison is confined only to metropolitan centers, it is observed that per account credit for foreign banks still remain higher than the corresponding amount for Indian banks as shown in Table 2.

The credit allocation pattern of foreign banks by types of organization also reveals the predominance of the private corporate sector in the credit portfolio of foreign banks. Thus, around three-fourth of the total credit advanced by the foreign banks were in favour of private corporate sectors (i.e. public and private Ltd. non-government companies and corporations) whereas in respect of Indian scheduled commercial banks, the corresponding figures were only around 25 to 30 per cent. On the other hand, the share of public sector in the total credit outstanding of foreign banks was around 10 per cent as at December 1984 and this share declined to 3.3 per cent by the end of December 1988 (Statement 8).

Statement 9 gives data of distribution of credit outstanding by various ranges of credit limits sanctioned per account in terms of both number of accounts and amount outstanding separately for foreign banks and Indian scheduled commercial banks. It may be seen therefrom that foreign banks generally did not extend credit to small borrowers unlike their Indian counterparts. The share of small borrowers with credit limit less than Rs. 25,000 in total outstanding credit of foreign banks remained at around 1 per cent between 1984 and 1988. As against this, the share of these small borrowal accounts in respect of Indian scheduled banks was as high as 21 per cent at the end of December 1984 and this share increased to 27 per cent by the end of December 1988. It may also be observed that the bulk of the credit extended by the foreign banks was in the range of Rs.50 lakhs to Rs.4 crore. A curious

Table 2 : Percentage Distribution of Outstading Credit and Amount per Account in Metropolitan Center for Foreign Banks and All Scheduled Commercial Banks according to Occupation (As at end December)

(Amount per Account in Lakhs of Rupees)

Occupation	1984				1986				1988			
	Foreign Banks		All Sch Comm. Banks.		Foreign Banks		All Sch Comm. Banks.		Foreign Banks		All Sch Comm. Banks.	
	Amt. Out-stand-ing	Amt. per A/c	Amt. Out-stand-ing	Amt. per A/c	Amt. Out-stand-ing	Amt. per A/c	Amt. Out-stand-ing	Amt. per A/c	Amt. Out-stand-ing	Amt. per A/c	Amt. Out-stand-ing	Amt. per A/c
Agriculture	1.3	12.46	1.8	0.42	0.2	7.36	1.9	0.45	0.9	10.59	2.45	0.59
Industry	69.4	19.30	49.7	4.79	70.8	28.83	55.1	5.85	71.3	36.89	64.1	7.41
Transport Operators	0.2	1.23	3.5	0.92	0.3	1.92	3.6	1.02	0.3	3.53	2.1	0.62
Personal loans & professional services	3.4	0.26	4.8	0.13	3.7	0.47	5.2	0.15	4.4	0.62	6.8	0.48
Trade	18.8	11.49	36.4	2.60	18.3	18.58	28.7	1.92	11.2	16.15	16.7	1.06
All others	6.9	1.76	3.8	0.14	6.7	1.64	7.1	0.26	11.9	3.89	7.9	0.28
Total Bank Credit	100.0	4.5	100.0	1.0	100.0	6.4	100.0	1.0	100.0	7.7	100.0	1.1
Of which Small Scale Industries	2.2	4.1	12.2	1.5	1.2	4.8	10.1	1.4	1.2	6.5	12.6	2.0

Source : Basic Statistical Returns (BSR), published by DESACS, RBI, in the various volumes on Banking Statistics.

phenomenon in the distribution of credit by size of limits is that in the highest size class i.e. above Rs. 10 crore, the credit outstanding of Indian scheduled commercial banks formed 19 per cent of the total at the end of December 1984, while the corresponding share in respect of foreign banks was only around 9 per cent. It is also interesting to find that the share of the highest size class progressively had got reduced in respect of all scheduled banks over the period, but the magnitude of reduction had been much less in respect of foreign banks. The concentration of credit flow at the medium level credit ranges in respect of foreign banks could be attributed to the specific size of business of the corporate clientele of these banks, some of which are foreign controlled Indian Companies. The large capital intensive public sector companies with very high credit limits are mostly financed by Indian public sector banks, and therefore, the share of this extreme sized class in the credit limit spectrum was very high in respect of Indian banks.

The interest range-wise classification of loan accounts for borrowal accounts with credit limits of more than Rs. 25,000, which is presented in Statement 10 throws up an important point that the concentration of credit (forming almost about 75 per cent of total credit) in the case of foreign banks was in the range of 16% to 18% whereas in the case of Indian banks it was divided between 12% to 14% and 16% to 18%. This signifies that the average return out of the credit portfolio of foregin banks was higher than that of the Indian counterparts.

Another important feature of foreign banks' business in India was their high level of overdafts and their high level of participation in bill financing market (Statement 11). Overdrafts formed about 29 per cent of foreign banks' outstanding credit as at end December 1988. Inland bills purchased and discounted accounted for about 37 per cent of total credit at end December 1988. The foreign banks extended bill financing facilities to suppliers of large corporate borrowers and their appointed distributors, and subsequently availed of rediscounting facilities from eligible institutions/banks. Thus, they reaped the benefit of the interest spread in the process. The low cost of servicing of such bills as well as the short term and self liquidating nature of such advances are important pointers to the foreign banks functioning for maximising their

profitability. From the Statement, it may be seen that the ratio of bill financing to total advances was much higher for foreign banks than in respect of Indian banks. It is also interesting to note that the share of foreign banks' financing inland bills was much higher as compared to that of export bill financing.

II

So far foreign banks have been treated as if they formed a single homogeneous entity and its position in the banking industry and its performance vis-a-vis its Indian counterparts analysed. However, there exist some important differences amongst the foreign banks in terms of branch net work and nature of their banking operations. To a certain extent, these differences are legacies of the past as well as due to the nature of the external relations that India has with the countries from which foreign banks have originated.

Foreign banks could be classified into 3 groups on the basis of the extent of their branch network. The first group comprising 3 British banks (called Group A) has the largest branch net work and has been operating in India for long, some of them before India's Independence. The 3 banks of group A together account for 99 branches, thus constituting around 73 per cent of total number of foreign bank branches. The second group consists of 6 banks (called Group B). This group includes 3 American banks, one Japanese bank, one German bank and one French bank. Each of these 6 banks has around 3 to 6 branches in India. The banks in Group B together account for another 24 branches, i.e. around 18 per cent of the total foreign bank branches. The remaining group (called Group C) includes all other foreign banks, each of which has only a single branch in India. There are 12 banks in this group.

Statement 12 giving the share of the three foreign bank groups in total deposits and credit of all foreign banks presents an interesting picture on differential growth of business of the three groups. It may be observed from the Statement that the share of Group A in total deposits and credit had been steadily declining. In terms of deposits, the share of Group A had declined sharply from 67.1 per

cent in 1969 to 38.7 per cent in 1989. Regarding credit, the corresponding figures were 68.7 per cent and 36.5 per cent, respectively. In contrast, the share of banks in Group B in total deposits of foreign banks increased from 31.3 per cent to 45.7 per cent and in respect of credit, it increased from 29.7 per cent to 47.7 per cent during the same period. The increase in the shares of Group C had been the most impressive. The deposits of these single-branch foreign banks in absolute terms increased from Rs.8 crore in 1969 to Rs. 804 crore in 1988. The outstanding credit amount of these banks increased from Rs.6 crore to Rs.767 crore during the same period.

Classification of credit by types of organisation for these 3 foreign bank group furnished in Statement 13 shows that while the share of credit to public/private limited companies in total was dominant in all the groups, the share of private firms was relatively high in respect of banks in Group C. The amount per account in respect of the private firms in Group C was much higher as compared to other two groups. The credit limit-wise classification of accounts for these three foreign bank groups shows that the share of accounts in the credit limit in the medium range Rs.10 lakhs to Rs.50 lakhs were relatively higher in respect of Group C (Statement 14). The interest range-wise classification of credit account shows that there was not much difference in terms of interest structure for credit accounts of the three bank groups (Statement 15). For all the groups, the share of borrowal accounts in the interest range of above 16 per cent was around 70 per cent. However, of late, it is observed that credit accounts in the interest range 10 per cent or less had increased for all the 3 groups of foreign banks; the rise in the share was particularly substantial for bank group C since 1985. All the three groups had maintained credit accounts in the form of cash credits/overdrafts/demand loans and inland bill financing (Statement 16). Together these accounted for over 75 per cent of total credit outstanding for all the three groups. The group-wise assessment of foreign banks shows that banks in group C had gained considerable ground over the years both in terms of deposits and credit outstanding. But between the groups, there were no divergences in the types of deposits mobilised or the pattern of credit deployment. It would, therefore, be vaild to view foregin banks as a whole from the point

of view of assessment of their performance vis-a-vis their Indian counterparts.

III

In the previous two sections, we have seen that foreign banks have posted higher rates of growth of business in recent years than their Indian counterparts. It is necessary to see whether in terms of some of the important indicators of operational efficiency, foreign banks have performed better than the Indian scheduled commercial banks.

The data on such indicators are furnished in Statement 17 for some benchmark years, for foreign banks as a group as well as for Indian public sector scheduled commercial banks.

In terms of per employee deposits and advances the outstandings in respect of foreign banks were far superior to those of Indian public sector banks. What is more, the per employee amounts in respect of foreign banks increased three-fold, whereas they hardly doubled in the case of Indian public sector banks during the period under view.

It might be tempting to argue that per employee deposits and advances data in regard to foreign banks would be high because of the fact that they are located in metropolitan areas where bank practices and procedures are better known and followed. However, a comparison of the data of foreign banks with per employee deposits and advances of metropolitan branches of Indian public sector banks also shows that foreign banks have fared better. This was facilitated largely because the foreign banks, unlike their Indian counterparts, had fewer accounts (deposits and loan) of relatively large size-classes as we had seen in Section I, and had mechanised their operations. These two aspects enabled the foreign banks to keep in check the number of employees on their pay roll from growing[7]. The rise in the total wage bill as a result could be contained within limits. It is also known that the employees' accountability had been higher in the case of foreign banks because of the predominance of the officers in the total number of their employees.

The spread between the amounts of interest earned and interest paid (on deposit and borrowing) which was almost the same for foreign banks as well as for public sector banks opened in 1969 widened in the case of foreign banks more than in respect of public sector banks. From little over 8 percentage points in 1969, the spread in the case of the foreign banks was 12-13 percentage points in 1974 and 1979. After touching the high 18 percentage points in 1984, the spread had settled at 12-13 percentage points by 1986. The spread in the case of public sector banks, on the other hand, was 8-10 percentage points in the period under view.

The difference in the spread between the foreign banks and Indian public sector banks reflected the differences in the credit allocation pattern as between these two banks groups, alluded to in Section I. There is also the important fact that unlike Indian scheduled banks, foreign banks till March 1989 were not subjected to any allocation norm such as priority sector lending[8]. It may also be recalled (Statement 10) that while 40 per cent of outstanding loans were disbursed at less than 14 per cent interest rate by Indian scheduled commercial banks, only 15 per cent of outstanding loans of foreign banks carried less than 14 per cent interest rate.

The interest rate spread by itself would not have been a significant matter of importance in the case of Indian public sector banks but for the fact that it did not give rise to adequate profits. Obviously, this implied that wage and other overhead costs as well as the situation regarding return flow of funds from customers had not been favourable to the Indian scheduled commercial banks. This is reflected both in the low profits per employee and in the low spread to working capital ratio. In comparison, foreign banks' performance was truly impressive

Foreign banks have also outscored their Indian counterparts in respect of funds management. They reaped the benefits of policy-induced change in the money market participation following the removal of ceiling on call money rates[9]. They began to play a major role in the call money market since 1989 when their share reached as high as 64.0 per cent as on September 1990 compared with an average of 2.0 per cent in the preceding four years (1985 to 1988). Foreign banks' operational efficiency was also

evident in regard to vault cash management, use of borrowing facilities from other financial institutions and participation in non-funded business. Compared with Indian scheduled commercial banks which usually maintained around 1.5 per cent of total deposits liabilities as vault cash, foreign banks tended to economise on it by maintaining only 0.3 to 0.5 per cent during the four years since 1986. Foreign banks had sizable recourse to borrowing from other financial institutions compared to Indian scheduled commercial banks. Foreign banks were also able to earn sizable commission from non-funded business such as bills of collection, acceptance, endorsements and the like. The ratio of non-funded business to the total working fund of foreign banks was around 32 per cent during the accounting years ended December 1987 and March 1989.

The branch network of foreign banks has been extremely limited, but this did not seen to have affected their profitability position. They have shown that labour productivity could be maintained at high levels, by attracting large sized deposits and by disbursing large-sized loans at fairly attractive rates of return. That this was rendered possible reflects the relatively limited regulations to which they were sujected to, unlike their Indian counterparts. This also reflects the fact that the Indian scheduled commercial banks were willing to provide banking services and serve those who were left out of the net of foreign banks' operations.

While foreign banks' recent performance has been impressive, it should be recognised that their total credit forms hardly 7 per cent of the total credit extended by all the scheduled commercial banks in the country. Foreign banks' impact on the Indian economy and the output-yielding activities is as yet limited. Their ability to increase their business would however be somewhat circumscribed by the fact that they are essentially metropolitan based, with limited number of branches.

Notes :

1. For a study of the origins of banking in India, see, for example, Brij Narain (1945), Goldsmith R.W. (1983), Muranjan S.K. (1948), Panandikar S.G. (1966) and Chandavarkar, A.G. (1982). These provide an idea of the working of the foreign banks which were set up as exchange banks in the middle of the nineteenth century.

2. The new branches are of the following new foreign banks; Bank of Bahrain and Kuwait, Oman International Bank, Abu Dhabi Commercial Bank, The Bank of Nova Scotia, Societe Generale, Banque Indosuez, The Bank of Oman and European Asian Bank.

3. *There are two types of data available to users of banking statistics.* Some use statistics given in Quarterly handouts emerging from the Basic Statistical Returns (BSR) system. But under the BSR system, credit of commercial banks includes the refinancing amounts availed by banks from refinancing agencies such as Reserve Bank of India (RBI), and Industrial Development Bank of India (IDBI). Such amounts on the other hand, are not included in the second type, viz., the Section 42(2) of the RBI Act, 1934 returns. This has led to considerable differences in the credit-deposit ratio of foreign *banks as may be seen under :*

	1984	1985	1986	1987	1988	1989	1990
Sec. 42(2) returns	87.5	74.7	71.5	67.3	68.4	58.9	51.9
BSR Qly returns	100.2	94.7	94.7	90.7	94.7	94.3	89.6

4. Working fund is defined as the total assets and liabilities minus contra items.

5. It may be noted that the Surveys of ownership do not give break-up of non-resident deposits. However, FCNR accounts form a major proportion of non-resident deposits.

6. The debits to deposits survey do not give classification of non-resident deposits versus resident deposits. However, there is a general impression that non-resident deposits· are rarely repatriated on maturity or before maturity.

7. The number of employees in foreign banks stood at 10845 in 1979, 11335 in 1984 and 11372 in 1986. The compound annual growth rate turned out to be 0.7 per cent over the period 1979-1986. The compound annual growth rate turned out to be 6.7 per cent during the same period in the case of public sector banks.

8. The point that needs to be noted is that foreign banks were required to provide 10 per cent of their advances to priority sectors by end-March 1989. This limit was raised to 15 per cent to be achieved by March 1992. Indian scheduled commercial bank are under the stipulation that they should disburse 40 per cent of their loans to priority sectors. This stipulation has been in vogue since October 1980.

9. Effective May 1, 1989, all interest rate ceilings on money market instruments have been withdrawn and the market forces are allowed to decide the rate.

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Statement 1 : Trends in broad banking variables for Foreign Banks (As at end December)

(Rs. Crores)

.	No. of branches	Total Deposits	Total Credit	Total Invest- ments	Credit-Deposit ratio	Investment- Deposit ratio
1.	2.	3.	4.	5.	6.	7.
1969	128	487	403	116	82.8	23.8
1974	128	813 (10.8)	614 (8.8)	259 (17.5)	75.6	31.9
1979	127	1163 (7.4)	867 (7.2)	378 (7.8)	74.5	32.5
1984	132	2054 (12.0)	1798 (15.7)	761 (15.0)	87.5	37.0
1987	135	4109 (26.0)	2766 (15.4)	1564 (27.1)	67.3	38.1
1988	135	5276 (28.4)	3611 (30.5)	1796 (14.8)	68.4	34.0
1989	136	7881 (49.4)	4643 (28.6)	2588 (44.1)	58.9	32.8
1990*	136	9956	5251	3423	52.7	34.4

Note: 1) Data are based on returns submitted under section 42(2) of RBI Act. 1934 and as such Credit data excludes bills rediscounted with RBI, IDBI & Other Financial Institutions. Data upto 1984 have been taken from various issues of Statistical Tables relating to Banks in India, published by Department of Banking Operations and Development, Reserve Bank of India, Bombay.

2) The figures in brackets are annual compound growth rate over the previous period.

* Data relate to September 1990

Statement 2 : Percentage share of Different Bank Groups in Broad Banking Aggregates (As at end December)

Indicator	1969			1974			1979			1984			1988			1989		
	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks	Fore-ign Banks	Other Pvt. Sch. Banks	SBI & As-sots. & Nati-onali-sed Bks
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
No. of Branches	1.45	16.76	81.79	0.71	17.79	81.50	0.44	12.55	87.01	0.34	11.90	87.76	0.32	10.00	89.68	0.31	9.40	90.29
Total Deposits	9.20	6.31	84.49	6.44	8.78	84.78	3.25	5.07	91.68	2.53	5.15	92.32	3.84	4.67	91.49	5.24	4.28	90.48
Total Credits	10.61	5.62	83.77	7.27	8.17	84.56	3.82	4.57	91.61	3.32	4.58	92.10	5.94	4.35	89.71	7.69	3.67	88.64
Total Investments	7.96	6.15	85.89	7.04	7.89	85.07	3.81	4.98	91.21	2.75	4.82	92.43	3.49	4.36	92.15	3.96	4.30	91.74
Profit	14.50	3.50	82.00	25.15	12.39	62.46	17.65	14.17	68.19	27.59	9.53	62.88	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Working Capital	9.65	6.12	84.23	6.88	8.58	84.54	3.64	11.57	84.78	3.07	4.94	91.99	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Source : Statistical Tables relating to Banks in India for years upto 1984.

Banking Statistics and Quaraterly Handout for years 1988 and 1989 for data on No. of branches, Deposits and Credit.

Investment figures for 1988 and 1989 are based on Survey of Investments of Commercial Banks (BSR)-5) and comparable to earlier year's data.

Statement 3 : Percentage Share of Deposits & Credit of Foreign Banks in different Metropolitan centres (As at end December)

Metropolitan Centres	1983		1985		1987		1989		1990@	
	Deposits	Credit	Deposits	Credit	Deposits	Credit	Deposits	Credits	Deposits	Credits
1.	2.	3.	4.	5.	6.	7.	8.	9.	10	11.
Bombay	8.9	9.9	10.9	12.6	14.9	16.6	22.4	23.1	25.6	22.6
Delhi	6.0	6.4	5.8	8.3	6.1	10.8	8.5	15.6	8.9	15.2
Calcutta	13.3	10.8	12.1	13.2	10.2	14.4	12.6	18.5	12.6	19.7
Madras	5.0	8.6	4.6	8.0	4.6	8.8	6.6	12.7	5.0	15.4
Total of 1 to 4 (Amount in Rs. crores)	8.7 (1672)	9.1 (1554)	9.2 (2542)	11.3 (2439)	10.4 (3881)	14.0 (3593)	15.1 (7972)	19.2 (7607)	16.4 (9617)	19.2 (8720)
Others (Amount in Rs. crores)	1.1 (48)	1.3 (42)	1.0 (59)	1 1 (52)	0 9 (76)	1.0 (64)	1.0 (105)	1.0 (94)	1.0 (123)	1.2 (127)
Grand Total (Amount in Rs crores)	7.2 (1720)	7.8 (1596)	7.7 (2601)	9.5 (2491)	8.7 (3957)	11.3 (3657)	12.7 (8076)	15.6 (7702)	13.7 (9740)	15.8 (8847)

@   Relate to September, 1990.
Source .   Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics and Quarterly Handout.

Statement 4 : Broad bank group-wise and category-wise distribution of deposits (As at end December)

(Rs. Crores)

Group	Type of Deposits	1969	1974	1979	1984	1988
Foreign Banks	Current	129	200	285	668	1044
		(26.4)	(24.6)	(25.2)	(31.2)	(19.7)
	Savings	101	171	242	424	810
		(20.8)	(21.1)	(21.4)	(19.8)	(15.3)
	Fixed	257	442	605	1048	3440
		(52.8)	(54.3)	(53.4)	(49.0)	(65.0)
	Total	487	813	1132	2140	5294
		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Other Scheduled	Current	63	208	282	777	837
Commercial Banks		(18.9)	(18.8)	(15.6)	(17.8)	(13.3)
(Private Sector)	Savings	77	269	475	1230	1725
		(23.1)	(24.3)	(26.2)	(28.2)	(27.3)
	Fixed	194	630	1055	2355	3751
		(58.0)	(56 9)	(58.2)	(54.0)	(59.4)
	Total	334	1107	1812	4362	6313
		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Public Sector Banks	Current	1158	2579	6925	15294	17875
		(25.9)	(24.1)	(21.3)	(19.6)	(14.2)
	Savings	1103	2679	8066	20001	34419
		(24.7)	(25.1)	(24.8)	(25.6)	(27.3)
	Fixed	2213	5433	17552	42865	73666
		(49.4)	(50.8)	(53.9)	(54.8)	(58 5)
	Total	4474	10691	32543	78160	125960
		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
TOTAL	Current	1349	2986	7492	16739	19756
		(25.5)	(23.6)	(21.1)	(19.8)	(14.4)
	Savings	1282	3120	8783	21655	36954
		(24.2)	(24.7)	(24.7)	(25.6)	(26.9)
	Fixed	2664	6505	19212	46268	80857
		(50.3)	(51.7)	(54.2)	(54.6)	(58.7)
	Total	5295	12611	35487	84662	137567
		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note :   Figures in brackets indicate percentages to total.
Source   Statistical Tables relating to Banks in India for the period upto 1984, and Banking Statistics for 1988.

Statement 5 : Amount per account for different Bank-groups and Types of accounts
(As at and December)

(Rs Lakhs)

Bank Group	Current Amount Per Account	Savings Amount Per Account	Term Amount Per Account	Total Amount Per Account
1984				
Foreign Banks	53	08	28	19
Other Scheduled Commercial Banks				
(Private Sector)	06	01	03	02
Public Sector Banks	14	02	07	04
All Scheduled Commercial Banks	13	02	06	04
(Of which : Metropolitan)*	(22)	(03)	(11)	(06)
1985				
Foreign Banks	62	08	32	23
Other Scheduled Commercial Banks				
(Private Sector)	05	01	03	02
Public Sector Banks	15	02	08	04
All Scheduled Commercial Banks	15	02	08	04
(Of which : Metropolitan)*	(25)	(03)	(13)	(07)
1986				
Foreign Banks	68	09	45	28
Other Scheduled Commercial Banks				
(Private Sector)	05	01	06	03
Public Sector Banks	17	02	09	04
All Scheduled Commercial Banks	16	02	09	04
(Of which : Metropolitan)*	(28)	(03)	(16)	(08)
1987				
Foreign Banks	63	10	52	31
Other Scheduled Commercial Banks				
(Private Sector)	05	02	07	03
Public Sector Banks	16	02	10	05
All Scheduled Commercial Banks	15	02	10	05
(Of which : Metropolitan)*	(26)	(03)	(18)	(09)
1988				
Foreign Banks	69	12	69	40
Other Scheduled Commercial Banks				
(Private Sector)	06	02	08	04
Public Sector Banks	15	02	11	05
All Scheduled Commercial Banks	12	02	12	05
(Of which . Metropolitan)*	(24)	(03)	(21)	(10)

* :   Based on 1981 census
Source ·   Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics .

Statement 6 : Bank group–wise Ownership pattern of Deposits of Scheduled Commercial Banks (As at end March)

(Rs. Crores)

Type of Ownership	1982			1984			1986			1988		
	Foreign	Other Sch. Comm. Banks	Public Sec–tor Banks	Foreign	Other Sch. Comm. Banks	Public Sec–tor Banks	Foreign	Other Sch. Comm. Banks	Public Sec–tor Banks	Foreign	Other Sch. Comm. Banks	Public Sec–tor Banks
I. Government Sector	153	78	2337	101	160	3766	174	171	5175	68	284	5836
	(11.3)	(3.3)	(5.8)	(5.5)	(4.9)	(6.8)	(5.8)	(4.0)	(6.5)	(1.4)	(5.0)	(5.3)
Of which : Foreign	149	..	9	97	..	50	173	..	26	67	..	42
II. Corporate Sector (Non–Financial)	252	41	1450	437	52	3270	765	86	4804	881	100	6303
	(18.5)	(1 7)	(3.6)	(23.9)	(1.6)	(5.9)	(25.7)	(2.0)	(6.0)	(18.3)	(1.8)	(5.7)
Of which : Foreign	54	–	8	69	..	33	57	–	10	26	–	7
III. Corporate Sector (Financial)	104	128	2068	88	77	3332	121	149	4974	304	225	5889
	(7.7)	(5.5)	(5.2)	(4.8)	(2.3)	(6.0)	(4.1)	(3.5)	(6.2)	(6.4)	(4.0)	(5.4)
Of which : Foreign	55	2	151	25	..	176	38	.	421	195	..	234
IV. Other Institutions	165	295	3721	225	357	5629	306	482	7313	255	731	9295
	(12.1)	(12 6)	(9.3)	(12.3)	(10.8)	(10.2)	(10.3)	(11.3)	(9.1)	(5.3)	(13.0)	(8.5)
Of which : Foreign	6	..	18	3	2	33	8	–	18	6	–	59
V. Individuals Including Hindu undivided families	684	1807	30506	979	2644	39233	1611	3378	57789	3296	4282	82421
	(50.4)	(76.9)	(76.1)	(53.5)	(80.4)	(71.1)	(54.1)	(79.2)	(72.2)	(68.6)	(76.2)	(75.1)
Of which : Non–Residents	137	61	1292	168	167	2714	568	209	5089	1698	260	8227
Total	1358	2350	40083	1830	3290	55231	2978	4265	80056	4804	5622	109744
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Of which : Foreign and Non–Residents	401	63	1478	362	169	21506	844	209	5565	1991	260	8569
	(29.5)	(2.7)	(3.7)	(19.8)	(5.1)	(38.9)	(28.3)	(4.9)	(7.0)	(41.5)	(4.6)	(7.8)

Note : Figures in brackets indicate percentage to total.
Negligible
Nil.
Source : BSR–4 Survey on composition and ownership pattern of Bank Deposits.

RESERVE BANK OF INDIA OCCASIONAL PAPERS

Statement 7 : Percentage Distribution of Outstanding Credit and Amount per Account for Foreign Banks and All Scheduled Commercial Banks * According to Occupation (As at end December)

(Amount per Account in lakhs of Rupees)

Occupation	1984 Foreign Banks		All Sch. Com Banks		1985 Foreign Banks		All Sch. Com Banks		1986 Foreign Banks		All Sch. Com Banks		1987 Foreign Banks		All Sch. Com Banks		1988 Foreign Banks		All Sch. Com Banks	
	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c	Amt. out-stand-ing	Amt. per A/c
1. Agriculture	1.3	12.4	18.2	0.05	0.8	9.2	17.6	0.05	0.2	7.36	17.6	0.05	0.8	19.06	18.9	0.06	0.9	10.59	18.3	0.06
2. Industry	69.4	19.30	40.3	0.99	70.0	21.2	40.7	0.94	70.8	28.83	42.6	0.94	71.5	30.45	45.6	1.02	71.3	36.89	45.7	0.95
3. Transport Operators	0.2	1.23	5.2	0.29	0.2	0.9	5.0	0.27	0.3	1.92	4.7	0.26	0.3	1.88	4.3	0.25	0.3	3.53	3.6	0.22
4. Personal Loans and Professional Services	3.4	0.26	6.5	0.06	3.2	0.3	6.7	0.06	3.7	0.47	7.4	0.07	4.3	0.58	8.1	0.08	4.4	0.62	9.0	0.09
5. Trade	18.8	11.49	23.8	0.28	16.6	12.6	23.3	0.25	18.3	18.58	20.4	0.21	13.2	14.94	15.2	0.16	11.2	16.15	14.4	0.14
6. All Others	6.9	1.76	6.0	0.06	9.2	1.7	6.7	0.07	6.7	1.64	7.2	0.08	9.9	2.21	7.9	0.09	11.9	3.89	9.0	0.10
Total Bank Credit	100.0	4.48	100.0	0.15	100.0	4.8	100.0	0.14	100.0	6.40	100.0	0.14	100.0	6.50	100.0	0.15	100.0	7.74	100.0	0.15
Of which : Small-Scale Industry	2.2	4.08	1.3	0.36	1.7	4.0	12.2	0.29	1.2	4.75	12.3	0.28	1.6	5.73	13.7	0.32	1.2	6.54	13.7	0.32

*: All banks other than Foreign Banks.

Source : Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 8 : Distribution of Outstanding Credit * of All Scheduled Commercial Banks (ASCB) and Foreign Banks   according to organisation (as at end December)

(Rs. Crores)

Organisation	1984		1985		1986		1987		1988	
	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks
I. PUBLIC SECTOR	10604	199	11236	185	10564	184	8799	167	8036	138
	(30.3)	(10.8)	(28.9)	(8.7)	(24.3)	(6.5)	(18.2)	(5.3)	(14.5)	(3.3)
a. Central Govt.	8149	199	8553	185	7603	184	5258	163	4399	138
owned undertakings	(23.2)	(10.8)	(22.0)	(8.7)	(17.5)	(6.5)	(10.9)	(5.2)	(8.0)	(3.3)
b. State Govt.	250	0	364	0	396	0	340	0	344	0
	(0.7)	(0.0)	(0.9)	(0.0)	(0.9)	(0.0)	(0.7)	(0.0)	(0.6)	(0.0)
c. State Govt.	1575	0	1578	0	1731	0	2162	4	2095	0
owned undertakings	(4.6)	(0.0)	(4.1)	(0.0)	(4.0)	(0.1)	(4.5)	(0.1)	(3.8)	(0.0)
d. Quasi-Govt. bodies	630	0	741	0	834	0	1039	0	1199	0
	(1.8)	(0.0)	(1.9)	(0.0)	(1.9)	(0.0)	(2.1)	(0.0)	(2.2)	(0.0)
II. CO-OPERATIVE	470	3	579	5	736	6	707	11	869	12
SECTOR	(1.3)	(0.2)	(1.5)	(0.2)	(1.7)	(0.2)	(1.5)	(0.4)	(1.6)	(0.3)
III. PRIVATE SECTOR	18808	1622	21524	1905	25809	2563	31041	2857	37030	3962
	(53.8)	(87.2)	(55.4)	(89.2)	(59.4)	(91.0)	(64.2)	(91.7)	(66.9)	(94.1)
a. Public & Pvt. Ltd. cos. managed by Govt.	439	8	523	5	586	10	508	8	619	14
	(1.3)	(0.4)	(1.4)	(0.2)	(1.3)	(0.3)	(1.1)	(0.3)	(1.1)	(0.3)
b. Public & Pvt. Ltd. cos. other than Govt. owned and/or managed coms. and Corporations.	9566	1375	11046	1663	13267	2187	15991	23871	19072	3258
	(27.3)	(73.9)	(28.4)	(77.9)	(30.6)	(77.7)	(33.1)	(76.6)	(34.5)	(77.4)
c. Partnership & Proprietory concerns, Joint Families, Association etc.	8803	239	9955	237	11956	366	14544	461	17339	690
	(25.2)	(12.8)	(25.6)	(11.1)	(27.5)	(13.0)	(30.1)	(14.8)	(31.3)	(16.4)
IV. JOINT SECTOR	55	0	94	0	151	0	207	0	218	0
UNDERTAKINGS	(0.2)	(0.0)	(0.2)	(0.0)	(0.3)	(0.0)	(0.4)	(0.0)	(0.4)	(0.0)
V. INDIVIDUALS	5038	21	5351	27	6178	46	7517	67	9101	85
	(14.4)	(1.1)	(13.8)	(1.3)	(14.2)	(1.6)	(15.5)	(2.2)	(16.5)	(2.0)
TOTAL +	34987	1860	38830	2134	43438	2815	48343	3115	55313	4211
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note : 1.   All Scheduled Commercial Banks (ASCB) comprise of SBI group, Nationalised Banks, and Other.Scheduled Commercial Banks (Excluding Foreign Banks).

2.   Figures in brackets indicate percentage to total.

*   Relate to Accounts with Credit Limits over Rs.25,000.

Source :   Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 9 : Distribution of outstanding credit of All Scheduled Commercial Banks (ASCB) and Foreign Banks according to credit limit (as at end December)

(Rs. in Crores)

Credit Limit Range	1984		1985		1986		1987		1988	
	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks
Rs. 25,000 and less	9202 (20.8)	26 (1.4)	11236 (22.4)	28 (1.3)	13928 (24.2)	35 (1.2)	16779 (25.7)	41 (1.3)	20221 (26.8)	36 (0.8)
Above Rs. 25,000 and upto Rs. 1 Lakh	4222 (9.6)	19 (1.0)	5124 (10.3)	23 (1.1)	5587 (9.8)	25 (0.9)	6539 (10.0)	34 (1.1)	7335 (9.7)	48 (1.1)
Above Rs. 1 Lakh and upto Rs. 5 Lakhs	5476 (12.4)	79 (4.2)	5731 (11.5)	83 (3.8)	6357 (11.1)	89 (3.1)	7364 (11.3)	94 (3.0)	8676 (11.5)	· 115 (2.7)
Above Rs. 5 Lakhs and upto Rs. 10 Lakhs	2436 (5.5)	72 (3.8)	2212 (4.4)	73 (3.4)	2450 (4.3)	83 (2.9)	2786 (4.3)	89 (2.8)	3278 (4.3)	114 (2.7)
Above Rs. 10 Lakhs and upto Rs. 25 Lakhs	2956 (6.7)	179 (9.5)	3271 (6.5)	183 (8.5)	3746 (6.5)	213 (7.5)	4175 (6.5)	228 (7.2)	4897 (6.5)	284 (6.7)
Above Rs. 25 Lakhs and upto Rs. 50 Lakhs	2671 (6.0)	273 (14.5)	3066 (6.1)	283 (13.1)	3632 (6.3)	361 (12.7)	4098 (6.4)	406 (12.9)	4847 (6.4)	497 (11.7)
Above Rs. 50 Lakhs and upto Rs. 1 Crore	2593 (5.9)	365 (19.3)	3009 (6.0)	381 (17.6)	3728 (6 5)	499 (17.5)	4375 (6.7)	561 (17.8)	5029 (6.7)	724 (17.1)
Above Rs. 1 Crore and upto Rs. 4 Crores	4238 (9.6)	548 (29.1)	5205 (10.4)	718 (33.2)	6725 (11.7)	1009 (35.4)	8019 (12.3)	1076 (34.1)	9813 (13.0)	1453 (34.2)
Above Rs. 4 Crores and upto Rs. 6 Crores	949 (2.1)	84 (4.4)	1212 (2.4)	103 (4.8)	1648 (2.9)	145 (5.1)	2372 · (3.6)	270 (8.5)	2801 (3.7)	406 (9.6)
Above Rs. 6 Crores and upto Rs. 10 Crores	913 (2.1)	72 (3.8)	1298 (2.6)	70 (3.2)	1636 (2.9)	164 (5.7)	2095 (3.2)	139 (4.4)	2301 (3.0)	268 (6.3)
Above Rs. 10 Crores	8533 (19.3)	169 (9.0)	8712 (17.4)	217 (10.0)	7929 (13.8)	227 (8.0)	6538 (10.0)	218 (6.9)	6336 (8.4)	302 (7.1)
TOTAL	44189 (100.0)	1886 (100.0)	50066 (100.0)	2162 (100.0)	57366 (100.0)	2850 (100.0)	65122 (100.0)	3156 (100.0)	75534 (100.0)	4247 (100.0)

Note :   1.   All Scheduled Commercial Banks (ASCB) comprise of SBI group, Nationalised Banks, and Other Scheduled Commercial Banks (Excluding Foreign Banks).

2.   Figures in brackets indicate percentages to total.

Source : Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 10 : Distribution of Outstanding Credit * of All Scheduled Commercial Banks (ASCB) and Foreign Banks according to interest range (as at end December)

(Rs. in Crores)

INTEREST RANGE	1984		1985		1986		1987		1988	
	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks
6% and less	428	14	581	16	707	23	1076	29	1375	50
	(1.6)	(1.2)	(1.8)	(1.2)	(2.0)	(1.5)	(2.6)	(1.7)	(2.9)	(2.3)
Above 6% and upto 10%	1186	32	1116	28	1945	94	3077	193	4211	101
	(4.5)	(2.7)	(3.4)	(2.1)	(5.6)	(6.2)	(7.5)	(11.0)	(9.0)	(4.7)
Above 10% and upto 12%	2362	89	2384	114	2067	104	2167	57	2432	70
	(8.9)	(7.4)	(7.4)	(8.5)	(5.9)	(6.9)	(5.3)	(3.2)	(5.1)	(3.2)
Above 12% and upto 14%	7888	158	11120	186	9954	99	11248	114	11390	109
	(29.7)	(13.2)	(34.4)	(13.8)	(28.6)	(6.5)	(27.7)	(6.5)	(24.2)	(5.1)
Above 14% and upto 15%	2535	48	2965	53	2823	40	3332	62	3812	86
	(9.5)	(4.0)	(9.2)	(3.9)	(8.1)	(2.6)	(8.2)	(3.5)	(8.1)	(4.0)
Above 15% and upto 16%	954	10	1092	9	1518	8	2206	49	3559	112
	(3.6)	(0.8)	(3.4)	(0.7)	(4.4)	(0.6)	(5.4)	(2.8)	(7.6)	(5.2)
Above 16% and upto 18%	10171	812	12446	911	15231	1137	17512	1244	19986	1602
	(38.2)	(69.9)	(38.4)	(69.6)	(43.8)	(75.1)	(42.8)	(70.9)	(42.4)	(74.3)
Above 18%	1057	10	654	3	550	8	208	7	270	26
	(4.0)	(0.8)	(2.0)	(0.2)	(1.6)	(0.6)	(0.5)	(0.4)	(0.6)	(1.2)
Total loans	26581	1173	32358	1320	34795	1513	40777	1755	47035	2156
and advances	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Bills purchased/discounted	8406	687	6472	814	8643	1302	7566	1360	8278	2055
TOTAL	34987	1860	38830	2134	43438	2815	48343	3115	55313	4211

Note: 1. All Scheduled Commercial Banks (ASCB) comprise of SBI group, Nationalised Banks, and Other Scheduled Commercial Banks (Excluding Foreign Banks).

2. Figures in brackets indicate percentages to Total Loans and Advances.

* Relate to Accounts With Credit Limits over Rs. 25,000.

Source : Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

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Statement 11 : Distribution of Outstanding Credit* of All Scheduled Commercial Banks (ASCB) and Foreign Banks according to type of account (as at end December)

(Rs. in Crores)

TYPE OF ACCOUNT	1984		1985		1986		1987		1988	
	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks	ASCB	Foreign Banks
Cash Credit	12572	43	15110	115	16760	141	19636	167	22411	202
	(35.9)	(2.3)	(38.9)	(5.4)	(38.6)	(5.0)	(40.6)	(5.4)	(40.5)	(4.8)
Overdrafts	1546	722	2490	765	2832	893	2922	1020	3154	1234
	(4.4)	(38.8)	(6.4)	(35.9)	(6.5)	(31.7)	(6.0)	(32.8)	(5.7)	(29.3)
Demand Loans	1133	177	1505	169	1466	148	1817	169	2095	164
	(3.2)	(9.5)	(3.9)	(7.9)	(3.4)	(5.2)	(3.8)	(5.4)	(3.8)	(3.9)
Term Loans	10302	142	12156	167	12282	194	14593	230	16920	284
	(29.5)	(7.6)	(31.3)	(7.8)	(28.3)	(6.9)	(30.2)	(7.4)	(30.6)	(6.7)
Packing Credit	1028	89	1098	104	1455	137	1806	169	2455	272
	(2.9)	(4.8)	(2.8)	(4.9)	(3.3)	(4.9)	(3.8)	(5.4)	(4.5)	(6.5)
Export Bills Purchased/Discounted/ Advanced Against	700	114	722	105	939	143	1228	116	1682	263
	(2.0)	(6.1)	(1.9)	(4.9)	(2.2)	(5.1)	(2.5)	(3.7)	(3.0)	(6.3)
Inland Bills (Trade) Purchase/Discounted	7048	485	4167	577	6230	938	4989	1034	4652	1568
	(20.2)	(26.1)	(10.7)	(27.0)	(14.3)	(33.3)	(10.3)	(33.2)	(8.4)	(37.2)
Inland Bills (Others) Purchased/Discounted	458	36	1324	69	1066	81	999	127	1362	136
	(1.3)	(2.0)	(3.4)	(3.2)	(2.5)	(2.9)	(2.1)	(4.1)	(2.5)	(3.2)
Advance against import Bills	164	49	203	63	258	137	259	79	461	84
	(0.5)	(2.6)	(0.5)	(3.0)	(0.6)	(4.9)	(0.5)	(2.5)	(0.8)	(2.0)
Foreign Currency Cheques/TCs/DDs/TTs/MTs Purchased	36	3	55	0	150	3	91	4	121	4
	(0.1)	(0.2)	(0.2)	(0.0)	(0.3)	(0.1)	(0.2)	(0.1)	(0.2)	(0.1)
TOTAL	34987	1860	38830	2134	43438	2815	48343	3115	55313	4211
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Note: 1. All Scheduled Commercial Banks (ASCB) comprise of SBI group, Nationalised Banks, and Other Scheduled Commercial Banks (Excluding Foreign Banks).

2. Figures in brackets indicate percentages to total.

* Relate to Accounts With Credit Limits over Rs. 25,000.

Source: Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 12 : Percentage Share of different groups of Foreign Banks in total deposits and credit of Foreign Banks
(As at end December)

Group of Foreign Banks	1969		1974		1979		1984		1988		1989	
	Deposits	Credit	Deposits	Credit	Deposits	Credit	Deposits	Credit	Deposits	Credit	Deposits	Credit
Group A	67.1	68.7	67.8	69.4	63.1	65.0	58.1	54.8	47.3	44.3	38.7	36.5
Group B	31.3	29.7	30.1	29.1	33.4	32.8	32.4	38.5	37.6	40.5	45.7	47.7
Group C	1.6	1.6	2.1	1.5	3.5	2.2	9.5	6.7	15.1	15.2	15.6	15.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Amount in Rs. Crores)	(487)	(403)	(813)	(614)	(1163)	(867)	(2140)	(1798)	(5330)	(5045)	(8290)	(7815)

Note : 1. Data upto 1984 are based on returns submitted under Section 42 (2) of RBI Act. 1934 and these data have been taken from various issues of Statistical Tables relating to Banks in India, published by DBOD, RBI, Bombay.
2. Data for 1988 and onwards are based on Quarterly Returns on Gross Bank Credit and Deposits, published in the form of Banking Statistics by DESACS, RBI, Bombay.

Statement 13 : Percentage Distribution of outstanding credit for different groups of Foreign Banks According to Organisation (As at end December)

ORGANISATION	1983 Group			1984 Group			1985 Group			1986 Group			1987 Group		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Public/Private Ltd. Companies	71.6	72.0	81.1	70.8	77.5	67.4	73.9	82.5	73.2	73.8	80.0	73.5	75.5	74.4	66.9
Private Firms	13.2	9.8	16.9	12.8	8.8	31.3	11.4	7.3	26.2	11.7	8.5	25.2	10.1	14.8	27.1
Individuals	2.6	1.7	2.0	2.4	3.0	0.9	2.8	2.5	0.2	3.7	2.9	0.5	3.5	4.5	1.0
Others*	12.6	16.5	-	14.0	10.7	0.4	11.9	7.7	0.4	10.8	8.6	0.8	10.9	6.3	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Amount in lakhs of Rupees)	(95442)	(50259)	(9605)	(110846)	(62313)	(12828)	(124550)	(73415)	(15438)	(134171)	(98872)	(48476)	(156773)	(98786)	(55956)

* Include Central Government undertaking, Co-operative Sector, Foreign Government/Banks, Government managed Public/Private companies, Joint Sector undertaking, State Governments, State Government undertaking and quasi Government Bodies.

Source : Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 14 : Percentage Distribution of outstanding credit for different groups of Foreign Banks According to Size of Credit Limits (As at end December)

CREDIT LIMIT RANGE	1983 Group			1984 Group			1985 Group			1986 Group			1987 Group		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Up to Rs. 1 Lakh	2.4	2.3	1.0	2.3	3.0	0.2	2.5	2.3	1.1	2.9	1.9	0.3	2.7	2.9	0.3
Rs. 1 Lakh and upto Rs. 10 Lakhs	7.9	9.1	15.2	7.9	6.8	15.0	7.4	6.5	9.4	6.7	5.8	4.8	6.5	5.2	4.9
Rs. 10 Lakhs and upto Rs. 50 Lakhs	22.3	25.2	41.2	23.9	21.4	37.5	21.4	18.8	36.8	19.6	17.4	27.5	19.7	16.0	28.7
Rs. 50 Lakhs and upto Rs. 1 Crore	15.2	23.5	29.3	17.1	21.8	26.8	17.0	16.6	27.3	16.0	15.1	26.9	15.6	15.9	27.8
Rs. 1 Crore and above	52.2	39.9	13.3	48.8	47.0	20.5	51.7	55.8	25.4	54.8	59.8	40.5	55.5	60.0	38.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Amount in lakhs of Rupees)	(96442)	(50759)	(9914)	(110949)	(64813)	(12865)	(124646)	(76136)	(15452)	(134670)	(100875)	(49474)	(158844)	(100300)	(56472)

Source : Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 15 : Percentage Distribution of outstanding credit for different groups of Foreign Banks According to Interest Range (As at end December)

INTEREST RANGE	1983			1984			1985			1986			1987		
	Group			Group			Group			Group			Group		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
10% or Less	3.0	3.0	1.2	2.7	3.6	0.8	3.1	3.9	1.5	8.6	6.2	6.2	11.8	9.8	10.3
10% to 16%	26.4	25 5	20.8	25.8	24.5	26.2	30.0	21.6	20.3	15.4	16.2	22.2	19.0	13.7	17.3
Above 16%	70.6	71.5	78.0	71.5	71.9	73.0	66.9	74.5	78.2	76.0	77.6	71.6	69.2	76.5	72.4
Total	100.0	100.0	100.0	100 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Amount in lakhs of Rupees)	(67253)	(32670)	(4580)	(75060)	(36210)	(6025)	(85720)	(39410)	(6909)	(84411)	(53225)	(13685)	(98502)	(57096)	(19944)

Source ·   Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics.

Statement 16 : Percentage Distribution of outstanding credit for different groups of Foreign Banks According to Type of Account (As at end December)

TYPE OF ACCOUNTS	1983 Group			1984 Group			1985 Group			1986 Group			1987 Group		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Cash Credit/ Overdrafts Demand Loans	57.5	52.4	30.6	56.3	49.2	28.9	54 8	45.3	32.0	50.1	46.3	26.6	48.6	47.1	26.7
Term Loans	7.5	7.4	9.0	7.5	7.5	7.7	9.4	5.2	6 4	8.5	4.2	7.5	7.6	6.6	7.4
Packing Credit/ Export Bills	12.7	12.2	9.3	10.7	9.2	12.9	9.6	9.1	13.0	9.1	10.5	10.4	9.0	7.7	11.6
Inland Bills (Trade)/ Inland Bills (Others)	20 5	27.6	49.6	21.7	32.8	48.4	22.6	38.1	47.4	26.9	37.4	52.9	31.4	37.4	51.3
														1.2	
Import Bills/ Foreign Currency	1.8	0.4	1.5	3.8	1.3	2.1	3.6	2.3	1.2	5.4	1.6	2.6	3.4		3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(Amount in lakhs of Rupees)	(95442)	(50259)	(9605)	(110846)	(62313)	(12828)	(124550)	(73415)	(15438)	(134171)	(98872)	(48476)	(156773)	(98786)	(55956)

Source . Basic Statistical Returns (BSR) published in the various volumes on Banking Statistics .

Statement 17 : Indicators of Profitability and Efficiency of Different Bank Groups for Selected Years

(Amount in Rs. Lakhs)

Indicators	1969		1974		1979		1984		1986	
	Foreign Banks	Public Sector Banks	Foreign Banks	Public Sector Banks	Foreign Banks	Public Sector Banks	Foreign Banks	Public Sector Banks	Foreign Banks	Public Sector Banks
Deposits per employee	-	-	-	-	10.72	6.40	18.88	10.50	32.76	13.39
Advances per employee	-	-	-	-	7.99	4.07	15.87	6.70	23.57	7.90
Turnover per employee	-	-	-	-	18.72	11.27	34.74	17.21	56.33	21.29
Profit per employee	-	-	-	-	7.20	0.63	24.32	0.84	61.50	1.77
Deposits per branch	380.64	61.99	634.93	72.75	915.71	134.50	1621.02	231.81	2739.21	297.36
Advances per branch	314.92	44.10	479.45	48.58	682.53	85.51	1362.36	147.96	1971.19	175.62
Spread/Working Capital*	3.44	2.72	3.93	2.75	4.28	2.00	4.60	2.21	4.60	2.10
Burden/Working Capital*	2.33	2.00	3.29	2.63	3.76	1.91	3.70	2.14	3.17	1.98
Profit/Working Capital*	1.11	0.72	0.63	0.13	0.52	0.01	0.90	0.07	1.43	0.11
Interest paid/ (Deposit + Borrowing)	3.27	3.45	5.08	5.06	5.45	5.23	7.14	6.54	7.28	6.68
Interest earned/Advances	11.54	11.23	17.83	15.15	17.58	14.36	25.35	16.81	20.10	15.94

Note :   Data are based on returns submitted under section 42(2) of RBI ACT, 1934. These data have been taken from various issues of Statistical Tables relating to Banks in India, published by DBOD, RBI, Bombay.
'-' = Not available.   * = Relates to percentage points.

BOOK REVIEWS

North-South Trade in Manufactures, Edited by H.W. Singer, Neelambar Hatti and Rameshwar Tandon (New Delhi, Indus Publishing Company, 1990, pp 720, Rs. 700.00)

THIS book, the seventh in the New World Order series, is dedicated to Professor Raul Prebisch — a pioneer in the field of international trade. Against the backdrop of changing patterns of comparative advantage, the editors evaluate the predictive power of comparative advantage indices for further trade changes. Several relevant issues pertaining to changing product composition of "maturing" less developed countries (LDCs) and the extent to which individual LDCs could capitalise on labour-intensive manufactures in their exports have also been studied.

There is a general feeling that it is necessary to take a relook at the question of LDCs' relying on export-led growth as an "engine of growth". Expanding exports is crucial for the growth of LDCs, but this requires significant structural changes in both developed and less developed countries. For LDCs, the challenge is to have enough flexibility to capture markets in the developed countries since they can not afford to be on the sidelines of global economic activity.

The volume under review brings together recent studies relating to the following major elements of North-South trade in Manufactures : Changing patterns of comparative advantage; Market structure and export performance; North-South terms of trade; structural change and the fallacy of export composition; Export opportunities or immiserization; Institutional obstacles to South-South trade; and Alternative approaches to measure structural change. In this review, we shall focus on some of the important research efforts, to highlight the major points of interest relevant for the subject under view.

Paul Streeten deals primarily with the doctrine of comparative advantage as also with subsequent modifications. In its Ricardian version the doctrine must assume constant unit costs while the Heckscher–Ohlin–Samuelson version assumes increasing unit costs. According to the author, the differences in comparative advantage have little to do with who produces what; political pressures are often responsible for the inability of governments to pursue free trade. With increasing expenditures on R and D, comparative advantage has become something "created" or "manipulated" – which is one way of saying that it could be influenced by technical progress. This indeed is borne out by the emergence in recent years of countries which adopted new technologies and refinements in their production processes and updated them constantly to meet market needs.

Bela Balassa and Marcus Noland study changes in the comparative advantage of the United States and Japan for 167 manufactured goods for 1967–83. The structure of comparative advantage is econometrically estimated as a function of inter–industry differences in factor intensities. Results reveal the transformation of Japan from unskilled labour–intensive goods to human capital and R & D intensive products. The United States maintained its strength in human capital, physical capital and R & D intensive products, for the period under review. Trade pattern in high technology intensive products are analysed for the two countries and future patterns indicated. The indicated future patterns seem to fall in line with the experience of the 1980s especially after 1983.

Alexender J. Yeats tests the use of factor proportion indices as a predictor of developing countries exports; he has taken 20 LDCs from different continents. Yeats' analysis covering the period 1965–86 found factor proportion data useful for LDCs' future exports as well as for long–term trade policy. The study noted that a relation existed between the level of labour–intensity of a product and the export performance of developing countries. The study also concludes that LDCs' export performance in terms of market shares was better in labour intensive items and also accounted for a steadily increasing share of non–fuel exports.

Cristian Moran uses a simple model to assess the likely

impact of a change in external economic activity on export revenues for developing countries – a key concern for the highly indebted countries. Moran's model finds that prices, domestic capacity and external economic activity clearly affects the supply of manufactured exports. The analysis suggests that for highly indebted countries to generate enough resources to service their debts, they have to adopt domestic economic policies, particularly those encouraging investment in export – oriented activities and appropriate exchange rate policies. While this is a generally accepted proposition, the periods of adjustment could be painfully long and harsh, if the concerned LDCs do not get adequate resource inflows and do not face favourable external environment. This point is now being increasingly recognized in the literature on external debt crisis.

C.D. Jebuni, J. Love and D.J.C. Forsyth consider the influence of market structure (domestic market concentration) on LDCs exporting manufactured products. Their evidence suggests that market structure has a favourable impact on export performance in half the sample countries and an unfavourable impact in the other half. They recommend that care should be taken in prescribing policies for individual countries with respect to degree of competition. This is a point well taken but if one considers the period of study, one would notice that it is comparatively devoid of general economic liberalisation measures in the relevant LDCs. If the regimes change, there may be efficiency gains, and LDCs may be benefitted by economic diversification into exportable manufacturing activities.

Detlef Lorenz states that during the course of 1988-89, tendencies to form regional trading blocs were becoming a matter of concern as it would only increase protectionism, a sentiment that was so well echoed by·Paul Streeten elsewhere in the volume, in the following words "........ economists recommend free trade and everywhere there is protection" (p.35). Lorenz however, hopes that these tendencies reveal only an "open–minded" regionalism, not based on inward-looking strategy of trade-bloc building.

P. Sarkar and H.W. Singer find that manufactured exports did not provide the LDCs as a whole with any major escape from the

long-term deterioration in their terms of trade *vis-a-vis* the DCs. This was particularly the case with highly indebted countries – where the decline in relative unit values of manufactured exports surpassed the decline in relative unit values of total exports. The authors clearly rule out changes in real exchange rates as an explanatory factor for either the expansion of volumes or the deterioration in overall manufacture terms of trade between 1980-82 and 1983-85. This conclusion is not surprising, considering the fact that these countries have been manufacturing products in which the market preferences have shown a shift in favour of more technologically superior products and in which competition has been severe.

On the theme of terms of trade, David Evans' evidence of the long-run decline of terms of trade between manufactures and primary commodities seems to suggest that the main culprit is the biased technical change. Evans goes further to show that social and political constraints in the South account for the bias in technical change. This may be true but the supplies of primary commodities as well as better inventory management of primary products seem to have had a say in the matter.

Underlining the importance of expanding exports for LDCs, Gary Sampson states that this would require a structural change in both developed and developing countries. Developing countries should be flexible enough to capture markets of the developed world. His arguments for flexibility are in terms of policies that show market orientation, reward incentives, and promote export units that are efficient.

O. Havrylyshyn argues that even when developed country market conditions are poor and exhibit some protectionist tendencies, the best trade policies for LDCs are still the outward oriented ones as pursued by the Asian "Gang of Four" (Singapore, S. Korea, Hong Kong, Taiwan). This could be contentious because outward orientation would ultimately lead, through efficiency gains, to growth in exports which should not be impeded by protectionism, and inappropriate adjustment measures in developed countries which after all provide the main markets for LDCs.

Examining the determinants of international trade in-

manufactured products in 152 industries among 38 major ex-
·porters. Bela Balassa   and Luc Bauwens conclude that the rela-
tive capital intensity of exports is positively correlated with rela-
tive capital abundance, something that is now taken for granted but
was once found to be untrue, as shown by the Leontief paradox.
The results of their multi-country and multi-industry model also
reveal that trade between any two countries is positively correlated
with their average per capita income and country size and nega-
tively correlated with inter-country differences in these variables.

Jean Waelbroeck and Jacob Kol focus on North-South trading
relations with the "Big Three" nations (The USA, Japan and the
EC). After reviewing the overall evolution of trade in these nations,
the authors discuss the comparative advantages of the developing
countries and the protectionist obstacles that have affected their
exports to the community. The authors contend that other than
refined oil, the share of natural resource intensive goods in
developing countries' total exports and their exports of manufac-
tures, has been falling sharply, reflecting lost opportunities to other
countries which are rich in natural resources such as Australia,
Canada and the U.S. The authors also state that any breakthrough
for steel, ship-building and automobiles industry is unlikely to be as
swift and decisive as that which developing countries achieved for
clothing in the 1970s, owing to competition from Japanese
producers as also the protection these industries were able to ob-
tain.

Abdelhamid Mahbob and Jeffrey B. Nugent model substantiate
G. Chichilnisky's case that immizerisation can occur even when an
initial change is brought about by an increase in North's demand for
South's exports. Their model relies on a dualistic labour market,
which can be interpreted as a distortion providing yet another ex-
ample in support of Bhagwati's "general theory of immiserising
growth". They included a "migration function" of the Harris-Todaro
type which serves as a "second adjustment mechanism" (pg. 462)
(in addition to the terms of trade) – which is crucial for immiseriza-
tion because it would "trigger adjustments in the labour market"
(pg.462) which would lower the South's terms of trade and income;
otherwise export demand shift would improve the South's terms of
trade and incomes.

Kym Anderson disputes the conventional view that agricultural growth in developing countries reduces their agricultural imports from developed countries like the U.S. and proves empirically for China that though agricultural output increased by 50 per cent between 1978 and 1984 so did agricultural exports to China. One could perhaps supplement examples to prove the point, but the logic of the conventional view is fairly strong in the case of most countries.

The need to attain and thereafter sustain a high growth of exports in manufactures, improve export revenues from primary product exports and alleviate the debt servicing burden are some major problems confronting developing countries, as highlighted by Dragoslav Avramovic. Regarding trade preference, valuable lessons can, in Avramovic's view, be drawn from the operation of the existing schemes of GSTP. One of them is that tariff reductions by themselves are not sufficient and must be supplemented by a reduction in non-tariff barriers. But more important is to adopt direct measures that foster cooperation in investment, production and technology to bring about a satisfactory degree of trade expansion. The author opines that both mutual trade and trade with the rest of the world can develop simultaneously, as long as there are unemployed resources in developing countries and their exports to developed and other convertible currency countries are subject to market limitations.

Louis Emmerji is critical of the fact that many OECD countries do not practice what they preach as a number of regulations, especially in agriculture, subsidies, etc. exist. The overall pattern of policy intervention continues to be heavily dominated by market price support. GATT has been ineffective insofar as agricultural products are concerned, with the result benefits accrue to countries such as U.S.A., Switzerland and Japan. Proposals to remedy the situation no doubt abound. While the U.S.A. and The Cairns Group call for a complete phase-out of all agricultural subsidies and import barriers, the EEC calls only for a 'concerted reduction in support'. Net importing countries including Japan and some EFTA countries favour regulation in production. Emmerji views that these proposals fail to respond to higher costs of imported food nor do they address the role of agriculture in the context of development in many developing countries.

Tamal Datta Chaudhuri and Arpita Dhar investigate the rationale behind the provision of export subsidies and the impact they have had on India's export performance. They highlight the structural change in India's exports, competitiveness of India's exports and the change in the strength of India's exportables over time. The authors conclude that the motivation behind providing subsidies has been the overall balance of payments deficit in the current account. They hypothesize that the observed deficit at the end of a period would lead to provision of subsidies in the next period such that increased export earnings reduces the deficit in that period. In their view, subsidies have to be provided only for specific products. Specially with limited resources, an 'across the board' subsidy provision would not help. The authors contend that if export policies are meant to promote exports then this should get reflected in the "deviation of actual earnings from hypothetical earnings".

C. Rene Dominique presents his analysis with Taylor's contribution on North–South trade patterns and growth within a structuralist perspective. Most of Taylor's conclusions are upheld with minor additions which offer a clearer picture of southern dependency. Economic performance in both the regions depends essentially on what happens in the North. The paper suggests that South should make its market more quantity-cleared and control its investment demand function to reduce its dependency in the long run.

Garciela Chichilnisky evaluates the role played by international markets in mediating North–South relations and analyses how the market works in distributing gains from trade. The presence of distortions in the form of dual production systems in the South, may prevent expansion of exports from improving consumption or real wages in the region. In fact, export-led policies might lead to serious deterioration of terms of trade thereby lowering export revenues for the region if it specializes in labour–intensive goods. She concludes that import substitution or indeed infant industry protection is neither a necessary nor sufficient correction to the harmful effects of export-led policies. The export sector of the South must be carefully balanced with the domestic sector in order to avoid harmful effects on the economy as a whole. The required protection should be of the domestic market rather than any infant industry, and should lead to betterment or increased welfare for all.

The book is a rich collection of ideas in international trade and in North-South relations. While many contributions give the impression of being somewhat biased in favour of the South, the suggestions and the analysis that follow from them should be seen as reactions to developments in the North which have generally had unfavourable effects on the South if the decade of the eighties is considered as a whole.

Abha Prasad[*]

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* Ms. Abha Prasad is Research Officer in the Department of Economic Analysis and Policy.

An Operational Planning Model for the Indian Economy: A Systems Approach, by G. Ananthapadmanabhan, Himalaya Publishing House, Bombay 1990, pp. XIII + 244, Rs. 105

THE literature on modelling of the Indian economy that has grown over the years since the 'fifties is truly impressive. Planning models for India in particular have been many, with many official and academic contributions distinguishing themselves as unique.

Ananthapadmanabhan's study under review is a scholarly piece which won for him a doctorate degree from the University of Bombay. It has reviewed in a succinct manner the existing Indian planning models. More importantly, it has provided a small linear operational physical planning model of the Indian economy, which falls in the broad genre of Walras–Johansen type of models.

The book has in all 10 chapters including 'Introduction' and 'Conclusions'. Chapter 2 is of historical interest in that it surveys the planning models in India, after discussing the theoretical developments concerning the development planning models. Chapter 3 is indeed the critical part of the book. It is here, as already stated, the author has provided a small linear, operational, physical planning model of the Indian economy: The model has twelve equations covering seven broad sectors, the sectors being chosen on the basis of the strength of the backward linkages which have more powerful effects than forward linkages. The sectors are : agriculture, mining and quarrying, manufacturing, power, construction, railways, and other transport. The twelve endogenous variables considered are : foodgrains, coal and lignite, iron ore, fertilisers, inorganic heavy chemicals, petroleum products, cement, iron and steel, electricity, construction, railways and transport. There are thirteen exogenous variables, *viz.*, minerals, jute textiles, motor vehicles, engines, wagons, explosives (industrial), mining machinery, non-ferrous metals,

irrigated area, non-irrigated area, gross cropped area, rainfall index, and crude throughput. All the independent variables in each equation are treated in terms of their net availability, while the dependent variable of each equation is in terms of its level of production, since the intention is to probe the link between production and net availability.

The structural form of the physical model is sought to be converted into financial form. There are 8 conversion equations. *These enable us to calculate the gross domestic product.*

Chapter 4 presents the structural form of the operational planning model presented in the previous chapter, in its estimated form. The estimates of the equations were obtained by using ordinary least squares (OLS) in combination with the Cochrane-Orcutt two-stage auto-regressive transformation. The period of the study is : 1961-62 to 1978-79.

Chapter 5 gives an econometric analysis of the estimated model. After identifying the model, its reduced form has been obtained. The reduced form coefficients have been used for full model simulation and counterfactual policy experiments which have been undertaken in the subsequent two chapters. The simulation results have been analysed in terms of the Root Mean Square Simulation Errors (RMSE) and Theil's Inequality Coefficient so as to meet the goodness of fit criterion and the turning points criterion. Most of the simulated values were close to the actual values, in their physical and financial forms. The RMSE per cent and Theil's inequality coefficient obtained for GDP show that the model captured the essential characteristics of the behaviour of the economy over the sample period, 1964-65 to 1978-79.

In Chapter 8, forecasting has been attempted with the help of the model for a period beyond the estimation period. More specifically, *the ex post forecasting has been done for 1979-80 to 1984-85.* This shows that the model, without any adjustments, could withstand all the tests. The chapter shows no structural break. Therefore the author has used it without alteration to obtain forecasts over the Seventh Plan period, 1985-90, in Chapter 9. One of the innovative aspects of this chapter is the introduction of a

stochastic version of the model (which is deterministic). Yet another innovative aspect is the application of instruments–targets approach on the lines of Jan Tinbergen and obtaining a split in the exogenous variables into core and 'slack' variables.

For a book based on Ph.D. thesis, it is a remarkably well written technical work. Many conventional econometricians may not be happy with the OLS approach of the author in estimating the structural equations. But the author has shown on pp. 69–70 why he has decided to use OLS method. This, one could say, is the beginning of a revival of the time–tested method.

This reviewer would like to make a point here essentially to suggest that the author may, while continuing in future his work in the area, like to give an explicit recognition of the distribution aspect – especially the "basic needs".

The book is a useful addition to any library, and could be profitably read by all students of planning.

Tapas Kumar Chakrabarty*

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* Dr. T.K. Chakrabarty is Assistant Adviser in the Department of Economic Analysis and Policy.

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