## CHAPTER FIVE

# THE DYNAMICS OF FEDERAL FISCAL TRANSFERS TO THE STATES IN NIGERIA

## I. INTRODUCTION

In this chapter we have examined various issues concerning federal fiscal transfers to the states. Hence, we discuss here the meaning and importance of federal transfers, the mechanics of fiscal adjustment in a federal set-up, through statutory transfers, federal grants, and federal loans. On the basis of established theories in fiscal federalism, and also from the experiences of other major federations, an attempt has been made to test few hypotheses empirically in case of Nigeria.

From the preceding chapters we have noted that federalism implies the existence of inequality - between the centre and the states, as well as amongst the states interse. This problem of inequality between the centre and the states, as we observed, originates from constitutional division of resource and responsibility[1], whereas for the states interse, the same results from the variation across the states in taxable capacity and performance which itself emanates from the uneven distribution of natural resources and the ability of the citizens to harness the same. Hence, the problem of vertical and horizontal fiscal imbalances. The former refering to the centre states disequilibrium in resource and responsibility, and the latter refering to the imbalance amongst the states[2]. This disequilibrium necessitates a fiscal adjustment so that each tier and each unit of government has enough resources to discharge its obligations. This fiscal adjustment generally takes the form of federal transfers to the states[3]. In this chapter, we are concerned only with federal transfers that adjusts the revenues of the centre on the one hand, with that of the states (as a collective entity) on the other hand. That is, the vertical fiscal adjustment. The horizontal fiscal adjustments have been examined in chapters seven, and eight.

1. It had been pointed out earlier that whereas the federal constitution assigns to the centre the more productive and more elastic resource bases with less expensive and less expansive expenditure obligations, it assigned to the states the less productive and less elastic resource bases with more expensive and more expansive expenditure obligations. For details, see II.1.1 of chapter two.
2. For details see sections II.1.1 and II.1.2 of chapter two.
3. In chapter two we had argued that if federalism is used in a broad sense to include loose federations known as confederation, in that case the states in such federal set-ups are very likely to be richer than the Centre. In such a circumstance fiscal transfers will be from States to the Centre. Here, there is an implicit assumption that we are dealing with a Centralistic federal nation, where the Centre is richer, and hence, transfers from Centre to the States.

From the above, it is, therefore, noted that federal transfers imply a "compelled" action of the federal government in transfering resources to the states from its own revenue pool with a view at making available to the lower-level governments, "sufficient revenues" to discharge their constitutional obligations. The emphasis here is on "compelled" and "sufficient revenue". The former because the pre-transfers budget position of the states is generally precarious (with huge deficits) such that central assistane to the states becomes inevitable, hence the centre is held under compulsion to making transfers to the states. And the latter because in the absence of sufficient revenue in the hands of the states, they would not be able to discharge their constitutional responsibilities.

The above observations thereby imply that federal transfers give the information in regards to fiscal dependence of the states on the centre. Hence the same is generally taken as a measure of vertical fiscal imbalance[4] and the means of correcting the same. Put differently, federal transfers would be used as an indicator of the degree of vertical fiscal imbalance as well as the means to achieving a vertical fiscal equalization. Following section deals with federal transfers.

## I.1 FEDERAL TRANSFERS

Fiscal adjustment through federal transfers to the states generally take the form of (a) statutory transfers (b) federal grants, and (c) federal loans. These are discussed below -

### I.1.1. STATUTORY TRANSFERS

The existence of a huge dichotomy between the pre-transfers resource and responsibility of the centre and its constituent units, as observed earlier renders resource devolution imperative in a federal set-up. If the constitution does not specify "what" the centre should transfer to the states, the former may use its own discretions to transfer "what" it considers 'sufficient revenue' to the states - which may or may not be sufficient - but which the recepient governments, the states, would never consider sufficient in their own eyes.

4. R. Sudarsana Rao, Grants-in-Aid and Economic Development in India, Chugh Publications, Allahabad, 1986, p. 50

This way, the federal constitutions in all major federations[5] stipulates that a certain proportion of revenues from a particular revenue head or pool of revenue heads should be transfered from the centres to the states in any fiscal year. These transfers which are made obligatory - for which the grantor government has no discretion[6] are called statutory transfers. In other words, these are the transfers which the statute - the federal constitution guarantees the states and for which the centre has no discretion, has no contemplation, and cannot impose any conditions. They are generally transferred from the Current Account of the Centre to the Current Account of the States.

It may also be pointed out that statutory transfers is synonymous with revenue sharing and unconditional transfers in most federations. Hence, "tax revenue sharing from the general revenue of the national government is like unconditional grants which are transferred from the general revenue of the national government collected nationally. Sharing of revenue from a specified tax is similar to earmarking the yield from a particular tax for making unconditional grants".[7] These "unconditional grants are those federal fiscal transfers which are intended to reduce vertical and/or horizontal federal fiscal imbalance without requiring the receipient governments either to use the grants for any specific purpose or to make any matching contributions".[8]

### I.1.2. FEDERAL GRANTS

Federal Grants[9] are non-obligatory by nature. That is, these are the transfers which the grantor government (generally the centre), may or may not make to the states. When they are made, they are unrequitable, i.e., the receipient governments (generally the states), are not expected to repay the fund so transferred, and are not also expected to pay interests

5. See the Federal Constitutions of USA, Australia, Canada, Germany, India and Nigeria.
6. For details, See Wheare K.C, Federal Government, Oxford University Press, London, 1953, p. 101.
7. Thimmaiah G., Federal Fiscal Systems of Australia and India (A Study in Comparative Relevance) Associated Publishing House, New Delhi, 1976. p. 98.
8. Thimmaiah G. ibid. pp. 143
9. Some writers use this term in a broad sense to include all federal transfers to the states other than federal loans. But they distinguish between discretionary and non-discretionary federal transfers. The former is what we have regarded here as Federal Grants, and the latter has been referred to as Statutory transfers. Aronson (1985), Wheare (ibid), and R. Sudarsana (ibid) have all use the term in a broad sense.

on them. Thus they are non-obligatory and non-requitable federal financial assistance to the states. They are capital transfers which go into financing part of the capital budget of the states.

Federal grants could be conditional or unconditional,[10] matching or non-maching, as well as open-ended or close-ended. Sometimes, these are also for specific purpose or as a block amount. Federal grants are said to be conditional if the centre requires the states to fulfill certain conditions or criteria before the grant sum could be made available to them. It is unconditional when such conditions are not imposed. If for a particular purpose or project the centre is willing to contribute a fraction of the project cost on the condition that the receipient state contributes the remaing fraction, then the grant is said to be matching.[11] A grant is said to be non-matching when the centre transfers such funds to the states without regard to the cost of the project(s) and how much the states spend on it (them). When the centre contributes to the cost of a state's project (mostly on matching basis) till such project is completed -- irrespective of its costs, then such a grant is said to be open-ended. This is so because there is no limit to centre's contribution in such project so long as it remains uncompleted. If on the other hand, the centre makes a grant to a state subject to the condition that the project cost should not exceed a particular amount, or specifies the amount it is willing to grant to the state(s), then such grants are said to be close- ended. Specific purpose grants, as the name implies, are grants which are utilized only and only for a particular specified purpose. And lastly, when the centre transfers block amount to the states in the form of grants, such transfers are regarded as block grants. Block grants may be conditional or unconditional but not necessarily matching.

Whereas unconditional grants are generaly welcomed by the states, conditional grants are geneally frawn upon. This stems from the fact that in the case of unconditional grants, the states enjoy their independence in spending the same, whereas, they lose such

10. Unconditional grants are generally synonymous with statutory transfers or revenue sharing, see section II.1 of this chapter. Thus Federal grants as used here implied conditional grants.

11. Sometimes matching grants are expressed in a direct relationship with the states contribution for a particular project, say for instance for every one dollar the State spends the centre may be willing to spend two dollars or even half a dollar.

autonomy in the case of conditional grants as the centre sets conditions of their utilization. Thus, unconditional grants are preferred as these do not limit the fiscal autonomy of the states. Prior to 1972, most of the grants, made to the states in Nigeria were conditional, non- matching, specific-purpose block grants. On the other hand, from 1972 the Grant system was largely conditional and matching.[12] Here, we may note that while all conditional grants may not be matching grants, on the other hand, all matching grants are conditional grants.

Conditional grants are justified on the ground that the national government in a federation should use these federal fiscal transfers for correcting distortions in the alloaction of resources".[13] The same may also be used as an effective method of redistribution amongst the states. Thus, Musgrave observed that "....redistribution elements may be attached to specified grants as is the case if the matching ratio is rendered a function of state need and fiscal ability".[14] That is to say that if the federal grant to the respective states is discreminatory, and matching for specific purpose -- according the need of the states as may be reflected be their respective socio-economic indicator(s), and also on the ability of these states to generate their own revenues, then the federal grants would be redistributory. This is so because this arrangement will permit more resources to be transferred to the most needy states and those states which are less able to generate their own revenue.

### I.1.3. FEDERAL LOANS

The third channel of financial transfers to the states is federal loans. These are requitable financial assistance from the centre to the states. This thereby implies that whatever amount the centre transfers to the states from this mechanism, the latter are expected to repay the same to the former along with interests thereon. Thus, unlike the statutory transfers and federal grants, federal loan increases the financial burden of the states. As such it serves as a temporary relief to the states.

12. See Chapter IV of the Main Report of Okigbo Presidential Commission on Revenue Allocation, Federal Government Press, Lagos, 1980
13. Thimmaiah G. ibid. pp. 286
14. Musgrave, R.A. "Multi-level Finance", in the Theory of Public Finance , edited by Musgrave, R.A, McGraw-Hill, New York, 1958.

## II. ISSUES EXAMINED AND METHODOLOGY APPLIED

In this section we present various issues examined and the method of inquiry adopted for this purpose.

### II.1. ISSUES EXAMINED

The following four issues have been examined in this chapter.

(1) The trend and structure of federal transfers to the states is examined along with the proportions of Federal Transfers in the Total Receipts and Expenditure of the Federal.

(2) The theory of federal transfers tells us that fiscal dependence of the states on the centre is a threat on their autonomy, and hence a threat on their viability. Thus, the more the states rely on the centre for financing their expenditure obligations, the more they lose their independence. However, the loss of autonomy does not arise from federal transfers in general but from conditional federal transfers specifically. Thus, we intend to examine whether, and to what extent conditional federal transfers impose a limit on the financial autonomy of the states in the Nigerian federation.

(3) The Federal Current Receipts determine mainly the quantum of statutory transfers to the lower-level governments. Also, a higher possibility exists that the same play a crucial role in determining the size of Federal Grants and Federal Loans to the federating units. We, are therefore, interested in examining the association between Federal Current Receipts and Federal Grants, and also between Federal Current Receipts and Federal Loans - to the lower-level governments - in the Nigerian federation. Do higher federal current receipts imply higher Grants & Loans or not ?

(4) The pre-transfers budget deficits of the federating units is generally one of the important determinants of statutory transfers to these lower-level governments. Hence, we intend to empirically test whether or not there is a positive association between the pre- transfers budget deficits of the federating units and the statutory transfers in the Nigerian federation.

## II.2. METHODOLOGY APPLIED

In order to carry out the investigations as highlighted in the preceding sections, the following methodology has been adopted.

(a) Simple proportions and ratios have been implored to ascertain.

(i) the structure and trend of the federal transfers to the states.

(ii) the share of federal transfers in the total receipts of the federal and state governments respectively.

(iii) the share of federal transfers in the expenditure of states.

In the previous analysis we have examined the data in respect of aggregate and statutory transfers for the entire period of the study, 1956-88, and in three sub-period of 1956-67, 1968-79 and 1980-88. The same pattern has been followed here. Since the data for federal grants are available for the period 1959-81, these are examined for this period, and then in two sub-periods of 1959-67 and 1968-79. Similarly, the data coverage of federal loans is 1959-86, hence we have analysed the data for this period and then for three sub-period of 1956-67, 1968-79 and 1980-86.

(b) As for the determinants of federal transfers to the states, a multi-variate regression equation has been fitted with double log model. That is :

$$\log y = B_0 + B_1 \log X_1 + B_2 \log X_2 + \dots + U_i$$

A detail explanation of this model has been given in the section VII.3 of this chapter. The regression analysis has been fitted for respective categories of federal transfers (statutory transfers, federal grants and federal loans) for the entire period as well as for the sub-periods. For statutory transfers the independent variable are Federal Current Receipts and States pre-transfers Deficit (in percentages). For federal grants and loans, the independent variables are : Federal Capital Receipts, Federal Current Account Revenue-Expenditure Ratio, and States Capital Outlay.

## III. STRUCTURE AND TREND OF FEDERAL TRANSFERS TO THE STATES IN NIGERIA

### III.1. STRUCTURE OF THE AGGREGATE TRANSFERS

Table 5.01 shows the total transfers from the centre to the states in Nigeria and its distribution between the component parts. From this table it is noted that the federal transfers in Nigeria are composed of the three mechanics of fiscal transfers. However, the table reveals that whereas a consitency was maintained in statutory transfers, that is no single year passed without statutory transfers being made to the states, the same cannot be said of the capital transfers - federal grants and federal loans. This way, it is noted that for the years 1956-58, and 1982-88 no grants were made to the states. And similarly, in 1958, 1987 and 1988 federal loans were not made available to the states. This, no doubt stems from the fact that whereas statutory transfers are transfers for which the centre has no discretion in both quantum and regularity, federal grants and loans are entirely at the discretion of the centre. Columns 6 to 9 of table 5.01 reveal the structure of federal transfers. It is observed that statutory transfers have dominion over federal grants and federal loans in the aggregate transfers. It is, therefore, seen from column 6 for the entire period of the study, 1956-88, that the share of statutory transfers varied between 54.37% in 1977 to 100.00% in 1958 and 1987-88, with execption of 1973, 1974 and 1974 when the same was relatively low at 45.54% 47.96% and 43.55% respectively. Between 1956 to 1967 (the first period of the study) the range was from 66.16% in 1961 to 100% in 1958. It ranged between 54.37% in 1977 and 95.80% in 1968 during the second period, 1968-79, (with the exception of the three years noted above). However, it ranged between 67.93% in 1984 to 100.00% in 1987- 88 in the last period, 1980-88.

On the other hand, columns 7 and 8 indicate that the relative share of federal grants and federal loans were comparatively low. This way, it is observed that during the period when grants were devolved to the states 1959-81, its share in the aggregate transfers ranged from 0.41% in 1970 to 27.85% in 1979. It varied between 5.23% in 1959 and 8.72% in 1962 between 1959 and 1969 (with the exception of 1961 and 1964 when the figure stood at 22.80% and 12.09% respectively), and from 0.41% in 1970 to 27.85% in 1979 between 1970 and 1981. Therefore we note that although the relative share of federal grants in the aggregate transfers to the states were generally small, it was quite higher in the later years, especially from 1975 to 1980, the period of the third National Development Plan. It was lowest during the three years of civil war, 1968 to 1970 when the figures stood at 1.91%, 2.14% and 0.41% respectively. As far as federal loans are concerned, its relative share was also comparatively low, although the same was generally greater than that of federal grants in the aggregate transfers (see column 8). For the period loans were made available to the states 1956-86, its relative share in the aggregate transfers ranged between 3.68% in 1957 and 35.21% in 1972 (with the exception of the two years, 1973 and 1974 when the figures were exceptionally high at 51.98% and 49.75% respectively. Between 1956 and 1967, the first period of the study, it varied from 3.68% in 1957 to 13.50% in 1960, and from 2.30% in 1968 to 51.98% in 1973 between 1968 and 1979. Here, it is interesting to note that from 1972 to 1978, the relative share of federal loans ranged between 25.36% in 1978 and 51.98% in 1973 which thereby implies its increased role during this period. During the last phase, 1980 to 1986, the proportionate share of loan transfers, again, declined and ranged merely between 5.64% in 1980 and 10.84% in 1986 (with the exception of 1984 and 1985 when it stood at 32.07% and 26.49% respectively).

The overall impression, therefore, is that in Nigeria, the obligatory transfers, (statutory) overwhelmingly dominated the discretionary transfers, federal grants and loans. Since the statutory transfers are made unconditionally unlike federal grants and loans, there is, therefore, an implication that the states enjoyed greater autonomy in the utilization of federal transfers, and as such the states cannot be said to be financially dependent on the

## TABLE 5.01
## TOTAL TRANSFERS TO NIGERIAN STATES AND ITS DISTRIBUTION BETWEEN THE COMPONENT PARTS, 1956-1988
### (AMOUNT IN MILLION OF NAIRA)

| Year | Total Transfers | Statutory Transfers | Federal Grants | Federal Loans | Statutory Transfers (3 as % of 2) | Federal Grants (4 as % of 2) | Federal Loans (5 as % of 2) | Federal Grants & Loans (7 + 8) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1956 | 47.94 | 46.17 | - | 1.80 | 96.25 | - | 3.75 | 3.75 |
| 1957 | 54.36 | 52.36 | - | 2.00 | 96.32 | - | 3.68 | 3.68 |
| 1958 | 54.52 | 54.52 | - | - | 100.00 | - | - | - |
| 1959 | 65.61 | 58.18 | 3.43 | 4.00 | 88.67 | 5.23 | 6.10 | 11.33 |
| 1960 | 81.41 | 70.42 | 4.28 | 6.71 | 86.50 | 5.26 | 8.24 | 13.50 |
| 1961 | 119.29 | 78.92 | 27.20 | 13.17 | 66.16 | 22.80 | 11.04 | 33.84 |
| 1962 | 100.26 | 88.08 | 8.74 | 3.44 | 87.85 | 8.72 | 3.43 | 12.15 |
| 1963 | 118.61 | 93.92 | 8.69 | 16.00 | 79.18 | 7.33 | 13.49 | 20.82 |
| 1964 | 124.88 | 95.78 | 15.10 | 14.00 | 76.70 | 12.09 | 11.21 | 23.30 |
| 1965 | 160.76 | 126.92 | 12.86 | 20.98 | 78.95 | 8.00 | 13.05 | 21.05 |
| 1966 | 154.19 | 132.54 | 14.22 | 7.43 | 85.96 | 9.22 | 4.82 | 14.04 |
| 1967 | 174.49 | 136.06 | 16.66 | 21.77 | 77.98 | 9.55 | 12.48 | 22.03 |
| 1968 | 87.05 | 83.39 | 1.66 | 2.00 | 95.80 | 1.91 | 2.30 | 4.21 |
| 1969 | 92.50 | 81.12 | 1.98 | 9.40 | 87.70 | 2.14 | 10.16 | 12.30 |
| 1970 | 203.23 | 182.00 | 0.83 | 20.40 | 89.55 | 0.41 | 10.04 | 10.45 |
| 1971 | 338.08 | 298.61 | 11.87 | 27.60 | 88.33 | 3.51 | 8.16 | 11.67 |
| 1972 | 517.13 | 314.08 | 20.95 | 182.10 | 60.74 | 4.05 | 35.21 | 39.26 |
| 1973 | 730.12 | 332.47 | 18.15 | 379.50 | 45.54 | 2.49 | 51.98 | 54.47 |
| 1974 | 817.63 | 392.15 | 18.68 | 406.80 | 47.96 | 2.28 | 49.75 | 52.03 |
| 1975 | 1609.67 | 926.39 | 254.78 | 428.50 | 57.55 | 15.83 | 26.62 | 42.45 |
| 1976 | 2177.41 | 948.32 | 532.09 | 697.00 | 43.55 | 24.44 | 32.01 | 56.45 |
| 1977 | 2756.27 | 1498.55 | 424.42 | 833.30 | 54.37 | 15.40 | 30.23 | 45.63 |
| 1978 | 3174.98 | 1836.91 | 532.81 | 805.26 | 57.86 | 16.78 | 25.36 | 42.14 |
| 1979 | 2972.11 | 1637.16 | 827.74 | 507.21 | 55.08 | 27.85 | 17.07 | 44.92 |
| 1980 | 5388.22 | 4485.22 | 599.30 | 303.70 | 83 24 | 11.12 | 5.64 | 16.76 |
| 1981 | 5354.54 | 4673.34 | 240.20 | 441.00 | 87.27 | 4.49 | 8.24 | 12.73 |
| 1982 | 5105.08 | 4626.08 | - | 479.00 | 90.60 | - | 9.40 | 9.40 |
| 1983 | 4626.52 | 4205.02 | - | 421.50 | 90.89 | - | 9.11 | 9.11 |
| 1984 | 6651.11 | 4518.01 | - | 2133.10 | 67.93 | - | 32.07 | 32.07 |
| 1985 | 8110.63 | 5962.03 | - | 2148.60 | 73.51 | - | 26.49 | 26.49 |
| 1986 | 5073.79 | 4523.79 | - | 550.00 | 89.16 | - | 10.84 | 10.84 |
| 1987 | 9996.72 | 9996.72 | - | - | 100.00 | - | - | - |
| 1988 | 11376.60 | 11376.60 | - | - | 100.00 | - | - | - |
| Growth Rates : | | | | | | | | |
| 1956-88 | 18.03 | 18.17 | 20.29 | 20.27 | | | | |
| 1956-67 | 11.37 | 9.43 | 18.79 | 23.09 | | | | |
| 1968-79 | 34.21 | 28.16 | 67.81 | 58.62 | | | | |
| 1980-88 | 8.66 | 10.90 | - | 8.85 | | | | |

Source (1) Federal Office of Statistics, Lagos (2) Central Bank of Nigeria (3) Official Gazettes of Federal and State Governments (4) A. Adedeji, Nigerian Federal Finance, 1969

Note :

(1) The sources quoted above refer to columns 2 to 5 as 6 to 9 have been generated from the same.

(2) Figures for 1968-70 excludes the Eastern Regions as they were not available due to the Nigerian civil war.

(3) Calculation of the growth rates is based on the compounded annual average formula : $y = a(1+r)^t$. For details see II 3 of chapter 4.

(4) Grants to the States were first made in 1959 and discontinued in 1981 The growth rate in regards to grants therefore is for this period

(5) Data for loans are not available for 1987 and 1988 hence the growth rates is between 1956 and 1986.

(6) Column 6,7 and 8 add to 100.00 and column 6 and 9 add to 100 00.

(7) In some cases, the columns referred to above may not add exactly to column 100.00 due to rounding up of figures

(8) Statutory transfers do not include the statutory expenditure on federal ecological problems in states and federal fund for the development of mineral producing areas The Centre generally treats these items as part of its statutory transfers to the states

(9) One Naira is equal to Rs 15 and \$ 1 40

(10) All figures are at Current prices

centre as statutory transfers could be treated as independent revenue[15] of the states. Our observation above is in contrast to the experience of India where the share of statutory transfers in the total central transfers to the states ranged between 28.4% and 43.0% between 1951 and 1984 as against plan transfers, 23.4% to 36.9%, and non-plan, non-statutory discretionary transfers, 26.4% to 4.3%, during the same period[16].

It is however interesting to note that from 1972 upto 1979 the structure of federal transfers to the states in Nigeria altered visibly in both absolute and relative terms as both federal grants and loans increased tremendously during this period. This increase was necessitated by the centre's effort to assist the states execute projects of the second and third national development plans, 1970-75 and 1976-80. Therefore in 1973, 1974 and 1976, it is observed that grants and loans constituted 54.47%, 52.03% and 56.45% respectively of the total transfers to the states. In these three years, federal loan alone accounted for 51.98%, 49.75% and 32.01% respectively (see column 8 and 9 of table 5.01). Hence, during this period, the fiscal autonomy of the states was in constrain as the share of statutory transfers was at its lowest during this period - dropping as low as 45.54%, 47.96% and 43.55% in 1973, 1974 and 1976 respectively. No wonder most of the states protested against the increased role of federal grants and loans, (the former in particular) and preferred the grant system to be scrapped for an increased share in the federal revenue in the form of statutory transfers[17]. This view was accepted by the Okigbo Commission[18], and thus recommended in favour of the states. Thus, by 1982, the federal grants was scrapped from the Nigerian centre-state fiscal adjustment system and most transfers were made through statutory mechanism, (see column 7 of table 5.01). This thereby increased the independence of the states in the utilization of federal transfers.

15. See Section II.4 of Chapter two. Also see Wheare K.C, ibid. p. 101.

16. For details see, George, K.K; "Discretionary Budgetary Transfers : A Review", in Centre-State Budgetary Transfers, ed. by Gulati, I.S. Oxford University Press, Bombay, 1987, p. 247-264. Also see R. Sudarsana Rao, ibid. p. 52.

17. See Okigbo Commission, Report, ibid. Vo. III.

18. See Okigbo Commission Report ibid, pp. 43. Also memorandum of the various states as contained in volume III of the Okigbo Commission Report.

## III.2. TREND OF FEDERAL TRANSFERS TO THE STATES IN NIGERIA

### III.2.1. TREND OF THE AGGREGATE TRANSFERS

The total transfers to the states are shown in column 2 of table 5.01. From here it is noted that the aggregate central resource devolution to the states recorded a trenendous growth over the period. Thus, from N47.94 million in 1956, it increased to N11376.60 million in 1988. During the first phase of the study, 1956-67, it rose with fluctuations from N47.94 million in 1956 to N174.49 million in 1967. However, at the begining of the second period, 1968, the aggregate transfers slumped to N87.05, thereafter it increased steadily and tremendouly to N3174.98 million in 1978 before declining to N2972.11 million in 1979, the end of the period. By 1980 the figure had jumped to N5388.22 million, and rose with fluctions to N11376.60 million in 1988. This, as could be seen from the bottom of the table under reference, denotes tremeadous growth rates (compounded annual average) of 18.03% for the entire period, 11.37% for the first phase, 34.12% for the second phase and 8.66% for the third phase. These rapid growth rates between the first and second subperiods reflect an increased dependence of the states on federal transfers over this period of the study as well as during the respective sub- periods. And as noted, it was fastest during the second period, 1968-79 followed by the first period. The increase was lowest during last period, 1980-88.

### III.2.2. TREND OF STATUTORY TRANSFERS

The evidence borne in column 3 of the same table 5.01 reveals that the trend of statutory transfers to the states followed that of the aggregate transfers closely. Hence, we observe that the obligatory transfers also recorded tremendous increase over the period. Thus, between 1956 and 1988, the statutory transfers rose from a mere N46.14 million to N11376.60 million with slight fluctuations. The growth was steady throughout the first period, from N46.14 million in 1956 to N136.06 million in 1967. By the begining of the second period, 1968, however, the transfers declined sharply to N83.39 million, and further to N81.12 million in 1969. This was as a result of the civil war which broke out when the richest region. (Easten Region) opted out of the federation. The transfers recovered upto N182.00 million in 1970 (higher than transfers in all the preceding years respectively). Thereafter, it rose with slight fluctuations to N1637.16 million in 1979 - the end of the period. By 1980, the begining of the third phase, the statutory transfers rose sharply to N4485.22 million, an increase of 2.74 times over the 1979 figure. This was made possible by the oil boom of 1980 consequent upon which the federal revenue from the petroleum sources rose sharply, thereafter the transfers then rose with fluctuations to N11376.60 million in 1988. The above quantum increases reflected compounded annual average growth rates of 18.17%, 9.43%, 28.16% and 10.90% for the entire, first, second and third periods respectively. These high growth rates no doubt, implied increased reliance of the states on mandatory transfers from the centre over the years. But considering the fact that these transfers are unconditional and statutory, this trend could be welcomed as the same arguments states independent receipts from their own sources, and hence an increase in their fiscal viability. It is, however, interesting to note that the increase was highest during the second period, 1968-79. This was mainly as a result of the oil boom of the mid and late 1970's which reached its peak in 1980.

### III.2.3 TREND OF FEDERAL GRANTS

Column 4 of table 5.01 reveals that the magnitude of federal grants to the states increased tremendously over the years, although without an established trend. Infact, a clear observation in this respect is of an erratic behaviour. This was especially so during the first phase of the study.

Thus, whereas no clue exists regarding grants for the first three years of this study, 1956-58, by 1959 the grant amount stood at N3.43 million. It rose without a definite trend to N16.66 million in 1967. The decline in 1968 (the first year of the second period) was very sharp - to a mere N1.66 million (a decline by 9.73 times). It rose marginally to N1.98 in 1969 only to fall to its all-time lowest of N00.83 million in 1970. Thereafter, these transfers jumped (with fluctuations) to to all-time high of N827.74 million in 1979 - the end of the second phase. Thereafter the trend was downward as the amount fell to N599.30 million in 1980 and further to N240.20 million in 1981 after which it was discontinued.

The above quantum increase reflects compounded annual average growth rate of 20.29% between 1959 and 1981, 18.79% between 1959 and 1967, and 67.81% between 1968 and 1979. (see the bottom section of colum 4 of table 5.01). These high growth rates, it has to be pointed out, is not a welcomed feature of federal transfers when we compare the same with the growth rate of statutory transfers for the corresponding periods. This stems from the fact that rapid increase in federal grants implies a loss in the fiscal autonomy of the states, and hence reflects a tendency towards fiscal centralization. This is so because federal grants are conditional grants which implies that the recepient governments have no freedom in the utilization of the funds so transferred. Thus the higher the increase in this discretionary transfers, the higher the degree of fiscal centralization, and the greater the loss of autonomy to the states in utilization of transfers. This was especially true in Nigeria between 1968 and 1979 when the federal grants (as observed above) rose by an unprecedented 67.81%.

### III.2.4 TREND OF FEDERAL LOANS

Column 5 of the same table 5.01 indicates that like federal grants, federal loan to the states rose rapidly over the years. Again, like the federal grants, the federal loans fluctuated heavily. This phenomenon was also more pronounced during the first phase of this study. Thus, from N1.80 million in 1956, it rose without a definite trend to N21.77 million in 1967, the end of the first phase. An unprecedented decline occured in 1968 (the begining of the second phase) with the loan amount standing at N2.00 million. But interesting, thereafter, it rose sharply and steadily to N833.30 million in 1977 - the highest for the period. Then, it fell gradually to to N507.21 million in 1979 - the end of the second period. By the begining of the third period, 1980, the amount had fallen still further to N303.70 million - the lowest in twelve years. It then rose with fluctuations to N2148.60 million in 1985 (an increase of 7.07 times over the 1980 figure) only to register a sharp decrease to N550.00 million in 1986. The compounded annual average growth rates stood at 20.27% between 1956 and 1986, 23.09% between 1956 and 1967, 58.62% between 1968 amd 1979, and 8.85% between 1980 and 1986.

We may note that the remarkable increase during the second period was made possible by the oil boom of this era. During this period the revenue collection of the Centre from Mining Rents and Royalty, Petroleum Profit tax etc rose tremendously -- such that it recorded huge Current Account surpluses in most the years between 1968 and 1979. Hence, the centre was able to make more resources available to the states in the form of federal loans to enable them carry out the projects of the Development Plans. Nevertheless, the 1979 constitution guaranteed the states more access to federal revenue collection in the form of unconditional statutory transfers. Because of this and the decline in the international oil prices during the 1980's, the federal loans to the states declined sharply. Hence the low average growth rate of 8.85% between 1980 and 1988.

This way it is therefore noted that, like the federal grants, this high growth of federal loans does not augur well vis-a-vis statutory transfers as the same while imposing a financial burden on the states also reflects a loss in their fiscal autonomy.

On the whole, it is noted that although the total federal grants to the states rose tremendously over the period the same could be translated into a severe financial dependence of the states on the centre. This would be the case since statutory transfers which are generally higher than federal grants and federal loans in absolute and relative terms also grew at reasonable high rate during the period. It has to be pointed out, however, that such financial independence was greatly hampered during the second period of the study, 1968-79, when there was huge increase in both federal grants and federal loans. But since the growning influence of these diseretionary transfers declined during the 1980's, the states could be said to have regained to a high extent their degree of freedom in the utilization of federal transfers.

## III.3. STRUCTURE AND TREND OF STATUTORY TRANSFERS (NON-DISTRIBUTABLE AND DISTRIBUTABLE POOL ACCOUNTS)

In section IV.2.2 of this chapter we have analysed the trend of aggregate statutory transfers to the states in Nigeria. In the present section, we are going to examine the two components of the statutory transfers, viz. the Non-Distributable and Distributable Pool Accounts (here-in-after called the Non-DPA and DPA respectively).

### III.3.1 COMPOSITION OF THE NON-DISTRIBUTABLE POOL ACCOUNT

The DPA is consisted of all the revenue accrual that are allocated only on the basis of "Derivation" principle. That is, those revenue that are transferred to the respective states according to the proportion of such revenue that originates from that state[19]. Between 1956 and 1959 this comprised of the states share[20] of revenue from : Import duties on Tobacco, Petroleum Products, Beer, Wine, Potable Spirits, Imports Unspecified and Export duties. Between 1960 and 1965, it was limited to import duties on Tobacco, Petroleum Products, Import unspecified and Export duties and in addition, 62.50% of revenues from Mining Rents and Reyalties. The composition of the Non-DPA was not altered between 1966 and 1969 except that its share from the Mining Rents and Royalties was reduced to 56.25%. The revenue base of the Non-DPA was contracted between 1970 to 1975 - limiting it to only import duties on Tobacco and Petroleum Products, 60% of Export duties and 47.37% of Mining Rents and Royalties. The Non-DPA suffered another setback between 1976 and 1980 when its resource base was limited only to 20% of in-shore Mining Rents and Royalities. From 1980 upto 1988, the Non-DPA had no specified resource base but was rather expressed as a percentage of the Federation Account[21] created in 1980. It amounted to 4.44% of the statutory transfers to the states during this period.

These changes were made consequent upon the Centre's determination to diffuse the influence of the principle of derivative in the horizontal revenue devolution. This was due to the fact that during the earlier period when upto 100% of the aggregate statutory transfers were made from this pool, the poorer Regions or states could not have better access to the National resources. This was so because under the derivative principle higher absolute amount are transferred to the respective states from most of these revenues originate. Thus, from the point of view of equity and redistribution it was desirable that this pool -- the Non-DPA -- should decline in importance.

19. For details see Section IV.2.1 of Chapter three.

20. Some of the revenues from these resource bases were divided between the Centre and the States. And then the States share was divided into Non-DPA and DPA. For details see Appendix Table III.03.

21. See note 5 of Chapter three.

TABLE 5.02

DISTRIBUTION OF STATUTORY TRANSFERS TO THE STATES OF NIGERIA BETWEEN THE COMPONENT PARTS, 1956-88.

(AMOUNT IN MILLIONS OF NAIRA)

| Year | Total Statutory Transfers (3+4) | Non-Distributable Pool Account | Distributable Pool Account | 3 as % of 2 | 4 as % of 2 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1956 | 46.14 | 46.14 | - | 100.00 | - |
| 1957 | 52.36 | 52.36 | - | 100.00 | - |
| 1958 | 54.52 | 54.52 | - | 100.00 | - |
| 1959 | 58.18 | 58.18 | - | 100.00 | - |
| 1960 | 70.42 | 53.08 | 17.34 | 75.38 | 24.62 |
| 1961 | 78.92 | 53.88 | 25.04 | 68.27 | 31.73 |
| 1962 | 88.08 | 59.64 | 28.44 | 67.71 | 32.29 |
| 1963 | 93.92 | 62.34 | 31 58 | 66.38 | 33.62 |
| 1964 | 95.78 | 64.22 | 31.56 | 67.05 | 32.95 |
| 1965 | 126.92 | 78.26 | 48.66 | 61.66 | 38.34 |
| 1966 | 132.54 | 81.68 | 50.86 | 61.63 | 38.37 |
| 1967 | 136.06 | 82.86 | 53.20 | 60.90 | 39.10 |
| 1968 | 83.39 | 43.25 | 40.14 | 51.86 | 48.14 |
| 1969 | 81.12 | 42.38 | 38.74 | 52.24 | 47.76 |
| 1970 | 182.00 | 64.35 | 117.65 | 35.36 | 64.64 |
| 1971 | 298.61 | 147.32 | 151.29 | 49.34 | 50.66 |
| 1972 | 314.08 | 114.99 | 199.09 | 36.61 | 63.39 |
| 1973 | 332.47 | 111.70 | 220.77 | 33.60 | 66.40 |
| 1974 | 392.15 | 124.10 | 268.05 | 31.65 | 68.35 |
| 1975 | 926.39 | 354.09 | 572.30 | 38.22 | 61.78 |
| 1976 | 948.32 | 32.84 | 915.48 | 3.46 | 96.54 |
| 1977 | 1498.55 | 150.28 | 1348.27 | 10.03 | 89.97 |
| 1978 | 1836.91 | 196.38 | 1640.53 | 10.69 | 90.31 |
| 1979 | 1637.16 | 167.23 | 1469.93 | 10.21 | 90.79 |
| 1980 | 4485.21 | 364.11 | 4121.10 | 8.12 | 91.88 |
| 1981 | 4957.81 | 227.47 | 4730.34 | 4.59 | 95.41 |
| 1982 | 4625.98 | 217.71 | 4408.27 | 4.71 | 95.29 |
| 1983 | 4204.90 | 197.88 | 4007.02 | 4.71 | 95.29 |
| 1984 | 4517.97 | 212.61 | 4305.36 | 4.71 | 95.29 |
| 1985 | 5962.02 | 280.57 | 5681.45 | 4.71 | 95.29 |
| 1986 | 4523.75 | 212.88 | 4310.87 | 4.71 | 95.29 |
| 1987 | 9996.79 | 470.43 | 9526.36 | 4.71 | 95.29 |
| 1988 | 11376.59 | 535.37 | 10841.22 | 4.71 | 95.29 |
| Growth Rate | | | | | |
| 1956-88 | 18.17 | 07.72 | 24.87 | | |
| 1956-67 | 09.43 | 05.01 | 15.09 | | |
| 1968-79 | 28.16 | 11.90 | 35.02 | | |
| 1980-88 | 10.90 | 04.35 | 11.39 | | |

Source : Table 5.01 and Appendix Table III.02 and III.03

Note : See Note for table 5.01.

### III.3.2 COMPOSITION OF THE DISTRIBUTABLE POOL ACCOUNT

The Raiseman-Tress Commission created the DPA in 1960 with 100% of duties on "Imports unspecified" and 37.50% of the states share in Mining Rents and Royalties. These remained the only constituents of the Account between 1966 and 1969 except that its share from the Mining Rents and Royalties was increased to 43.75% in 1966. The DPA was boosted between 1970 and 1975 with the inclusion into it, of 100% of Excise duties due to the states and also 40% of the states share of the Export duties. Its share from Mining Rents and Royalties was increased further to 52.63% of the states share of the Mining Rents and Royalties. The DPA became of overwhelming importance between 1976 and 1980 when it was constituted by 100% of duties from Import of Petroleum Products, Tobacco, Imports unspecified, Excise duties, Export duties, Off-shore Mining Rents and Royalties and 80% of In- shore Mining Rents and Royalties. The significance of this Account was furthered by the creation of the Federation Account in 1980. Thus from 1981 it had no specific resource base but was expressed as a percentage of the Federation Account. It stood at around 90% of the total statutory transfers to the states. The detail of this is given in Appendix table III.03 which shows the inter-state Revenue Allocation System.

The DPA is devolved amongst the states on criteria other than Derivation. That is, Population, Equality-of-State, Revenue Effort and School Enrolment Ratio.

### III.3.3 STRUCTURE OF STATUTORY TRANSFERS

As hinted above, prior to 1960, all the statutory transfers in Nigeria were made through a single pool - the Non-DPA which was devolved on the basis of a one-factor formula of "Origin-of-Revenue" technically referred to as the "Derivation" criterion. In other words, the Non-DPA constituted 100.00% of the aggregate statutory transfers upto 1959, (see table 5.02 which depicts the distribution of statutory transfers between the component parts). However, by 1960 when the DPA was created, the relative share of the Non-DPA in the aggregate statutory transfers declined to 75.38% while the DPA accounted for the remaining 24.62%. As time went on the relative importance of the DPA increased while that of the

Non-DPA declined. Thus, by 1967 the figures stood at 60.90% and 39.10% respectively. By 1968, the begining of the second period, the share of the Non-DPA had dropped further to 51.86% from this figure, it declined with slight fluctuations to 31.65% in 1974 before rising to 38.22 in 1975. However by 1976, it slumped sharply to the lowest value of 3.46%. It's share was 10.21 in 1979. The process of marginalization of the Non-DPA continued unabated, and thus by 1980, it's share in the aggregate statutory transfers had declined further to 8.12% and still further to 4.59% in 1981. The Okigbo commission fixed the same at around 4.71% for the remaining period of the study. Conversely, the relative share of the DPA increased from 24.62% in 1960 (with slight fluctuations) to 39.10% in 1967. It was 48.14% in 1968 from which it touched an all-time height of 96.54% in 1986. Thereafter the share of the DPA revolved around 90% upto 1979. It increased to 91.88% in 1980 and remained around 95% for the remaining period of the study.

The continuous decline in the significance of the Non-DPA (and conversely the increase in the importance of the DPA) over the years was a deliberate act of the government as it decreased the resource bases of the former while increasing that of the latter, (see sections IV.3.1 and IV.3.2). This policy is indeed welcomed since the Non-DPA was devolved on the basis of a single principle of derivation which is considered an "unequitable" principle of resource devolution as the same simply transfers resouces back to rich and more developed regions from where most of the revenues originate. As such, devolving a high percentage of the statutory transfers on this criterion will (over the years) widen the disparity amongst the states. This would increase the horizontal fiscal crisis and inter-state animosity. But on the other hand, the increased role of the DPA meant that the statutory transfers have a tendency of being more equalizing than the Non-DPA. This could be so because the DPA, as noted earlier is devolved on the basis of multiple principles of Population, Equality-of-State, Revenue Effort and School Enrolment Ratio. Such multiple-factor resource devolution formula implies that most of the states would be accomodated into the system through one or more of the various principles. Hence, they will have better access to the National resources through these principles. In other words, the DPA is devolved according to criteria that reflects (to a great extent) the need of the states. This is clearly lacking in Derivation principle on the basis of which the Non-DPA is shared amongst the states.

### III.3.4. TREND OF THE NON-DISTRIBUTABLE POOL ACCOUNT

Having examined the trend of the aggregate statutory transfers in section IV.2.2, we now turn to trend of its Non-DPA component in this section while the trend of its second component, the DPA is examined in the succeeding section, IV.3.5

Column 3 of table 5.02 shows the Non-DPA transfers to the states in Nigeria. It is noted that these transfers increased moderately over the period, from N46.14 million in 1956 to N535.37 million in 1988. Such an increase was achieved with a highly fluctuating trend. This was especially so during the second and third phases. Thus from N46.14 million in 1956 - the begining of the first phase - the DPA tranfers rose with fluctuations to N82.86 million in 1967, the end of the first phase. However, during the first three years of the second period 1968-70, (years of the civil war), the Non-DPA declined sharply. Thus from N82.86 million in 1967, it fell to N43.25 in 1968, and still further to N42.38 million in 1969 before recovering to N64.35 in 1970. Thereafter, it recorded a big jump, reaching a height of N354.09 million in 1975 (the highest for the period) only to decline to a lowest value of N32.84 the next year, 1976. It then increased with fluctuations to N167.23 in 1979, the end of the second period. Nevertheless, by 1980, the begining of the third phase, the DPA transfers had risen to N364.11 million -- an increase of 2.18 times over the 1979 figure, and further with fluctuations to N535.37 million in 1988. Thus the Non-DPA was always above the 1956 figure of N46.14 except in 1976 when it was N32.84.

The above increases reflect modest compounded annual average growth rates of 7.72% for the entire period, 1956-88, 5.01% for the first period, 11.90%, for the second period and 4.35% for the third period. The main reason for the variation in the growth rates of the three periods was that the revenue yield from Mining Rents and Royalties -- the main resource base of the Non-DPA -- increased tremendously during the second period, 1968-79.

This, as pointed out earlier was as a result of the "oil boom" of this era. There were no such phenomenal changes during the first and third phases. Hence, the growth rates in these periods were lower. As pointed out earlier, the small growth rates recorded by the Non-DPA is quite welcomed as this Account is devolved on the basis of the single principle of derivation leading to the non-equitable resource devolution and gives filip to horizontal inequality.

### III.3.5. TREND OF THE DISTRIBUTABLE POOL ACCOUNT

Table 5.02, column 4 indicates the amount of statutory transfers to the states from the DPA. It is observed that these transfers increased tremendously from a mere N17.34 million in 1960 (when it was created), to N10841.22 million in 1988 -- an increase of 625.21 times in a period of twenty-nine years. It is also noted that unlike the Non-DPA which fluctuated heavily, the DPA fluctuated mildly. This way, we see that from the amount of N17.34 million in 1960, these transfers increased continously to N53.20 million in 1967, the end of the first period - declining marginally in 1964 when it stood at N31.56 million as against N31.58 million in 1963. However, it stood at N40.14 million in 1968, the begining of the second period, and declined to N38.74 million in 1969. These were the two of the three years of the civil war. It, then rose to N117.65 million in 1970, and increased continously to to it N1640.53 in 1978 - (an increase of 414.56 times over 1968 figure) - the highest for the period. It declined to N1469.93 million in 1979, the end of the second period. But by 1980, the begining of the third period the transfers had jumped to N4121.10 million - an increase of 2.80 times over the 1979 figure. It moved up continously, although with slight fluctuations - reaching N10841.22 million in 1988. The above increases implied componded annual average growth rates of 24.87%, 15.09%, 35.02% and 11.39% for the entire, first, second and third phases respectively. As had been observed earlier, the oil boom of the 1970's which reflected into a tremendous increase (of 55% between 1971 and 1979) in the revenue yield of Mining Rents and Royalties -- a proportion of which was the main resource base of the DPA. Such increases was not recorded during either the first or third periods, hence the variation.

The high growth rates of the DPA transfers vis-a-vis the Non-DPA transfers are welcomed, because such an increase meant more resources availability for devolution amongst the states on more equitable principle of Population, Equality- of-State, Revenue Effort and School Envolment Ratio.

Here, it has to be pointed out that the enomous increase of the magnitude of the DPA from 1980, was consequent upon the recommendations of the Okigbo Commission on Revenue Allocation, 1980, which felt that a proportional increase in the statutory transfers to the states was the only way through which they would be guarantteed an access into the National revenue that increased significantly because of the oil boom.

### IV. FEDERAL TRANSFERS VERSUS FEDERAL RECEIPTS

In this section we have examined the various categories of transfers as proportions of Federal Raceipts in the particular Account from where such transfers are generally made. That is, the statutory transfers which are generally made from the Federal Current Receipts have been expressed as a proportion of the same. Similarly, Federal Grants and Federal Loans which are made from the Capital Receipts have also been expressed as proportions of the same. And the total transfers have been expressed as proportions of total Receipts (Current plus Capital) of the federal government. The idea here is to ascertain to what extent these categories of federal receipts are able to contain the respective categories of federal transfers made therefrom. This would also throw a light on the degree of participation of the Nigerian states on the federal collected revenues. We have also calculated the total transfers as percentages of Federal Current Receipts. This has been done because (as noted earlier in chapter 4 which will also become clearer in the ongoing analysis) apart from the statutory transfers, Federal Grants and Federal Loans seem to depend, to a great extent, on the Federal Current Account surplus. The result of these calculations are presented in table 5.03.

From this table it is observed that the size of fiscal transfers in relation to the various categories of federal receipts is quite sizeable. Column 2 of the table reveals that the share of statutory transfers in the total Federal Current Receipts ranged between 15.00% in 1979 and 48.13% in 1965 for the entire period of the study, 1956-88. The range was between 35.28% in 1961 and 48.13% in 1965 during the first phase, 1956-67, between 15.00% in 1979 and 41.74% in 1970 during the second phase, 1968-79, and between 29.44% in 1980 and 41.66% in 1988 during the third phase, 1980-88. The average[21A] share in these three periods were 39.71%, 25.12% and 38.44% respectively although the ratio fluctuated over the years, it was more erratic during the first phase when it also recorded the highest average share. On the other hand, the proportions were less erratic in the second period during which it declined steadily from 41.74% in 1970 to 16.25% in 1976. The heavy fluctuation in the first period was as a result of a lot of changes in the vertical resource allocation formula which occured frequently during this period, (see Appendix table III.02). Another reason for this erratic behaviour could also be found in the fluctuations of the revenue collection from the exclusive federal resource base like the Federal Income tax, Corporate tax and Earnings and Sales, (see table 4.02(a)). On the other hand, the declining and less erratic behaviour of the ratio in the second period was the basic upward trend of Petroleum profit tax (see table 4.02(b)). This resource base as had been observed earlier was under the exclusive resource base of the centre during this era. During the third period, the ratio, increased with fluctions from 29.44% in 1980 to 41.66% in 1988, following the fiscal provisions of the 1979 constitution and the recommendations of the Okigbo Commission in 1980. The constitution provided for greater access into the federal collected revenues by the states. As clear from the above, the ratios did not vary much within each of the three phases. This reflects the non-discretionary nature of statutory transfers on the one hand, and on the other hand, that the same is expressed as a percentage of Federal Current Receipts as noted in chapter three. This fall into three clear-cut regimes, 1956-67 when the states had greater autonomy and hence were given a greater share in the total Federal Current Receipts, 1968-79 when there was strong wave of revenue centralization and consequently, the states' share in the Federal Current Receipts was reduced, and then 1980-88, when the Okigbo Commission granted greater share to the states in the total Federal Current Receipts.

21A. Refers to simple average, i.e., arithematic mean. Please see note 20 of chapter 4 for details.

TABLE 5.03
TRANSFERS AS PERCENTAGES OF FEDERAL RECEIPTS BEFORE TRANSFERS IN NIGERIA 1956-88

| Year | Statutory Transfers aś % of Total Federal Current Receipts | Grants as % of Total Federal Capital Receipts* | Loans as % of Total Federal Capital Receipts* | Grants and Loans as % of Total Federal Capital Receipts* (3+4) | Grants and Loans as % of Total Federal Capital Receipts** | Total Transfers as % of Total Federal Current Receipts | Total Transfers as % of Total Federal Receipts |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1956 | 38.48 | - | 17.45 | 17.45 | 07.01 | 39.98 | 36.82 |
| 1957 | 37.10 | - | 18.21 | 18.21 | 04.17 | 38.51 | 35.73 |
| 1958 | 38.42 | - | 00.00 | 00.00 | 00.00 | 38.42 | 35.56 |
| 1959 | 37.62 | 29.98 | 34.97 | 64.95 | 19.60 | 42.36 | 39.44 |
| 1960 | 39.64 | 19.58 | 30.70 | 50.28 | 22.67 | 45.83 | 40.81 |
| 1961 | 35.28 | 42.63 | 20.64 | 63.27 | 31.73 | 53.32 | 41.49 |
| 1962 | 38.47 | 22.27 | 08.76 | 31.03 | 16.98 | 43.79 | 37.38 |
| 1963 | 40.74 | 15.60 | 28.72 | 44.32 | 34.22 | 51.44 | 41.43 |
| 1964 | 38.44 | 18.48 | 17.14 | 35.62 | 32.23 | 50.12 | 37.74 |
| 1965 | 48.13 | 19.74 | 32.21 | 51.95 | 64.78 | 60.96 | 48.88 |
| 1966 | 41.27 | 17.88 | 09.34 | 27.22 | 21.03 | 48.01 | 38.48 |
| 1967 | 42.87 | 10.98 | 14.35 | 25.33 | 20.22 | 38.48 | 37.20 |
| 1968 | 28.82 | 01.24 | 01.49 | 2.73 | 05.93 | 30.09 | 20.57 |
| 1969 | 27.86 | 00.79 | 03.74 | 4.53 | 07.61 | 31.77 | 17.06 |
| 1970 | 41.74 | 00.20 | 04.84 | 5.04 | 14.19 | 46.61 | 23.69 |
| 1971 | 41.11 | 06.44 | 14.98 | 21 42 | 19.78 | 46.55 | 37.13 |
| 1972 | 24.22 | 16.35 | 142.15 | 158.50 | 31.93 | 39.88 | 36.30 |
| 1973 | 24.03 | 05.44 | 113.76 | 119.20 | 51.59 | 52.76 | 42.51 |
| 1974 | 18.11 | 08.30 | 180.80 | 189.10 | 34.49 | 37.76 | 34.20 |
| 1975 | 17.98 | 66.45 | 111.76 | 178.21 | 17.49 | 31.25 | 29.08 |
| 1976 | 16.25 | 42.33 | 55.45 | 97 78 | 26.09 | 37.30 | 30.69 |
| 1977 | 21.37 | 15.67 | 30.76 | 46.43 | 19.32 | 39.31 | 28.36 |
| 1978 | 24.92 | 16.27 | 24.58 | 40 85 | 24.86 | 43.07 | 29.82 |
| 1979 | 15.00 | 92.87 | 56.91 | 149.78 | 19.13 | 27.24 | 25.18 |
| 1980 | 29.44 | 51.23 | 25.96 | 77.19 | 16.28 | 35.37 | 32.85 |
| 1981 | 39.01 | 07.88 | 14.46 | 22.34 | 14.68 | 44.69 | 35.63 |
| 1982 | 39.37 | - | 13.07 | 13.07 | 08.47 | 43.45 | 33.12 |
| 1983 | 38.41 | - | 04.97 | 4.97 | 04.34 | 42.26 | 23.81 |
| 1984 | 40.58 | - | 46.02 | 46.02 | 45.33 | 59.74 | 42.18 |
| 1985 | 40.82 | - | 64.66 | 64.66 | 48.20 | 55.29 | 45.24 |
| 1986 | 36.78 | - | 45.56 | 45.56 | 53.79 | 41.24 | 37.56 |
| 1987 | 39.83 | - | - | - | - | 39.83 | 29.17 |
| 1988 | 41.66 | - | - | - | - | 41.66 | 28.82 |

Source : Calculated with data from tables 4.01, 5.01 and Appendix tables IV-01, IV-02 and IV-05.

Note : (1) * Excludes Current Account Surplus or Deficit.
(2) ** Includes Current Account Surplus or Deficit.

Thus, these proportions were relatively high during the first and third periods, but comparatively low during the second period. Here, it is interesting to mention specifically that the relatively low share of the states in the second period was due to two reasons. One, the oil boom of this era (as noted in chapter 4) made the petroleum profit tax more resourceful, and the same was placed under the exclusive list of the centre. Two, Mining Rents and Royalties which were hitherto mostly in the hands of the states, were transferred to the centre, (see Appendix table III.03 for details).

Federal Grants as proportions of the total Capital Receipts is shown in column 3 of the same table 5.03. This column indicates that there was a high fluctuation in the percentage share of the Federal Grants in the aggregate autonomous Capital Receipts of the centre - that is Capital Receipts excluding the Current Account surplus or deficit. The range in the variation of the same was equally wide. Thus, it is noted that between 1959 and 1981, the period during which grants were made, its share in the total autonomous Capital Receipts ranged from 0.20% in 1970 to 92.87% in 1979. The variation between 1959 and 1967 was from 10.98% in 1967 to 42.63% in 1961, and between 1968 to 1979 it ranged from 0.20% in 1970 to 92.87% in 1979. Thus, second period recorded the highest range of variation which was highly fluctuating. The average for the first and second periods stood at 16.43% and 22.70% respectively. Similarly, column 4 of table 5.03 shows that the ratio of Federal Loans to the total autonomous Federal Capital Receipts was quite unpredictable over the entire period of the study. Its range from 0.00% in 1958 to 180.80% in 1974 between 1956 and 1986 was. During the first, second and third periods, the variation ranged from 0.00% in 1958 to 34.97% in 1959, 1.49% in 1968 to 180.80% in 1974, and 4.97% in 1983 to 64.66% in 1985 respectively. The average share for these periods stood at 19.37%, 61.77% and 30.42% respectively. It is observed that although the ratios fluctuated heavily, they were quite high, between 1972 and 1975 when it was above 100.00%.

Column 5 of the table presents the total capital transfers (Grants and Loans) as a percentage of the total autonomous capital of the federal government. From here one notices a trend which retains the same in respect to both Federal Grants and Federal Loans respectively. It is noted that the percentage share of the total capital transfers in the total autonomous Capital Receipts of the Centre varied between 0.00% in 1958 and 189.10% in 1974. Within this range, the same fluctuated heavily leaving a range of 0.00% in 1958 to 64.95% in 1959 during the first phase, 2.73% in 1968 to 189.10% in 1974, during the second phase, and 4.97% in 1983 to 77.19% in 1984 during the third period. The respective average for these three periods stood at 35.08%, 84.47% and 30.42%.

Thus a clear observation from columns 3 and 4 (which is combined in column 5), reveals two things. One, that the ratios fluctuated heavily, and two, that in some years the capital transfers exceeded the autonomous Capital Receipts of the Centre. The possible explanation for the heavy fluctuations is the discretionary nature of these transfers. This means that these transfers are not expressed as a percentage of either the individual capital revenue head, or as a proportion of the total capital receipts over specified period of time unlike the statutory transfers. Thus the amount to be transferred and when the same should be transferred depend entirely on the reasoning of the grantor government, the Centre.

As far as the second observation is concerned, that is, capital transfers being made in excess of autonomous capital receipts -- which occured in the years 1972 to 1975 and in 1979. This phenomenon is, indeed surprising and would not have been expected under a normal circumstance. It indicates that the autonomous capital receipts of the centre are so meager in some years that it could not even take care of the capital transfers to the states. It thereby shows that the Current Account surplus is the main component of the Federal Capital Receipts. Thus we note from column 6 of table 5.03 that when the Current Account surplus, is included in the Capital Receipts of the centre, the percentage share of capital transfers from the same became small. With the exception of 1965, 1973, 1984, 1985 and 1986 when the percentages were 64.78, 51.59%, 45.33%, 48.20% and 52.79% respectively, it varied between 0.00% in 1958 and 34.49% in 1974 in the rest of the years. Thus we note that even in the years noted earlier, 1972-75 and 1979 when the capital transfers in relation to the autonomous capital receipts were above 100% the percentage share in the total Capital Receipts (after including the Current Account surplus) fell drastically. It was

31.93%, 51.59%, 34.49%, 17.49% and 19.13% for 1972, 1973, 1974, 1975 and 1979 respectively, (compare column 5 with 6).

From the above, it is thus clear that the Federal Current Receipts influence not only the Statutory transfers, but also the Federal Grants and Loans. Hence in column 7 of table 5.03 we have shown the total transfers as proportions of the total Current Receipts of the federal government. Here, we note that the range was not wide (as was the case in respect to statutory transfers, Federal Grants and Loans as percentages of Federal Current and Capital Receipts respectively, see columns 2 to 6 and compare them with 7). The variation was between 35.37% in 1980 and 60.96% in 1965 with the exception of the four yeras, 1968, 1969, 1975 and 1979 when the figures stood out 30.09%, 31.77%, 31.25% and 27.24% respectively. It is noted, however, that the trend fluctuated slightly over the years.

In column 8 of the table, we have expressed the total transfers as proportions of total federal receipts. Here it is noted that the same ranged from 20.57% in 1968 to 48.88% in 1965 (with the exception of 1969 when the same was 17.06%). It varied between 35.56% in 1958 and 48.88% in 1965, 20.57% in 1968 and 42.51% in 1973 and 23.81% in 1983 and 45.24% in 1985 during the first, second and third phases respectively. The average during these periods were 39.25%, 32.65 and 34.27% respectively. Thus the ratio was highest during the first phase, 1956-67, and relatively low in the second periods, 1968-79 and 1980-88 respectively.

A general impression from table 5.03, is that the percentage share of the various transfers in the various categories of the Federal Receipts seem high in some years, and low in others. Yet one cannot say that such a view is exactly correct unless two things are considered. First is the Independent Receipts of the states and the relative share of the federal transfers in the aggregate Receipts of the States. The second thing is the expenditure of the states and the relative share of federal transfers in the same. The need for this arises because (as we had seen in chapter 4) the Nigerian federation is typified by Revenue centralization and expenditure decentralization. Thus, whether or not central transfers to the states are enough would depend on their expenditure obligations and how much of it is financed through federal transfers. We have examined these issues in the following sections.

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## V. FEDERAL TRANSFERS VERSUS STATES REVENUE AND EXPENDITURE

Table 5.04 presents the percentage distribution of states' receipts between the component parts. This distribution becomes very crucial for the basic reason that the respective relative share of "own revenue" of the states and "federal transfers" in the total revenue of the states in a particular Account (Current, Capital and Total, (Current Plus Capital)) show the fiscal viability of the states. Thus the higher the relative share of the states own revenue in the total revenue of a particular Account, the lesser the states depend on federal transfers to carry out their expenditure obligations and hence, the more fiscally viable the states would tend to be, and vice versa.

The above postulation would also imply that the higher the proportion of federal transfers in the expenditure of the states the less the degree of their fiscal autonomy. This would be especially so if Federal Grants and Federal Loans dominate the aggregate federal transfers as these transfers are largely conditional.

### V.1. FEDERAL TRANSFERS VERSUS STATES REVENUES

Column 2 and 3 of table 5.04 indicate the percentage distribution of the State Current Receipts between "Own Revenue" and Statutory Transfers. From column 2 it is observed that with the exception of 1969 when the relative share of States' Own Revenue in their aggregate Current Receipts was 40.14%, it ranged between 13.55% in 1975 and 34.78% in 1957 for the remaining years covered in this study. This thereby implies that the share of statutory transfers in the aggregate Current Receipts varied between 65.22% in 1957 and 86.45% in 1975 (with the exception of 1969 when it was 59.86%), see column 3. During the first, second and third phases, 1956-67, 1968-79 and 1980-88, the share of the states own revenue ranged between 28.02% in 1956 and 34.78% in 1957, 13.55% in 1975 and 31.02%

## TABLE 5.04

### PERCENTAGE DISTRIBUTION OF STATES RECEIPTS AFTER FEDERAL TRANSFERS IN NIGERIA (AMONGST THE COMPONENT PARTS) 1956-88

| Year | Own Current Recei-pts as % of Total Current Recei-pts | Statu-tory Trans-fers as % of Total Current Recei-pts | Own Capital Recei-pts as % of Total Capital Recei-pts | Grants and Loans as % of Total Capital Recei-pts | Own Current Recei-pts as % of Total Recei-pts | Own Capital Recei-pts as % of Total Recei-pts | Statu-tory Trans-fers as % of Total Recei-pts | Federal Grants as % of Total Recei-pts | Federal Loans as % of Total Recei-pts | Total own Recei-pts (6+7) as % of Total Recei-pts | Total Trans-fers (8+9+10) as % of Total Recei-pts |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1956 | 28.02 | 71.98 | 82.35 | 17.65 | 24.17 | 11.31 | 62.10 | - | 2.42 | 35.48 | 64.52 |
| 1957 | 34.78 | 65.22 | 97.24 | 2.76 | 18.27 | 46.17 | 34.25 | - | 1.31 | 64.44 | 35.56 |
| 1958 | 32.86 | 67.14 | 100.00 | 0.00 | 27.93 | 14.99 | 57.08 | - | 0.00 | 42.92 | 57.08 |
| 1959 | 33.89 | 66.11 | 35.17 | 64.83 | 29.98 | 4.05 | 58.50 | 3.45 | 4.02 | 34.03 | 65.97 |
| 1960 | 30.89 | 69.11 | 26.88 | 73.12 | 26.92 | 3.46 | 60.22 | 3.66 | 5.74 | 30.38 | 69.62 |
| 1961 | 28.29 | 71.71 | 17.17 | 82.83 | 19.61 | 5.27 | 49.70 | 17.13 | 8.29 | 24.88 | 75.12 |
| 1962 | 32.39 | 67.61 | 59.15 | 40.85 | 26.36 | 11.02 | 55.02 | 5.46 | 2.15 | 37.38 | 62.63 |
| 1963 | 31.88 | 68.12 | 27.15 | 72.85 | 25.59 | 5.36 | 54.68 | 5.06 | 9.31 | 30.95 | 69.05 |
| 1964 | 32.22 | 67.78 | 20.30 | 79.70 | 25.61 | 4 17 | 53.86 | 8.49 | 7.87 | 29.78 | 70.22 |
| 1965 | 28.92 | 71.08 | 21.52 | 78.40 | 23.29 | 4.19 | 57.25 | 5.80 | 9.46 | 27.28 | 72.51 |
| 1966 | 30.12 | 69.88 | 25.60 | 74.40 | 26.11 | 3.41 | 60.59 | 6.50 | 3.40 | 29.52 | 70.49 |
| 1967 | 31.71 | 68.29 | 39.60 | 60.40 | 24.03 | 9.59 | 51.76 | 6.34 | 8.28 | 33.62 | 66.38 |
| 1968 | 31.02 | 68.98 | 86.98 | 13.02 | 25.17 | 16.40 | 55.97 | 1.11 | 1.34 | 41.57 | 58.42 |
| 1969 | 40.14 | 59.86 | 57.47 | 42.53 | 33.52 | 9.48 | 49.99 | 1.22 | 5.79 | 43.00 | 57.00 |
| 1970 | 27.48 | 72.11 | 60.58 | 39.42 | 22.99 | 10 65 | 59.43 | 0.27 | 6.66 | 33.64 | 66.36 |
| 1971 | 21.48 | 78.52 | 82.92 | 17.08 | 13.36 | 31.35 | 48.87 | 1.94 | 4.51 | 44.71 | 55.29 |
| 1972 | 22.68 | 77.32 | 42.88 | 57.12 | 12.09 | 20.01 | 41.24 | 2.75 | 23.91 | 32.10 | 67.90 |
| 1973 | 25.30 | 74.70 | 23.60 | 76.40 | 11.66 | 12.71 | 34.44 | 1.88 | 39.31 | 24.37 | 75.63 |
| 1974 | 24.72 | 75.28 | 31.44 | 58.56 | 11.28 | 17.09 | 34.35 | 1.64 | 35.64 | 28.27 | 71.63 |
| 1975 | 13.55 | 86.45 | 30.76 | 69.24 | 7.05 | 14.75 | 45.00 | 12.38 | 20.82 | 21.80 | 78.20 |
| 1976 | 18.48 | 81.52 | 17.25 | 82.75 | 8.11 | 9.67 | 35.81 | 20.09 | 26.32 | 17.78 | 88.22 |
| 1977 | 18.75 | 81.25 | 26.71 | 73.29 | 9.70 | 12.95 | 42.05 | 11.91 | 23.39 | 22.65 | 77.35 |
| 1978 | 20.03 | 79.97 | 36.50 | 63.50 | 10.44 | 17.47 | 41.71 | 12.10 | 18.28 | 27.91 | 72.09 |
| 1979 | 24.11 | 75.89 | 18.34 | 81.66 | 13.71 | 7.91 | 43.18 | 21.83 | 13.38 | 21.65 | 78.39 |
| 1980 | 22.84 | 77.16 | 56.59 | 43.41 | 16.82 | 14 91 | 56.82 | 7.59 | 3.85 | 31.73 | 68.26 |
| 1981 | 18.77 | 81.23 | 72.56 | 27.44 | 12.79 | 21.95 | 56.95 | 2.92 | 5.38 | 34.74 | 65.25 |
| 1982 | 23.25 | 76.65 | 78.28 | 21.72 | 17.10 | 20.95 | 56.14 | - | 5.81 | 38.05 | 61.95 |
| 1983 | 25.29 | 74.71 | 86.27 | 13.73 | 16.36 | 30.45 | 48.34 | - | 4.85 | 46.81 | 53.19 |
| 1984 | 23.41 | 76.59 | 10.16 | 89.84 | 16.66 | 3.12 | 54.49 | - | 25.73 | 19.78 | 80.22 |
| 1985 | 20.99 | 79.01 | 19.11 | 80.89 | 15.53 | 4.97 | 58.44 | - | 21.06 | 20.50 | 79.50 |
| 1986 | 29.14 | 70.86 | 59.06 | 40.94 | 24.08 | 10 27 | 58.54 | - | 7.12 | 34.35 | 65.66 |
| 1987 | 16.35 | 83.65 | 100.00 | 0.00 | 12.46 | 23.83 | 63.71 | - | - | 36.29 | 63.71 |
| 1988 | 15.86 | 84.14 | 100.00 | 0.00 | 11.66 | 26.48 | 61.86 | - | - | 38.14 | 61.86 |

Sources : Appendix tables IV-01, IV-02 and V.

Note : (1) Columns 2 and 3, 4 and 5 add upto 100.00 respectively. Similarly, columns 6 to 10, 11 and 12 add upto 100.00

(2) In some cases the columns mentioned above may not add exactly to 100.00 due to rounding up of figures.

in 1968 (with the exception of 1969 when it was quite higher at 40.14%), and 15.86% in 1988, and 29.14% in 1986 respectively. The corresponding share of statutory transfers in these periods ranged from 67.14% in 1958 to 71.98% in 1956, 68.98% in 1968 to 86.45% in 1975, and 70.86% in 1986 to 84.14% in 1988 respectively. Thus, it is noted that while the relative share of the states Own Revenue was highest during the first phase, the same was lowest during the second and third periods. And conversely whereas the share of statutory transfers was comparatively low during the first period, it was higher during the second and third periods. It is therefore interesting to note that between 1970 and 1988, the share of states' Own Revenue was less than 30%, while that of statutory transfers was above 70% during the same period, (see column 2 and 3). However, we also note that between 1956 and 1969 the share of states own revenue did not fall below 30% (except in the three years, 1956, 1961 and 1965 when the figures were 28.02%, 28.29% and 28.92% respectively). On the other hand, during the same period, the share of statutory transfers did not touch 70% except in the three years as noted above when it stood at 71.98%, 71.71% and 71.08% respectively.

An inference that emerges from the above discussion is that while on the one hand the statutory transfers dominate the Own Current Revenues of the states in the aggregate Current Receipts, on the other hand, this domination has increased over the years. Hence under the "traditional definition of the Independent Revenue"[22] of the governments the Nigeria states would be said to be unviable as the statutory transfers constitute a very big chunk of its aggregate Current Receipts. However, under the "Redefined Independent Revenue"[23] of the governments, this view may not hold much water since statutory transfers are non discretionary and are guaranteed to the states by the Federal Constitution. Hence, the same could be treated as Independent Revenue of the states, which thereby implies that the states in Nigeria are fiscally viable in their Current Account. The danger here is that

22. The traditional definition of Independent Revenue of the governments treats statutory transfers as obligatory federal finance assistance.

23. Under the Redefined Independent Revenue of the Governments, Statutory transfers constitute a part of the States Independent Revenue and classified as their "Independent Revenue from Federal Sources" as against the other component, "Independent Revenue from Own Sources". For details, see section II.04 of chapter Two.

such viability is from "without" -- the centre - and not from "within", - the states. This, therefore means that the fiscal autonomy of the states in the above sense depends on the efficiency and competency of the federal mechinaries involved in the collection of federal revenues from which the statutory transfers originate.

Column 4 of table 5.04 shows Own Capital Receipts of the states as proportion of their total Capital Receipts, while column 5 shows Federal Grants and Federal Loans as proportions of the same. From column 4 it is observed that the former ranged from 10.67% in 1984 to 100.00% in 1958, and 1987-88. However, with the exception of few years like 1956-58, the same did not rise above 50%. Infact it was below 30% in most years. Its trend was very erratic throughout the period studied and within each of the three periods. Conversely, column 5 reveals that the share of capital transfers (Grants and Loans) in the total Capital Receipts of the states varied between 0.00% in 1958 to 89.84% in 1984. Notwithstanding this range, the ratio was largely above 50%. Like the states share, the trend here was highly erratic throughout the periods.

Thus it is noted that, like in the Current Account, the Capital Account of the states is largely dominated by federal transfers - Grants and Loans. But unlike in the former, the transfers here are non-discretional, (and moreover) conditional transfers. Thus the greater is their share in the aggregate Capital Receipts of the states, the greater the states lose their autonomy in this Account. This would be so because the states have no real control over the use-end of the transfers. It is the centre that directs its movement. This way it could be said that the Nigerian states do not enjoy adequate fiscal autonomy in their Capital Account. Hence, their fiscal viability here is highly endangered.

The percentage distribution of the total receipts of the states (from all the sources) between the component parts - Own Current Receipts, Own Capital Receipts, Statutory transfers, Federal Grants and Federal Loans - is shown in columns 6 to 10 of table 5.04. From here it is observed that in 1956, the share of Own Current Receipts and Own Capital Receipts of the states, stood at 24.17% and 11.31% respectively (see column 6 and 7). In the same year the share of Statutory transfers, Federal Grants and Federal Loans were 62.10%, nil, and 2.42% respectively, (see columns 8,9 and 10). By 1967 these figures were 24.03%, 9.59%, 51.76%, 6.34% and 8.28% for Own Current Receipts, Own Capital Receipts, statutory transfers, Federal Grants and Federal Loans respectively. In 1979, the relatives shares stood at 13.71%, 7.91%, 43.18%, 21.83% and 13.38% respectively. By 1988, Federal Grants and Federal Loans were not transfered to the states. Thus, the aggregate Receipts of the states in 1988 comprised only of Own Current Receipts, Own Capital Receipts and statutory transfers - with relative shares of 11.66%, 26.48% and 61.86% respectively.

It is noted from column 6 that the relative shares of Own Current Receipts ranged between 10.44% and 29.98% (with the exception of 1969 when it was 33.52% and 1975-77 when it was 7.05%, 8.11% and 9.70% respectively). However, it is interesting to note that between 1956 and 1971, (that is the first phase and the first three years of the second period) the ratio ranged mainly between 22.99% in 1970 and 29.98% in 1959. The exceptions were years 1957, 1961 and 1969 when the figures stood at at 18.27%, 19.61% and 33.52% respectively. Conversely, between 1971 and 1988, the figures ranged from 7.05% in 1975 to 17.10% in 1982 excepting 1986 when it was 24.08%. The trend of the proportions fluctuated throughout the period. The fluctuations seemed quite higher in the case of Own Capital Receipts as depicted in column 7 of the table. Its range for the entire period, 1956 to 1988 was from 3.12% in 1984 to 46.17% in 1957. Nevertheless, the proportions were mostly less than 20% which thereby implies that the share of Own Capital Receipts in the aggregate Receipts of the states was low. We may also note that between 1971 and 1988 the relative share of Own Capital Receipts of the states were mostly higher than the Own Current Receipts, (Compare column 6 with 7).

From column 8 of the table we observe that the relative share of Statutory transfers was higher than federal grants and loans throughout the years covered in this study. Although the range varied between 34.25% in 1957 and 62.10% in 1956, it was above 50% in most of the years. This is especially so between 1956 and 1967 and between 1980 and 1988 - the first and third periods. It was comparatively low between 1968 and 1979 (with exception of 1968 and 1970) when the figures were 55.97% and 59.43 respectively, while the range was between 34.35% in 1974 to 49.99% in 1969 in the remaining years. These were the years (as one can see from columns 9 and 10) when Federal Grants and Loans became more active. Thus we note that whereas prior to 1975 Federal Grants accounted for less than 10% of the total Receipts of the States (except in 1961 when it was 17.13), it ranged between 12.38% in 1975 and 21.38% in 1979 between 1975 and 1979; (See column 9). On the other hand, whereas prior to 1972 federal loans accounted for less than 10% of the states total revenue, its share ranged from 13.38% in 1979 to 39.31% in 1973 between 1972 and 1979.

From the above analysis we may deduce that although statutory transfers dominated the total revenues of the Nigerian states, they cannot not be regarded as being fiscally unviable since these are guaranteed by the Federal Constitution, and hence are mandatory. In other words, so long as the relative share of Federal Grants and Federal Loans in the total revenues is comparatively low, as we have observed, the fiscal control of the centre over the states in Nigeria cannot be considered overwhelming. Hence, it may be concluded that the states enjoy a reasonable degree of financial autonomy.

The aggregate federal transfers as proportion of total revenue of the states, are quite high when compared with the share of the aggregated Own Receipts (Current plus Capital) in the total revenue. These are depicted in columns 11 and 12 of table 5.04. It is noted that the share of aggregate Own Receipts of the states varied between 17.78% in 1976 and 44.71% in 1971 (except in 1957 and 1983 when it was 64.44% and 46.81% respectively). Thus, it was generally less than 45%. On the other hand the share of aggregate federal transfers (Statutory Transfers Plus Grants and Loans) ranged from 55.29% in 1971 to 88.22% in 1976 (except in the two years noted above when it was 35.56% and 53.19% respectively). Thus, it was generally above 55%. This thereby implies that in the absence of federal transfers, the fiscal operation of the states could not have been sustained. In other words, an inference could be drawn that the survival of the Nigerian states is determined by the revenue collection from the federal resource bases. Hence in event of any socio-political instability like civil war, or economic instability like the decline in the international oil prices

-- which affect the federal resource bases adversely, then the budget proposals of the states would be in a precavous state of deficit. This would cripple most of the state machinaries and services as their revenue collections from their independent resource bases are relatively small.

## V.2. FEDERAL TRANSFERS VERSUS STATES EXPENDITURE

Another way of looking into the fiscal viability of the states in a federation is by examining to what extent the states' expenditure obligations are financed through federal transfers. The existence of vertical fiscal imbalance in a federation, no doubt, necessitates federal transfers. But should the magnitude of these transfers be so huge, and hence become the main source of financing the states' activities'. If this is the case, it is inevitable that the autonomy of the states' would be threatened. This might be the case because in such a situation, the centre may use federal transfers to regulate and direct the financial activities of the states. This could be done mainly through discretionatory conditional transfers. Therefore, in this section we have made attempts to examine the ratios of various categories of federal transfers in the respective expenditure accounts where there utilisation are basically intended. Thus, statutory transfer which is primarily meant to financial the current expenditure of the states has been expressed as a percentage of the same. Similarly, Grants and Loans which are capital transfers have been expressed as a proportion of capital expenditure. If these ratio are relatively high in a particular Account, then the states would be said to be fiscally subordinate to the centre and vice versa.

Table 5.05 depicts various categories of federal transfers as percentage of states expenditure in the respective Accounts, (Current, Capital and Total (Current Plus Capital)). From column 2 of this table it is observed that statutory transfers accounted for 61.61% in 1983 to 126.42% in 1975 of the Current Expenditures of the States. This thereby indicates a high degree of fiscal dependence of the states on the centre. Thus, since current expenditures are running expenses or government mechanaries and basic socio-economic infrastructures, a high degree of fiscal dependence as has been observed in Nigeria is not a welcomed feature of fiscal federalism. This would be so because, as pointed out earlier, in event of sharp decline in Central revenue collection, amount transferable to the states would inevitably decline sharply as well. Thus, making it difficult for the states to discharge some of their basic responsibilities. This was the case in Nigeria during the 1980's when virtually all the states recorded huge deficits consequent upon the drastic fall in federal revenue during this period. It is, however, noted that with the exception of the five years, 1971, 1972, 1975, 1987 and 1988 when the percentage stood above 100% these generally ranged from 61.61% in 1983 to 92.92% in 1978 for the entire period, 1956-88. The range was from 66.11% in 1957 to 79.61% in 1967 during the first phase, 67.35% in 1969 to 126.42% in 1975 during the second phase and 61.61% in 1983 to 113.21% in 1988 during the third phase. It is, therefore, clearly evident from the above that the greater proportion of the states Current Expenditure is financed by statutory transfers. This way, these obligatory transfers alone were capable of generating current surpluses. This feature has been observed only during the second and third phases during which statutory transfers accounted for the highest proportion of Current expenditure. Column 3 also indicates that these obligatory transfers accounted for around 33.07% in 1983 to 97.95% in 1971 of the total expenditure of the states for the entire period. On the other hand we observe from column 4 of the table that the share of Federal Grants in the Capital Expenditure of the states was generally low. It varied between 1.52% in 1970 and 27.62% in 1978 with the exception of 1961, 1976 and 1979 when it stood at 52.50%, 35.65% and 40.68% respectively. Similarly, its share in the total expenditure (Current plus Capital) was very small, (see column 5). The range was from 0.31% in 1970 to 7.95% in 1964 except in some years, (1961 and 1975-79 when it fluctuated between 12.55% in 1977 and 20.38% in 1979.

However, column 6 shows that the share of Federal Loans in the total capital expenditure of the states was greater than that of Federal Grants. Although it fluctuated heavily - ranging from 0.00% in 1958 to 328.02% in 1984. Nevertheless, the range was mainly from 22.58% to 49.19%. Federal loans to the states (as it is known) are requited federal transfers which also carry an obligation on the part for the states in the form of interests.

**TABLE 5.05**
**STATES OWN RECEIPTS AND TRANSFERS AS PERCENTAGE OF THEIR EXPENDITURE IN NIGERIA, 1956-88**

| Year | Statutory Transfers as % of Total Current Expendi-ture | Statutory Transfers as % of Total Expendi-ture (Current & Capital) | Grants as % of Capital Expendi -ture | Grants as % of Total Expendi -ture (Current & Capital | Loans as % of Total Capital Expendi -ture | Loans as % of Total Expendi-ture (Current & Capital) | Grants and Loans as % of Total Capital Expen di-ture | Grants and Loans as % of Total Expendi -ture (Current & Capital) | Total Transfers as % of total expendi-ture (Current & Capital) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1956 | 67.06 | 54.89 | - | - | 11 80 | 2.14 | 11.80 | 2.14 | 57.03 |
| 1957 | 66.11 | 44.96 | - | - | 5 37 | 1.72 | 5.37 | 1.72 | 46.68 |
| 1958 | 69.72 | 50.30 | - | - | 0 00 | 0.00 | 0 00 | 0.00 | 50.00 |
| 1959 | 75.76 | 53.55 | 10.77 | 3.16 | 12 56 | 3.68 | 23.33 | 6.84 | 60.30 |
| 1960 | 70.99 | 47.99 | 9.00 | 2 92 | 14 11 | 4.57 | 23.11 | 7.49 | 55.47 |
| 1961 | 71.88 | 48.83 | 52.50 | 16 83 | 25 42 | 8.15 | 77.92 | 24.98 | 73.81 |
| 1962 | 70.24 | 46.42 | 13.58 | 4 61 | 5 35 | 1.81 | 18.93 | 6.42 | 52.84 |
| 1963 | 69.67 | 48.89 | 15.17 | 4.52 | 27 92 | 8.33 | 43.09 | 12.85 | 61.74 |
| 1964 | 72.02 | 50.45 | 26.56 | 7.95 | 24.62 | 7.37 | 51.18 | 15.32 | 65.77 |
| 1965 | 77.58 | 53.04 | 16 99 | 5 37 | 27 72 | 8.77 | 44.71 | 14.14 | 67.18 |
| 1966 | 71.64 | 51.17 | 19.36 | 5 49 | 10.12 | 2.87 | 29.48 | 8.36 | 59.52 |
| 1967 | 79.61 | 50.90 | 17.28 | 6.23 | 22 58 | 8.14 | 39 86 | 14.37 | 65.28 |
| 1968 | 75.09 | 48.48 | 2.72 | 0.97 | 3 28 | 1.16 | 6.00 | 2.13 | 50.60 |
| 1969 | 67.35 | 46.12 | 3.57 | 1 13 | 16 96 | 5.34 | 20.53 | 6.47 | 52.60 |
| 1970 | 85 67 | 68.19 | 1.52 | 0.31 | 37 47 | 7.64 | 38.99 | 7.95 | 76.15 |
| 1971 | 121.03 | 97.95 | 20.42 | 3.89 | 47.48 | 9.05 | 67.90 | 12.94 | 110.90 |
| 1972 | 101.61 | 75.51 | 19.60 | 5 04 | 170.38 | 43.78 | 189.98 | 48.82 | 124.32 |
| 1973 | 88.02 | 60.40 | 10.51 | 3.30 | 219 76 | 68.95 | 230 27 | 72.25 | 132.65 |
| 1974 | 91.94 | 55.25 | 6.59 | 2.63 | 143.61 | 57.31 | 150.61 | 59.94 | 115.19 |
| 1975 | 126.42 | 47.47 | 20.91 | 13 06 | 35 16 | 21 96 | 56.07 | 35.02 | 82.49 |
| 1976 | 83.37 | 36.06 | 35.65 | 20.23 | 46.69 | 26.50 | 82.34 | 46.73 | 82.79 |
| 1977 | 88.85 | 44.33 | 25.06 | 12 55 | 49 19 | 24.65 | 74.25 | 37.20 | 81.53 |
| 1978 | 92.92 | 47.03 | 27.62 | 13 64 | 41 74 | 20.62 | 69.36 | 34.26 | 81.28 |
| 1979 | 80.81 | 40.31 | 40.68 | 20.38 | 24.92 | 12.49 | 65.60 | 32.87 | 73.19 |
| 1980 | 86.09 | 43.72 | 11.87 | 5.84 | 6 02 | 2.96 | 17.89 | 8.80 | 52.52 |
| 1981 | 73.97 | 35.32 | 3.47 | 1.82 | 6.38 | 3.33 | 9.85 | 5.15 | 40.47 |
| 1982 | 71.88 | 37.18 | - | - | 7.98 | 3.85 | 3.85 | 3.85 | 41.03 |
| 1983 | 61.61 | 33.07 | - | - | 7.23 | 3.31 | 7.23 | 3.31 | 36.38 |
| 1984 | 78.18 | 70.15 | - | - | 328.02 | 33.12 | 328.02 | 33.12 | 103.27 |
| 1985 | 80.12 | 69.54 | - | - | 207 79 | 25.06 | 207.79 | 25.06 | 94.60 |
| 1986 | 69.09 | 58.59 | - | - | 46 86 | 7.12 | 46.86 | 7 12 | 65.71 |
| 1987 | 106.41 | 83.58 | - | - | - | 0.00 | - | - | 83.58 |
| 1988 | 113.21 | 84 61 | - | - | - | 0.00 | - | - | 84.61 |

Source : Calculated with the available data from Tables 4.01, 5.01 and Appendix tables IV-01 and VI-02.

Note : Statutory transfers have been expressed as percentage of current expenditure as it is generally used to finance the same. Similarly, Grants and Loans have been expressed as percentage of capital expenditures as they usually used finance the same.

Thus, unlike the statutory transfers or federal grants, federal loans add to the financial burden of the states that receive them. As such if the ratio of federal loans to the states Capital Expenditure is 0.00%, it implies that the states have no financial burden in the form of repayment and interest. On the other hand, if the ratio is 100% or above in a particular year it means that any form of capital expenditure in that year imposes a burden on the state in the form of repayment and interest. Hence, a high dependence of the states on federal loans may not be at their best interest. This would be especially so for a country like Nigeria where the states have created a bad reputation of debt mismanagement by their treatment of these capital transfers as if they are current receipts which carry no obligation neither in the form of repayment or interest.[23A] It is, thus, interesting to note that in some years in Nigeria, such as 1972-74 and 1984-85 the loans were far in excess of capital expenditure of the states (see column see of table 5.05). This thereby implies that federal loans could single-handedly cause tremendous increase on Capital Account saving on the one hand, and on the other hand, it reflects an increase in the financial burden on the states. Nevertheless, its share in the total expenditure (current plus capital) was very small. It ranged merely for 0.00% in 1958 to 9.05% in 1971, except during the years 1972-79 and 1984-85 when it ranged from 12.49% in 1979 to 68.95% in 1973 (see column 7).

The combined shares of Grant and Loans in the total capital expenditure and total expenditure (current and capital) are shown in columns 8 and 9 respectively. Column 8 indicates that the former ratio fluctuated heavily between 0.00% in 1958 and 328.02% in 1984. It was, however, mainly around 20.53% in 1969 and 82.34% in 1976. It ranged from 46.86% in 1986 to 328.02% in 1984 (except in 1983 when it was very low at 7.23%) between 1972 and 1988. This thereby implies that during this later period the role of capital transfers in the capital expenditure of the states assumed greater significance. This was the period when the centre registered huge surpluses in its Current Account due to the Oil boom and assited the states in embarking on ambitious capital projects of the second and third development plans, 1971-80.

23A. See Okigbo Commission Report, ibid, pp. 45.

Column 9, however, shows that the combined share of Grants and Loans in the total expenditure of the states (Current and Capital) was not high between 1956 and 1971 and it varied between 0.00% in 1958 and 15.32% in 1964 except in 1961 when it was 24.98%. In contrast, it was reasonably high between 1972 and 1988 - ranging mainly between 25.06% in 1985 and 72.75% in 1973.

From the above we may draw some general inferences : whereas the current expenditure of the states is heavily dependent on statutory transfers, the role of capital transfers (Grants and Loans), in the Capital Expenditure of the states was also undauntedly high - and could only be dispensable in few years. However, when one compares the role of statutory transfers with that of Grants and Loans in the total expenditure of the States (Current plus Capital), it becomes clear that the former dominated the latter, (compare column 3 with 9). Thus, we note that whereas the percentage of statutory transfers in that Account stood at 54.89%, 50.90%, 48.48%, 40.31% and 43.72% in 1956, 1967, 1968, 1979 and 1980 respectively, the corresponding figures for the capital transfers stood at 2.14%, 14.37%, 2.13%, 32.87% and 8.80% respectively. This is a welcomed feature of fiscal fedenalism as it ensures greater autonomy for the states in the utilization of fund.

Nontheless, column 10 of the table reveals that total transfers as percentage of total Expenditure (Current plus Capital) accounted for 50.30% in 1958 to 94.60% in 1985 of the total expenditure of the states (with the exception of 1957, 1981-83 when it stood at 46.68%, 40.47%, 41.03% and 36.38% respectively). It was even above 100% in some years such as 1971-74 and 1984 when the percentages stood at 110.90%, 124.32%, 132.65%, 115.19% and 103.27% respectively. It may be interesting to note that these are some of the years during which the Centre collected huge revenue from Mining Rents and Royalties and Petroleum Profit tax. Hence, the transfers to the states increased significantly in these years. This ratio which stood above 100% in the noted years, therefore, reflects the complete reliance of the states on federal transfers in Nigeria -- as these transfers were able to generate budget surpluses (even without the states' own revenue from own sources). This phenomenon hadly exists in any other federation. No doubt these percentages reflect revenue centralization, but as we have argued earlier that the same may not be taken as indicative of fiscal dependence per se -- of the states on the centre. The reason being that these transfers are dominated by statutory transfers which are non- discretionary and unconditional. Thus, we can generalize that the Nigerian States enjoy greater fiscal autonomy, especially on the use-end of the federal transfers.

## VI. THE DETERMINANTS OF FEDERAL TRANSFERS TO THE STATES OF NIGERIA : REGRESSION ANALYSIS

In this section, we have attempted to explore the variables that determine the quantum of federal transfers to the states over the study period, as well as in the sub- periods. We have tried to establish a functional relationship between the respective "explained" variables - Statutory Transfers, Federal Grants and Federal Loans - and a set of "explanatory" variables. Whereas the "independent" or "explanatory" variables used in respect to Statutory Transfers are (i) Federal Current Receipts and (ii) Pre-Transfers Current Account Deficit of the states, Federal Grants and Federal Loans are explained by :(i) Capital Receipts of the Federal Government (ii) Current Account Revenue-Expenditure Ratio of the Federal Government and, (iii) States Capital Outlay. These concepts and the theoretical justication for using them as determinants of federal transfers are explained below.

### VI.1. DETERMINANTS OF TOTAL STATUTORY TRANSFERS

#### VI.1.1. FEDERAL CURRENT RECEIPTS ($X_1$)

The theory and practice of fiscal federalism favours that the federal constitution which guarantees statutory transfers to the states also stipulates that these transfers should be made from the Federal Current Receipts. However, these transfers are not made from the Aggregate Federal Current Receipts (AFCR) as the latter includes receipts from the federal exclusive resource heads also. Hence, statutory transfers are generally made from the Divisible Federal Current Receipts (DFCR). Thus, the Federal Current Receipts as used in the regression model refer to the absolute figures of the Divisible Federal Current Receipts (DFCR). Hence we expect that higher the DFCR, higher will be the statutory transfers and vice versa.

## VI.1.2. PRE-TRANSFERS CURRENT ACCOUNT DEFICIT OF THE STATES,($X_2$)

The disequilibrium between the revenues and expenditures of the states before fiscal adjustment forms the logical base for resource transfers to the states. This is because the disequalibrium reflects the fiscal need of the states. Hence, the primary considerations for statutory transfers to the states is their Pre-transfers Current Account Deficits, which (more or less as a rule) always shows huge deficits. The deficits arises from the fact that the states resource bases are not very elastic whereas their expenditures are "expensive" and "expansive". It may be pertinent to point out that the Pre-transfers Current Account Deficit of the states indicates their inability to generate sufficient current revenue to excute their current expenditure. This, in other words implies that the states are dis-saving in their Current Account and have to dependent on federal transfers in order to discharge their current expenditure obligations. However, the Current Deficit is not generally "expressed" as a factor or criterion of centre- state fiscal transfers in most federations.[24] It, the pre-transfers deficits, remains "implicit" in the proportionate allocation to the states from the divisible revenues, and thus, could be regarded as an "implicit determinant" of statutory transfers. Therefore, we expect a positive association between the pre-transfers Current Account Deficits of the states and the statutory transfers. We have expressed this variable (states pre-transfers current deficits) in percentage terms, (Current Revenue as a percentage of Current Expenditure). Hence, if the Current revenue as a percentage of Current Expenditure is 100.00%, it implies a position of equilibrium (balance) between revenue and expenditure of the states. That is, there are no deficits, therefore, percentage values that are less than 100.00% reflects pre-transfers deficit in Current Account of the States. This implies that the states' own current revenue as a proportion of their current expenditure is less than the equilibrium mark, 100.00%. Therefore, the percentage point between these two gives us the percentage pre-transfers current budget deficit of the states. Take for instance, suppose before statutory transfers, the share of the Own Current revenue of the states in their Current expenditure is 35% in a particular year. It means that the states have a pre-

24. India is one of the Federations where Budget Deficit of the states is used as an explicit criterion in statutory transfers. The criterion dubbed the "Gap- filling Approach" has found favour with most of the Finance Commissions. For details, see Reports of the Various Finance Commissions of India.

transfers Current deficit of 100% minus 35%, which is equal to 65%. Thus, we assume that higher the percentage deficit higher is the need for transfers and lower the deficit lower is the need for transfers. Hence, a positive association is expected to prevail between statutory transfers and Pre-transfers Current Deficits of states.

## VI.2 DETERMINANTS OF CAPITAL TRANSFERS : FEDERAL GRANTS AND LOANS

### VI.2.1. FEDERAL CAPITAL RECEIPTS ($X_1$)

Federal Grants and Loans are capital transfers which are not only non-recurrent but are also discretional. Hence they are usually made available to the states from its non-recurrent receipts, the Federal Capital Receipts. Thus, the availability of capital transfers to the states depends on the availability of Federal Capital Receipts, hence we expect a positive association between Federal Capital Receipts and Federal Grants and Loans. Hence, larger the Federal Capital Receipts larger would be the capital transfers to the states and vice versa. The variables, Federal Grants, Federal Loans and Federal Capital Receipts used here are the absolute amounts and not ratios or percentages.

It may be pointed out that capital receipts as used here denote autonomous capital receipts. That is, the aggregate capital receipts of the federal excluding its Current Account surplus or deficit. This exclusion has been made necessary as our analysis suggests that the Current Account budget position of the centre plays a crucial role in federal grants and loans. Hence, we have included the same as a seperate explanatory variable in our model.

### VI.2.2. FEDERAL CURRENT ACCOUNT REVENUE-EXPENDITURE RATIO

Our observations earlier reveal that Federal Current Receipts not only determine the size of statutory transfers but also play crucial role in federal capital transfers to the states. Thus it was noted in chapter 4 (see Appendix IV-02) and section V of this chapter (see table 5.03) that federal autonomous capital receipts (as defined in IV.2.1 above) could not contain the capital transfers in some years. However, it was observed that after making adjustment for Current Account surplus or deficits, federal capital transfers accounted for small proportions of the Federal Capital Receipts in most of the years as the Federal Current Account budget position showed huge surpluses over the years. Thus, capital transfers (Federal Grants and Loans) generally accounted for 4.17% to 26.09% of the aggregate Federal Capital Receipts (which includes Current Account Surplus or deficit), see column 6 of table 5.03. This suggests that Federal Current Account budget position also influences the Federal Grants and Loans.

Thus, we expect a positive association between each of the Federal Grants and Loans respectively with the Federal Current Account budget position. We have defined Federal Current Account Budget Position as a ratio of Federal Current Receipts (after statutory transfers) to Federal Current Expenditure. The Federal Current Expenditure here excludes the statutory transfers to the states. This is so because statutory transfers are not actual Current expenditure of the Centre. Hence, its inclusion in the Current expenditure of the Centre will only exaggerate the same. Moreover, our interest here is to examine the influence of post-statutory transfers Federal Current Account budget position on the quantum of capital transfers to the states. We assume that the higher the ratio, larger will be the capital transfers to the states and vice versa.

### VI.2.3. STATES' CAPITAL OUTLAY ($X_3$)

The Federal Grants and Loans to the states in Nigeria depended mainly on the cost of the projects for which the Grants or Loans were sought for[24A]. Thus, the higher the cost of the projects the more the need for Federal Grants or Loans. Considering the fact that Federal Grants and Loans consituted a certain proportion of most of the states capital projects, it would therefore, imply, that Federal Grants and Loans to the states depend to a great extent on the aggregate states capital outlay, expressed in absolute terms. Hence we assume that there is a positive association between each, Federal Grants and Federal Loans to the states and the States' Capital Outlay. Obviously an increase in States' Capital Outlay is expected to cause an increase in demand for and hence in capital transfers to the states and vice versa.

24A. See foot-note 9 of this chapter.

## VI.3. METHODOLOGY

In an attempt to explore the relationship between the dependent and independent variables as highlighted above, it was observed that the Log-Log model (also called the Log-Linear, or Constant-Elasticity Model) proved the best fit for our time-series data. Other simple linear and semi-log models were also fitted, but the results did not prove to be good fits. Hence, we have fitted Log-Log multivariate regression models as follows :

### (A) MODEL FOR DETERMINANTS OF STATUTORY TRANSFERS TO STATES OF NIGERIA

$$\text{Log}_{10}\,\text{STT} = \text{Bo} + \text{B}_1\text{Log}_{10}\,\text{DFCR} + \text{B}_2\text{Log}_{10}\text{PTBDS} + \text{U}$$

| | | | |
|---|---|---|---|
| Where : | STT | = | Total Statutory transfers to the states |
| | DFCTR | = | Total Divisible Federal Current Receipts |
| | PTBDS | = | Pre-Transfers Current Account Deficit of the States in Percentages |
| | $B_0, B_1, B_2$ | = | Parameters to be estimated |
| | U | = | Stochastic Error Term. |

The above model examines the relationship between log valuesof Divisible Federal Current Receipts and Pre-transfers Budget Deficit of the states with log values of Statutory Transfers to the states. $B_0$, is the intercept and indicates the level of Statutory Transfers when DFCR and PTBDS are zero, while $B_1$ and $B_2$ are the respective coefficients of these two variables. It is assumed that an increase in log values of DFCR and PTBDS would lead to, on an average, some increase in STT, i.e., a positive association is assumed to exist in between STT and DFCR, and STT and PTBDS log values. $B_1$ and $B_2$ also indicate the extent of elasticity between STT and DFCTR and STT and PTBDS as it reflects proportionate changes in these variables.

This model and the following also have been fitted for the entire period of the study as well as for the sub-periods, i.e., for 1956-88, 1956-67, 1968-79 and 1980-88 respectively.

(B) MODEL FOR DETERMINANTS OF FEDERAL GRANTS TO STATES OF NIGERIA

$$Log_{10}FG = B_0 + B_1Log_{10}FCR + B_2Log_{10}FRER + B_3Log_{10}SCO + U$$

Where : FG = Federal Grants to the States in Absolute Amount

FCR = Federal Capital Receipts in Absolute Amount

FRER = Federal Current Revenue-Current Expenditure Ratio after statutory transfers

SCO = States' Capital Outlay in Absolute Amount

$B_0, B_1, B_2, B_3$ = Parameters to be Estimated

U = Stochastic Error Term.

The above model examines the relationship between the log values of Federal Capital Receipts (FCR), Federal Current Revenue-Expenditure Ratio (FRER), and States' Capital Outlay (SCO) with log values of Federal Grants to the states. $B_0$ is the intercept and measures the level of Federal Grant when FCR, FREER and SCO are zero. $B_1$, $B_2$ and $B_3$ are the respective coefficients of these three explanatory variables. It is assumed that an increase in the log values of FCR, FRER and SCO would lead to, on an average, some increase in log values of Federal Grants (FG). That is, a positive association is assumed to exist between FG and FCR, FG and FRER, and FG and SCO log values. $B_1$, $B_2$ and $B_3$ also indicates the elasticity between FG and FCR, FG and FRER and FG and SCO as it shows the proportionate changes in these variables.

(C) MODEL FOR DETERMINANTS OF FEDERAL LOANS TO STATES OF NIGERIA

$$Log_{10}FL = B_0 + B_1Log_{10}FCR + B_2Log_{10}FRER + B_3Log_{10}SCO + U$$

Where : FL = Federal Loans in Absolute Amount. All other variables and subscripts are the same as in model (B) above.

In the above model, we have examined the relationship between the log values of : Federal Capital Receipts (FCR), Federal Current Revenue-Expenditure Ratio (FRER), and States' Capital Outlay (SCO), with log values of Federal Loans to the states of Nigeria. $B_0$ is the intercept and indicates the level of Federal Loan when FCR, FRER and SCO are zero. $B_1$, $B_2$ and $B_3$ are the respective coefficients of these three explanatory variables. It is assumed that an increase in the log values of FCR, FRER and SCO would lead to, on an average, some increase in log values of Federal Loans (FL). Thus, a positive relationship is assumed to exist between FL and FCR, FL and FRER, and FL and SCO log values. $B_1$, $B_2$ and $B_3$ also indicates the elasticity between FL and FCR, FL and FRER, and FL and SCO as it shows the proportionate changes in these variables.

## VI.4. EMPIRICAL RESULTS

### VI.4.1. DETERMINANTS OF STATUTORY TRANSFERS

Model (a) cited in section VII.3 of this chapter examines whether or not a given proportionate change in each of the (Divisible Federal Current Receipts and Pre-transfers Current Account Deficit of the States') result into certain proportionate change in statutory transfers to the states. Table 5.06 gives regression results for the model. It is observed that the log-log multivariate regression model gives a good fit. This is revealed through the high values of the coefficient of determination (adjusted for the degree of freedom) $\overline{R}^2$ and the F-Ratio. The $\overline{R}^2$ assumed the value of 0.9708, 0.9560, 0.9547 and 0.9253 for the periods, 1956-88, 1956-67, 1968-79, and 1980-88 respectively, (see column 8 of table 5.06). This implies that 97%, 96%, 95% and 93% variations in log values of Total statutory transfers in the four respective periods were caused by the changes in log values of Divisible Federal Current Receipts ($X_1$) and Pre-transfers Current Account Deficits of the States ($X_2$) during the periods. We also observe that the F-Ratios were satistically significant at 1% level which confirms the goodness of fit of the model. The coefficient of Determination $\overline{R}^2$, varied from 0.925 in equation 4 to 0.971 in equation 1.

It is also very interesting to note that the Divisible Federal Current Receipts($X_1$) are positively associated with Statutory transfers (as expected) in all the equations (periods). We equally note from column 6 of table 5.06 that $B_1$, the coefficient of $X_1$ assumed values

## TABLE 5.06

## DETERMINANTS OF STATUTORY TRANSFERS TO THE STATES IN NIGERIA - SOME REGRESSION RESULTS

| Equation No | Period | Dependent Variable | Independent Variables | $B_0$ | $B_1$ | $B_2$ | $\bar{R}^2$ | D-W Statistics | F-Ratio | Degree of Freedom |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | 1956-88 | Statutory Transfers | Federal Current Receipts ($x_1$), States' Pre-Transfers Deficit ($x_2$). | -0.9599636 (-0.2515806) | 0.9510065 (19.991743)* | 0.0465664 (0.0486561) | 0.970807 | 0.580082@ | 533.0775* | 30 |
| 2 | 1956-67 | Statutory Transfers | Federal Current Receipts ($x_1$), States' Pre-Transfers Deficit ($x_2$) | -1.6771142 (-0.8792625) | 1.1277316 (16.254862)* | 0.0168957 (0.0385909) | 0.9559985 | 2.411942 | 132.9491* | 9 |
| 3 | 1968-79 | Statutory Transfers | Federal Current Receipts ($x_1$), States' Pre-Transfers deficit ($x_2$). | -3.0590342 (-0.6584639) | 0.7524626 (7.3009515)* | 0.8186313 (0 6592330) | 0.954711 | 1.365847 | 116.9413* | 9 |
| 4 | 1980-88 | Statutory Transfers | Federal Current Receipts ($x_1$), States' Pre-Transfers Deficit ($x_2$) | -7.2440358 (-1.9722408) | 1.0096880 (9.6055102)* | 1 4238398 (1 6908939) | 0 925258 | 0.965961 | 50 517* | 6 |

Source of Data : Table 5.01 and Appendix Table IV-01.

Notes :

(1) Regression equation = Log10STT = $B_0 + B_1 \text{Log}_{10}$ + DFCR + $B_2 \text{Log}_{10}$ PTBDS + U.

Where :

| | | |
|---|---|---|
| STT | = | Statutory transfers to the States. |
| DFCR | = | Divisible Federal Current Receipts |
| PTBDS | = | Pre-Transfers Budget Deficit of the States. |
| $B_0$, $B_1$ and $B_2$ | = | Parameters to be estimated |
| U | = | Stochastic Error Term. |

(2) Pre-Transfers Budget Deficits of the states are in percentages.

(3) Figures in brackets denote T-statistics.

Table 5.06 (Contd.)

(4) *,** denote the 1% and 5% levels of significance respectively.

(5) @ implies significant for autocorrelation at 1% level.

(6) There are no table values for D-W statistics for observations less than fifteen hence, test for autocorrelation in equations 2, 3 and 4 could not be carried out.

(7) T-test has been applied on $B_0$, $B_1$ and $B_2$ with the T-statistics having the following critical values :

| Degree of Freedom (DF) | Level of significance 1% | 5% |
|---|---|---|
| 30 | 2.750 | 2.042 |
| 09 | 3 250 | 2.262 |
| 06 | 3 707 | 2.447 |

(8) F-Test has been applied to $\bar{R}^2$, with F-Ratio having the following critical values :

| Degree of Freedom (DF) | Level of significance 1% | 5% |
|---|---|---|
| 2, 30 | 5.39 | 3.32 |
| 2, 09 | 8.02 | 4.26 |
| 2, 06 | 10.92 | 5.14 |

(9) The regression estimates have been carried out with the Statistical Programme, T.S.P.

(10) Multicollinearity amongst the variables has been tested.

0.951 (for the entire period 1956-88), 1.128 (between 1956-67), 0.752 (between 1968-79), and 1.010 (between 1980-88) and was statistically significant at 1% level in all the equations. This implies that one percent increase in Divisible Federal Current Receipts ($X_1$) led, on an average, to 0.951% increase in Statutory transfers in 1956-88, 1.128% in 1956-67, 0.752% in 1968-79, and 1.01% in 1980-88. Almost unitary value of B in three out of these four cases denotes that $X_1$ and Statutory transfers increased in same proportions as the elasticity of statutory transfers with respect to $X_1$, was almost equal to one.

It is equally noted that the Pre-Transfers Current Account Budget Deficits of the states ($X_2$) were also positively associated with the statutory transfers in all the four periods, (see column 7). However, it is not found to be statistically significant. Hence, no further analysis is undertaken here.

The results here are of paramount importance. This is so because statutory transfers are basically designed to adjust the revenues with the expenditures of the centre and the states respectively -- such that each tier of decision- making would have at its disposal resources that approximately commensurate with its expenditure obligations[25]. Thus, the theory of fiscal federalism requires that adequate attention be paid to the Pre-Transfers Budget Deficit of the states. However, statistically insignificant values of $B_2$ as observed above denote that this is not true with respect to statutory transfers in Nigeria.

### VI.4.2. DETERMINANTS OF FEDERAL GRANTS

Model (B) cited in section VII.3 examines the relationship between Federal Grants and each of the variables, Federal Capital Receipts ($X_1$), Federal Current Revenue-Expenditure Ratio ($X_2$), and the States' Capital Outlay ($X_3$). The log-log model fitted assumes positive association between Federal Grant and each of the above variables as stated earlier.

25. Howard C, The Federal Fiscal Imbalance, Paper Presented to Minerals Outlook Seminar, May 2, 1984. Proceeding Published by Australia Mining Industry Council, Camberra, May 1984. pp.2.

## TABLE 5.07

## DETERMINANTS OF FEDERAL GRANTS TO THE STATES IN NIGERIA - SOME REGRESSION RESULTS

| Equation No. | Period | Dependent Variable | Independent Variables | $B_0$ | $B_1$ | $B_2$ | $B_3$ | $\bar{R}^2$ | D-W Statistics | F-Ratio | Degree of Freedom |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 1959 to 1981 | Federal Grants | Federal Capital Receipts (x1), Fed. Current Account Revenue - Expenditure Ratio (x2). States Capital Outlay (x3) | -7.4360445 (-4.314768)* | -10.0017627 (-0.0079017) | 1.2500966 (3.2647233)* | 0.8429900 (3.5658660)* | 0.876963 | 1.293763@ | 53.26923* | 19 |
| 2 | 1959 to 1969 | Federal Grants | Fed. Current Account Revenue -Expenditure Ratio (x2) States Capital Outlay (x3) | -18.327690 (-3.8711678)* | 0.1971618 (0.5467378) | 2.7710770 (3.2494910)** | 1.5850693 (1.7724095) | 0.623064 | 1.168072 | 6.509903** | 07 |
| 3 | 1970 to 1981 | Federal Grants | Fed Current Account Revenue -Expenditure Ratio (x2) States Capital Outlay (x3) | -9.5389034 (-3.0695208)* | 0.3479758 (0.8013760) | 1.3331564 (2.6782240)** | 0.7290757 (2.2452894)** | 0.866929 | 1.634603 | 24.88753* | 08 |

Source of Data : Appendix tables IV.01 and IV-02.

Note :

(1) Regression equation = $Log_{10}FG = B_0 + B_1 Log_{10} FCR + B_2 Log_{10} FRER + B_3 Log_{10} SCO + U$

Where :

FG = Federal Grants to the States
FCR = Federal Autonomous Capital Receipts
FRER = Federal Current Revenue - Expenditure Ratio after Statutory Transfers (in percentages)
SCO = States Capital Outlays
$B_0$, $B_1$, $B_2$, $B_3$= Parameters to be estimated
U = Stochastic Error Term

(2) Figures in bracket denote T-statistics

Table 5.07 (Contd.)

(3) *,** denote the 1% and 5% levels of significance respectively.

(4) @ Denotes test is conclusive for autocorrelation.

(5) There are no table values for D-W statistics for observations less than fifteen, hence tests for autocorrelation for equations 2 and 3 could not be carried out.

(6) T-statistics has been applied on $B_0, B_1, B_2$ and $B_3$ with the T-statistics having the following critical values :

| Degree of Freedom (DF) | Level of significance 1% | 5% |
|---|---|---|
| 19 | 2.861 | 2.093 |
| 7 | 3.499 | 2.365 |
| 8 | 3.355 | 2.306 |

(7) F-Test has been applied to $\bar{R}^2$, with F-Ratio having the following critical values :

| Degree of Freedom (DF) | Level of significance 1% | 5% |
|---|---|---|
| 3, 19 | 5.01 | 3.13 |
| 3, 07 | 8.45 | 4.35 |
| 3, 08 | 7.59 | 4.07 |

(9) The regression estimates have been carried out with the Statistical programme, T.S.P.

(10) Multicollinearity amongst the variables has been tested.

The results of this regressions fitted for various periods are presented in Table 5.07. It is observed that the Log-Log multivariate regression model proved a good fit. Thus, we note that the coefficient of determination, $\overline{R}^2$ assumed values 0.877, 0.623, and 0.867 for the periods 1959-81, 1959-69 and 1970-81 respectively. This implies that around 88%, 62% and 87% variations in the log values of Federal Grants to the states are explained by the variations in the log values of Federal Capital Receipts, Federal Current Revenue-Expenditure Ratio and States Capital Outlay during respective periods. F-Ratio was found to be statistically significant at 1% level.

The table further shows that the Current Account Budget position of the Federal government (after Statutory transfers) as reflected by the Revenue-Expenditure Ratio, $X_2$ was positively associated with Federal Grants to the states in Nigeria. It is, thus, observed that the coefficient $B_2$, assumed the values 1.250, 2.771 and 1.333 for the periods 1959-81, 1959-69 and 1970-81 respectively which were found to be statistically significant at 1% level in the entire period, and at 5% level in the two sub periods. This denotes that one percent increase in Federal Current Revenue-Expenditure Ration ($X_2$), caused, on an average, 1.25%, 2.77% and 1.33% increase in Federal Grants during 1959-81, 1959-69 and 1970-81 respectively indicating that these were highly elastic to Federal Current Account Budget position.

It is interesting to note that one percent rise in States Capital Outlay caused, on an average, less than one percent rise in Federal Grants (except for 1959-69 when B = 1.585) which shows that the latter are inelastic to states Capital Outlay in Nigeria.

**VI.4.3. DETERMINANTS OF FEDERAL LOANS**

In this section, an attempt has been made to explore the relationship between Federal Loans and each of the variables, viz., Federal Capital Receipts, Federal Current Revenue-Expenditure Ratio and States Capital Outlay. Log-Log Model i.e., Model (C) cited in VII.3 of the chapter is fitted. Table 5.08 shows the regression results in this regard.

## TABLE 5.08

## DETERMINANTS OF FEDERAL LOANS TO THE STATES IN NIGERIA - SOME REGRESSION RESULTS

| Equation No. | Period | Dependent Variable | Independent Variables | $B_0$ | $B_1$ | $B_2$ | $B_3$ | $\bar{R}^2$ | D-W Statistics | F-Ratio | Degree of Freedom |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 1959 to 1986 | Federal Loans | Federal Capital Receipts (x1), Fed. Current Account Revenue- Expenditure Ratio (x2). States Capital Outlay (x3) | -9.0129906 (-4.4832659)* | -1.0964569 (-4.645405)* | 1.5984070 (3.7703908)* | -0.846736 (-0.6210603) | 0.827578 | 1.137426@ | 44.19745* | 24 |
| 2 | 1959 to 1972 | Federal Loans | Fed. Current Account Revenue-Expenditure Ratio (x2) States Capital Outlay (x3) | -12.116504 (-2.7527493)* | 0.8558507 (1.9998322) | 1.96559284 (2.0534710) | 0.3920511 (0.3412123) | 0 419391 | 1.9659284 | 4.130099** | 10 |
| 3 | 1973 to 1986 | Federal Loans | Fed Current Account Revenue-Expenditure Ratio (x2). States Capital Outlay (x3) | 3.8809487 (2.0246827)* | 0 6650525 (4.0562495)* | 0.2638112 (1.0274239) | -0.5069071 (-3.7580173* | 0 580089 | 1.611615 | 6.986318* | 10 |

Source of Data : Appendix Tables IV.01 and IV-02.

Note :

(1) Regression Equation = $Log_{10}FL = B_0 + B_1Log_{10}FCR + B_2Log_{10}FRER + B_3Log_{10}SCO + U$

Where FL = Federal Loans to the States

FCR = Federal Autonomous Capital Receipts

FRER = Federal Current Revenue-Expenditure Ratio after Statutory Transfers (in percentage)

SCO = States Capital Outlay.

$B_0, B_1, B_2$ & $B_3$ = Parameters to be estimated

U = Stochastic Error Term.

(2) Figures in bracket denote T-statistics

P.T.O.

Table 5.08 (Contd.)

(3) *,** denote the 1% and 5% levels of significance respectively.

(4) @ Denotes test inconclusive for autocorrelation.

(5) There are no table values for D-W Statistics for observations less than fifteen, hence tests for autocorrelation for equations 2 and 3 could not be carried out.

(6) T-statistics has been applied on $B_0, B_1, B_2$ and $B_3$ with the T-statistics having the following critical values :

| Degree of Freedom (DF) | Level of significance | |
|---|---|---|
| | 1% | 5% |
| 24 | 2.797 | 2.064 |
| 10 | 3.169 | 2.228 |

(7) F-Test has been applied to $\bar{R}^2$, with F-Ratio having the following critical values .

| Degree of Freedom (DF) | Level of significance | |
|---|---|---|
| | 1% | 5% |
| 3, 24 | 4.72 | 3.01 |
| 3, 10 | 6.55 | 3.71 |

(9) The regression estimates have been carried out with the statistical programme, T.S.P.

(10) Multicollinearity amongst the variables has been tested.

From this table it is observed that the log-log model gives a good fit in all the three equations. The coefficient of determination. $\overline{R}^2$ was found to be satisfactorily significant and assumed the values 0.828, 0.419 and 0.580 for the periods, 1959-86, 1959-72 and 1973-86 respectively. Thus, during these respective periods, 83%, 42% and 58% variations in the log value of Federal Loans to the States resulted from variations in Federal Capital Receipts Federal Current Revenue-Expenditure Ratio and States' Capital Outlay. It would also be interesting to note that the F-Ratio was significant at 1% level for the periods 1959-86 and 1973-86, and at 5% level for the remaining period, 1959-72.

It is further observed from the table that the Federal Capital Receipts ($X_1$) are positively associated as expected, with Federal Loans to the states in all the equations (periods). Thus, the coefficient of this variable, $B_1$, assumed the values 1.096, 0.856 and 0.665 for the periods, 1959-86, 1959-72 and 1973-86 respectively. It was statistically significant at 1% level for the entire period, 1959-86, and in the second period, 1973-86. It was not statistically significant during 1959-72. As in case of Federal Grants less than one value of B in two out of three cases here, indicates the inelasticity of these variables with Federal Loans.

Interestingly, also, it is revealed from table 5.08 that the Current Account Budget Position of the Federal Government ($X_2$) (after statutory transfers) as reflected by its Revenue-Expenditure Ratio was positively related to the Federal Loans to the States as assumed for the entire period, 1959-86 as well as for the sub-periods, 1959-72 and 1973-86 respectively. The coefficient, $B_2$ assumed the values 1.598, 1.966 and 0.264 in the three periods respectively and was significant at 1% level for the entire period. Thus, a proportionate increase in the Federal Current Surplus would proportionately increase the availability of Federal Loans to the states, and vice-versa, for the entire period only, indicating high elasticity between the two variables.

Contrary to our expectation, table 5.08 shows that the States' Capital Outlay ($X_3$) is negatively associated with Federal Loans to the states for the periods, 1959-86 and 1973-86.

It was, however positively related to the Loans between 1959 and 1972 as expected. The coefficients of the States Capital Outlay, $B_3$, assumed the values -0.847, 0.392 and -0.507 for the respective periods. It was significant at 1% level during the period, 1973-86 only. This implies that one percent rise in states Capital Outlay ($X_3$) led to, on an average, 0.507 percent fall in Federal Loans to Nigerian States. The relationship, therefore, warrants further investigation.

## APPENDIX TABLE V

## TOTAL RECEIPTS OF THE STATES AFTER FEDERAL TRANSFERS AND ITS DISTRIBUTION BETWEEN THE COMPONENT PARTS, 1956-88.

## (AMOUNT IN MILLIONS OF NAIRA)

| Year | Total Receipts | Own Current | Own Capital | Statutory Transfers | Federal Grants | Federal Loans |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1956 | 74.30 | 17.96 | 8.40 | 46.14 | - | 1.80 |
| 1957 | 152.86 | 27.92 | 70.58 | 52.36 | - | 2.00 |
| 1958 | 95.52 | 26.68 | 14.32 | 54.52 | - | 0.00 |
| 1959 | 99.46 | 29.82 | 4.03 | 58.18 | 3.43 | 4.00 |
| 1960 | 116.93 | 31.48 | 4.04 | 70.42 | 4.28 | 6.71 |
| 1961 | 158.80 | 31.14 | 8.37 | 78.92 | 27.20 | 13.17 |
| 1962 | 160.10 | 42.20 | 17.64 | 88.08 | 8.74 | 3.44 |
| 1963 | 171.77 | 43.96 | 9.20 | 93.92 | 8.69 | 16.00 |
| 1964 | 177.83 | 45.54 | 7.41 | 95.78 | 15.10 | 14.00 |
| 1965 | 221.68 | 51.64 | 9.28 | 126.92 | 12.86 | 20.98 |
| 1966 | 218.76 | 57.12 | 7.45 | 132.54 | 14.22 | 7.43 |
| 1967 | 262.86 | 63.17 | 25.20 | 136.06 | 16.66 | 21.77 |
| 1968 | 148.99 | 37.50 | 24.44 | 83.39 | 1.66 | 2.00 |
| 1969 | 162.28 | 54.40 | 15.38 | 81.12 | 1.98 | 9.40 |
| 1970 | 306.26 | 70.40 | 32.63 | 182.00 | 0.83 | 20.40 |
| 1971 | 611.42 | 81.67 | 191.67 | 298.61 | 11.87 | 27.60 |
| 1972 | 761.67 | 92.12 | 152.42 | 314.08 | 20.95 | 182.10 |
| 1973 | 965.40 | 112.61 | 122.67 | 332.47 | 18.15 | 379.50 |
| 1974 | 1141.49 | 128.74 | 195.12 | 392.15 | 18.68 | 406.80 |
| 1975 | 2058.48 | 145.21 | 303.60 | 926.39 | 254.78 | 428.50 |
| 1976 | 2648.51 | 214.95 | 256.15 | 948.32 | 532.09 | 697.00 |
| 1977 | 3563.37 | 345.80 | 461.30 | 1498.55 | 428.42 | 833.30 |
| 1978 | 4404.16 | 459.98 | 769.20 | 1836.91 | 532.81 | 805.26 |
| 1979 | 3791.91 | 520.02 | 299.78 | 1637.16 | 827.74 | 507.21 |
| 1980 | 7893.18 | 1327.70 | 1177.29 | 4485.22 | 599.30 | 303.70 |
| 1981 | 8205.14 | 1049.20 | 1801.40 | 4673.34 | 240.20 | 441.00 |
| 1982 | 8240.48 | 1409.30 | 1726.10 | 4626.08 | - | 479.00 |
| 1983 | 8698.52 | 1423.30 | 2648.70 | 4205.02 | - | 421.50 |
| 1984 | 8291.01 | 1381.30 | 258.60 | 4518.01 | - | 2133.10 |
| 1985 | 10202.23 | 1584.10 | 507.50 | 5962.03 | - | 2148.60 |
| 1986 | 7727.69 | 1860.60 | 793.30 | 4523.79 | - | 550.00 |
| 1987 | 15690.62 | 1954.50 | 3739.40 | 9996.72 | - | - |
| 1988 | 18390.26 | 2144.70 | 4868.90 | 11376.66 | - | - |

Source . Same as per table 5.01.