

# AN ESTIMATE OF THE NATIONAL EXPENDITURE OF PAKISTAN, 1960-1

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## INTRODUCTION

SINCE Independence, no estimate of national expenditure of Pakistan has been made. Out of all the conventional estimates included in national accounts, only one table containing the estimates of national product of Pakistan by industrial origin at constant prices has been prepared and published. Deficiency of source data has been a major handicap in the preparation of other tables. But with recent stress on planned economic development of the country, it has become imperative to have information on all the economic factors covered by national accounts. The Planning Commission of the Government of Pakistan, which is responsible for the formulation of development plans, has already experienced difficulty in its task for want of statistical data, and the Commission has in both the First and Second Five-Year Plans referred to the non-availability of statistical information and its consequence for the plans. With a future programme of long-term economic planning, Pakistan cannot afford to be deficient in statistical data any longer. Efforts are, therefore, being made to prepare all estimates included in national accounts. Since the estimates of national product are available, the next important information required for economic planning is an estimate of national expenditure and its composition. The estimates of national expenditure contained in this paper represent an exercise by the author as a member of the Economic Research Section of the Planning Commission. It needs special emphasis that these estimates may not necessarily be recognized by the Planning Commission as official estimates. Only the author himself is responsible for the inaccuracy or inconsistency of these estimates.

As far as possible, methods and techniques recommended by the United Nations have been followed in the preparation of these estimates. Efforts have been made to apply the same definitions to all the components included in the estimates. The arrangement of the individual constituent tables and their composition

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has also been guided by the U.N. Standard Tables. However, deviations have been made in many cases due primarily to the shortage of basic data and also to make the estimates conform to the pattern and structure of the economy. As far as possible, these deviations have been specifically pointed out at the relevant places in the paper.

*The Estimate – Main Table*

The table below gives the total national expenditure of Pakistan in 1960–1 and its composition in broad categories. The structure of the table follows the pattern of Table I of the U.N. Standard Tables contained in 'A System of National Accounts and Supporting Tables' (page 21) with some variation in the constituent items and their coverage.

TABLE I  
*Expenditure on Gross National Product of Pakistan 1960–1*

	(Rs. million) <sup>1</sup>
1. Private consumption expenditure	28,396
2. General government consumption expenditure	2,254
3. Development expenditure	3,260
(i) Public sector	2,060
(ii) Private sector	1,200
4. Increase in stocks	360
Expenditure on consumption and investment	34,260
5. Export of goods and non-factor services	2,115
Expenditure on gross domestic product and imports	36,375
6. Less imports of goods and non-factor services	3,432
Expenditure on gross domestic product	32,943
7. Net factor income payments	– 34
Expenditure on gross national product	32,909
Population (thousands)	93,691
Expenditure <i>per capita</i> (Rs.)	350

<sup>1</sup> A rupee is equal to 0.2100 U.S. dollar.

It will be noticed that a departure has been made from the U.N. Standard Table in giving the estimates of non-consumption expenditures, i.e. the expenditures on gross fixed capital formation. The break-down of capital formation as shown in the U.N. table also has not been followed. This deviation has been necessitated by the type of basic data available for use in the estimation of non-consumption expenditures. The conventional

head for this type of expenditure is 'Gross Domestic Capital Formation'. But that term could not be used in the present estimates as they differ in content from the scope of the U.N. term. The conventional definition of 'gross domestic capital formation' includes only expenditures incurred in the acquisition or creation of physical capital assets and excludes all other expenditures, although of non-consumption and developmental nature, which do not end in the acquisition or creation of physical assets. The present estimates include expenditures which are treated as developmental but do not end in the creation of physical assets. The replacement of the U.N. term by the term used in this paper is not due to any preference for the latter on theoretical grounds over the former, but because the data which formed the basis of these estimates could not be analysed and that part of the expenditure out of the total development expenditures which ended in the creation of physical assets could not be separated from the total. Therefore, it has been considered proper to define the estimates under the present term. It is, however, a controversial issue whether all development expenditure should or should not be considered as expenditures on capital formation irrespective of the final form it takes. There are definite views which support the contention that all such expenditure should be treated as capital formation in underdeveloped countries where huge expenditures are incurred on the development of human resources which do not end in the creation of physical assets. The E.C.A.F.E. Survey Report 1961 seems to support this view. Without any intention to enter into this controversy it may be stated that both terms have their own analytical significance and it would be better to include all non-consumption developmental expenditure in capital formation in the estimates of national expenditure of an under-developed country, with a clear break-down between expenditure on capital formation in the U.N. sense and the expenditure for development not ending in the creation of physical assets. Due to the shortage of basic data this break-down could not be attempted.

The U.N. table calls for a four-fold break-down of capital expenditure, into (i) gross fixed capital formation of private enterprises, (ii) gross fixed capital formation of public corporations, (iii) gross fixed capital formation of government enterprises, and (iv) gross fixed capital formation of general government. Such a thorough break-down has not been possible as the

organization and structure of the economy is not amenable to such a fine classification and also as no statistical data have yet been compiled on this basis. It is, however, to be conceded that a very time-consuming survey of all economic activities in the country could yield reasonable estimates of gross capital formation of all these categories, but the author had neither the time nor the resources to make such an attempt. Therefore, the present estimates include a break-down which could easily be compiled on the basis of the available data. The present break-down of development expenditure by public and private sector, although it does not serve the comprehensive purpose of tracing the origin of capital formation in detail, is useful as it is sufficient to indicate the level of investment and saving originating in the two sectors and thus help in deciding policies on resource allocation to the public and the private sectors.

#### CONSTITUENT TABLES

The overall estimate shown in Table I does not indicate the composition of the individual items. For analytical purposes, a further elaboration of the composition of the main items is necessary. Therefore, the U.N. main table is followed by a number of supporting tables which show the break-down of the main items into as many meaningful and significant components as possible. A number of alternative break-downs can be made of the main totals but a set of minimum tables has been attempted in the present estimate, trying as far as possible to follow the pattern of disaggregation followed in the U.N. system. Detailed break-down of each of the main components is given in the following tables.

##### 1. *Private Consumption Expenditure*

The following table<sup>1</sup> shows the composition of private consumption expenditure by commodity groups and individual commodities within a group. It may be noticed that the classification of commodities and commodity groups differs from the U.N. classification. (See Table VII in *A System of National Accounts and Supporting Tables*, p. 23.) This is due to the fact that the classification pattern adopted for the Family Expendi-

<sup>1</sup>The figures of this table have been reproduced from a paper entitled, 'Methods of Estimating National Expenditure of Pakistan' read by the author at the C.E.N.T.O. Conference on National Accounts held in May 1962 at Mureer, Pakistan.

ture Surveys which form the basis of the present estimates differs from the U.N. pattern. However, expenditures on broad categories of commodities can be traced from this classification also.

TABLE II  
*Composition of Private Consumption Expenditure*

Items	(Rs. million)		
	Rural	Urban	Total
1. <i>Food, beverages and tobacco</i>	15,920	3,629	19,349
(a) Bread and cereals	10,202		
(b) Meat	566		
(c) Fish	400		
(d) Milk, cheese, butter and eggs	2,093		
(e) Oils and fats	282		
(f) Fruits and vegetables	311		
(g) Sugar, preserves and confectionery	451		
(h) Coffee, tea, cocoa	82		
(i) Other food, beverages and tobacco	1,334		
2. <i>Clothing and personal effects</i>	1,695	507	2,202
(a) Footwear	216		
(b) Clothing other than footwear	1,383		
(c) Other personal effects	96		
3. <i>Rent, rates and water charges</i>	805		
4. <i>Fuel and lighting</i>	1,178		
5. <i>Furniture, furnishing and household equipment</i>	162		
(a) Furniture and furnishings	41		
(b) Household equipment	121		
6. <i>Household operation</i>	1,754		
(a) Domestic services	1,538		
(b) Repairs	216		
7. <i>Personal care and health expenses</i>	863		
(a) Personal care	515		
(b) Health expenses	348		
8. <i>Transportation and communication</i>	277		
9. <i>Recreation and entertainment</i>	33		
10. <i>Education and miscellaneous</i>	158		
Total private consumption expenditure	22,646	5,751	28,397
Population (thousands)	81,425	12,266	93,691
Private consumption expenditure <i>per capita</i> (Rs.)	280	468	302

It will be noticed that the estimates for urban consumption expenditure do not show a break-down by individual commodities. This is because the Reports of Family Expenditure Surveys which formed the basis of these estimates do not show commodity-wise expenditure in money terms but give the percentages of the total expenditure. Conversion of the percentages

into money figures was considered too lengthy and involved for the purpose of these estimates.

The estimates of Private Consumption Expenditure have been obtained by calculating (i) rural consumption expenditure and (ii) urban consumption expenditure.

*Rural Consumption Expenditure.* These estimates have been derived from the unpublished data of the Family Expenditure Survey in the rural areas conducted by the Central Statistical Office in the middle of 1960. The survey was a stratified sample survey with households as the ultimate respondents. Two hundred and fifty villages were selected in each wing and eight households from each of these villages were chosen for interviewing. The survey provided data on average monthly household expenditure which has been used as a basis for calculating the provincial aggregate expenditure for the whole year by multiplying the monthly expenditure by the total number of families and then by twelve. In deriving the annual expenditure estimate, consideration has been given to seasonal fluctuations and the necessary adjustments have been made.

*Urban Consumption Expenditure.* Difficulty was experienced in making this estimate as comprehensive data for the total urban population were not available. The estimates have been based on the Reports of Urban Family Expenditure Survey of 1955-6 conducted by the Central Statistical Office in some selected cities and towns. The deficiency of this survey is that it was confined only to lower income groups. Thus, an indirect method had to be used for estimating the expenditure of high-income groups of urban population. First, an estimate of total consumption expenditure for low-income groups was made. This was done by working out a monthly average *per capita* consumption expenditure in 1955-6. The average has been calculated by weighting the item-wise expenditure by the respective population size of the various cities and towns enumerated in the survey. This was then inflated by the working class cost of living index published by the Central Statistical Office to arrive at the estimate of *per capita* consumption expenditure in 1960-1. Subsequently, the *per capita* figures were multiplied by the total low-income population and then multiplied by twelve to get the annual estimates. The size of the low-income population was obtained by deducting the number of people assessed for income-tax for the year 1960-1 from the respective total urban population. This

method can be deemed as fairly satisfactory as the Family Expenditure Survey of 1955-6 covered the population whose income was not taxable.

The estimation of consumption expenditure for the high-income group raised a serious difficulty of source data. No survey concerning this class of urban population has been conducted. Thus, an assumed *per capita* consumption expenditure for this group has served as the basis for further estimation. However, some useful indication of the consumption pattern of the high-income group in Karachi was obtained from a few survey schedules of an attempted family expenditure survey of high-income Government officials in Karachi. These assumed *per capita* figures were multiplied by the number of people assessed for income-tax. In the absence of a more representative comparable index, the same cost of living indices as used for the low-income classes were used to obtain the estimate for 1960-1.

The flow of private consumption expenditure, according to the conventional definition, should include final expenditure by private non-profit institutions. But the estimates given in Table II do not include such expenditures due to the absence of regular and organized basic data. It is intended to complete the coverage of this estimate by a thorough survey of consumption of such institutions as soon as possible. Gifts in kind received from the rest of the world have also not been added to the figures in Table II. Non-inclusion of the consumption expenditure of the non-profit institutions has created complications in the general government expenditure as well. This is explained under the relevant section.

## 2. *General Government Consumption Expenditure*

The estimates of general government consumption expenditure include the expenditures incurred by the Central and the two Provincial Governments (Governments of East Pakistan and West Pakistan) and the local authorities. Separate estimates of expenditure for these three categories of governments have been made. The total expenditure of each of these three forms of government has further been subdivided into expenditure by type and by purpose. Table III shows the expenditure by type and Table IIIA by purpose.

These estimates have been made by an analysis of the Central and Provincial budgets and the budgets of the local authorities.

TABLE III

*General Government Consumption Expenditure by Type*

(Rs. million)

Type of expenditure	Central Government	Provincial Government	Local authorities	Total	Percentage distribution	Expenditure per capita (Rs.)
1. Wages and salaries	210	433	177	820	36	9
2. Pay and allowances of armed forces	442	—	—	442	20	5
3. Purchases for military purposes	584	—	—	584	26	6
4. Purchases for civilian purposes	122	180	106	408	18	4
Total	1,358	613	283	2,254	100	24

TABLE IIIA

*General Government Consumption Expenditure by Purpose*

Purpose of expenditure	Central Government	Provincial Government	Local authorities	Total	Percentage distribution	Expenditure per capita (Rs.)
1. General administration	164	129	39	332	15	4
2. Defence	1,026	—	—	1,026	46	11
3. Justice, police and civil defence	58	205	—	263	11	3
4. Education and research	23	94	158	275	12	3
5. Health services	13	78	41	132	6	1
6. Special welfare	10	1	6	17	1	—
7. Transport and communication	22	20	30	72	3	1
8. Economic services	42	86	9	137	6	1
Total	1,358	613	283	2,254	100	24
Percentage distribution	60	27	13	100		
Expenditure per capita (Rs.)	15	6	3	24		

The Government budgets are generally framed with a view to maintaining accountability of the budgeted amounts and, therefore, the classification of expenditure adopted in the budgets differ from the one set for the national expenditure estimates. As a result, sometimes it becomes difficult to identify a particular expenditure and define its nature and purpose. Hence, some degree of arbitrariness has entered into the allocation of expenditures to the various types and purposes.

Much difficulty has been experienced in the estimation of consumption expenditures of the local authorities. Local bodies are numerous and their budgets are not available at one central organization. As a result, the estimation of even the total expenditure became difficult. The present estimates have been made by an analysis of a few budgets of the local bodies that were available and, therefore, the estimates are purely provisional. A study of the resources of local authorities prepared by a group of researchers in the Planning Commission of the Government of Pakistan was of much assistance in the preparation of the estimates.

Estimates of Government expenditure exclude all grants and aids given by the Governments to semi-government and private institutions or households, as these payments are considered transfer payments. Therefore, estimates of expenditure on education, health services and transport and communications do not include Government grants to universities and other educational institutions, private hospitals and dispensaries, and semi-government transport authorities such as Karachi Road Transport Authority, etc. Theoretically the effect of such transfer payments is to be reflected in the consumption expenditures of the households and private non-profit institutions. But since, as has already been pointed out, the estimates of private consumption expenditure given in Table II do not include the consumption expenditure of private non-profit institutions, Government grants to the extent of the amounts paid to such institutions are not reflected anywhere. This has resulted in an underestimate of the total.

### 3. *Development Expenditure*

The use of the term 'development expenditure' instead of 'gross capital formation' has already been explained. The details of development expenditure in the public sector by

industrial origin and a total of expenditure in the private sector are given in the table below:

TABLE IV  
*Development Expenditure in the Public and Private Sectors*

(Rs. million)

Purpose	Public Sector					Private Sector	Total
	Central government	Provincial government	Local authorities	Total	Percentage distribution		
1. Agriculture	76	200	N.A.	276	14	N.A.	276
2. Water and power	31	628	N.A.	659	33	N.A.	659
3. Mining and manufacturing	116	106	N.A.	222	12	N.A.	222
4. Transport and communication	325	100	N.A.	425	21	N.A.	425
5. Housing and settlement	156	104	N.A.	260	13	N.A.	260
6. Education	14	79	N.A.	93	5	N.A.	93
7. Health	2	32	N.A.	34	2	N.A.	34
8. Special welfare	4	2	N.A.	6	—	N.A.	6
Total	724	1,251	85 <sup>1</sup>	2,060 <sup>2</sup>	100	1,200 <sup>1</sup>	3,260 <sup>2</sup>
Percentage distribution	35	60	5	100			
Expenditure per capita (Rs.)	7.7	13.3	1.0	22.0			

<sup>1</sup> No break-down of these figures by purpose is available.

<sup>2</sup> These totals do not agree with the total of the figures contained in the respective columns because of the inclusion of expenditure of local authorities and the private sector for which a detailed break-down was not available.

The figures on development expenditures of the Central and the Provincial Governments have been derived from the 1960-1 Evaluation Report prepared by the Planning Commission to evaluate the achievement of the first year of the Second Five-Year Plan. These figures are based on the utilization of resources allocated to the various industrial sectors. The sectoral distribution of the total development expenditure in the above table does not follow the pattern recommended by the U.N. Statistical Commission partly because the data are available only in this particular form and partly because it is difficult to divide the economy into mutually exclusive industrial categories. However,

the classification adopted in the above table does not raise any difficulty in ascertaining the origin of development expenditure, with clear indication of the magnitude of capital formation in the different sectors of the economy.

A break-down of the development expenditure incurred by the local authorities and the private sector was not possible owing to the lack of necessary basic data. The figures on total expenditures included in the above table are based on a study carried out in the Planning Commission. In this study, a number of budgets were examined to determine the ratio of development expenditure to total expenditure. The total development expenditure was obtained through the use of this capital expenditure coefficient. The development expenditure shown for local authorities was financed through their own revenues and does not include loans and grants made by the Central or Provincial Governments. Such loans and grants have been included in the development expenditure of the lending or the paying authority.

The estimate of development expenditure in the private sector has been taken from the Evaluation Report. The Evaluation Report included this figure as a mere guess as no detailed planned allocation is made in the plan for the private sector except a reasonable expectation of probable investment in that sector. However, the figure of Rs. 1,200 million shown as development expenditure in the private sector seems to be an underestimate. Although no empirical proof in support of this view can be given, yet there is some evidence which seems to indicate the underestimation involved in this figure. A major constituent of private investments is 'construction'. An exercise on the estimation of the value of private construction through the use of raw material co-efficients has been made by the author and the preliminary results show that the value of private construction in 1960-1 might have been of the order of Rs.1,000 million. This leaves an amount of Rs.200 million for other sectors. On the basis of sanctions of the projects contained in the Industrial Schedule the investment in the manufacturing sector alone has been estimated at Rs.225 million, and when we add the investment in construction to this, the figure exceeds Rs.1,200 million. Certainly there have been investments in other sectors as well as non-monetary investment in the agricultural sector. Therefore, it is most likely that the total investment in the private sector was higher than Rs.1,200 million. But as no complete and consistent

basis could be found for an alternative estimate, the official estimate, however rough it may be, has been accepted for use in this paper.

#### 4. *Increase in Stocks*

The figure for this item shown in Table I is merely a guess. In the absence of any reliable basic data, a guess – as reasonable as possible – had to be made for this item. Normally, the value of the stock increase is derived from the inventory statistics of the manufacturing industries, wholesale and retail trade establishments, etc. In Pakistan only one organized source of inventory data is available, i.e. the results of the Census of Manufacturing Industries. An effort was made to analyse the Census results for this purpose, but it was found that the total value of stocks available from that analysis was equal to 27 per cent of the total capital investment. This was considered too high, as no country has as high an inventory component as 27 per cent. To check the accuracy of the Census of Manufacturing Industries inventory data a scrutiny of inventory, production and shipment data given in the Census of Manufacturing Industries questionnaires was made and widely inconsistent beginning and end-of-the-year figures were deleted. So, the Census of Manufacturing Industries data was considered unreliable for the purpose.

However, in order to attain completeness of the estimate, some figure of stock increase had to be shown. The figure of Rs.360 million shown in Table I for increase in stocks represents 10 per cent of the total value of development expenditure. The acceptance of 10 per cent as the stock component of the total value of investment has been guided by empirical data relating to other countries similar to Pakistan. In his paper entitled 'The Impact of Inflation on the Composition of Private Domestic Investment', A. S. Shaalan of the International Monetary Fund has analysed the composition of private domestic investment of a few countries under inflationary conditions. He quoted the statistics for the relative share of fixed capital investment and inventories in the total investment of eight countries. The highest percentage of inventories to the total value of investment was 14.4, and the lowest — .5 over a period of nine years. Mr. Shaalan's thesis is that the share of inventories in total investment increases under inflationary conditions. Without implying any agreement with his thesis, his statistics could be used in the

estimation of the magnitude of the value of stock increase in Pakistan. On the basis of his statistics a share of 10 per cent for the value of stock increase may not be treated as unreasonable, especially since Pakistan was in an inflationary condition in 1960-1, though of milder intensity than the previous years.

### 5. Finance of Development Expenditure

Since the highest concern of a developing economy is to assess the magnitude of funds available for development, it is desirable to trace the source of finance of capital investment. According to the U.N. system also, a table showing the finance of gross domestic capital formation forms an integral part of the Standard National Accounts. This table is also important for determining planning policy as the magnitudes of finance available from the various sources indicate the level of savings and provide data on further policy decisions in this regard. A rough estimate of finance of development expenditure has, therefore, been attempted and given in the following table:

TABLE V  
*The Finance of Development Expenditure*

Development expenditure		Source of finance		Percentage of total net expenditure
1. Public sector	2,060	1. Government savings	1,183	3.9
2. Private sector	1,200	2. Foreign aid	877	2.7
		3. Foreign private investment	100	0.3
		4. Private savings	1,100	3.3
Total	3,260		3,260	9.9

The amount of foreign aid utilized during the year is available in the 1960-1 Evaluation Report of the Planning Commission. From the total public sector investment, the amount of foreign aid was deducted. This gave the amount of development expenditure in the public sector financed out of Government savings. Again, the amount of foreign private investment in 1960-1 was estimated at Rs.100 million. This figure was deducted from the total private sector investment. The residue was identified as private savings.

6. *Export of Goods and non-Factor Services*

The following table gives the details of exports of goods and services:

TABLE VI  
*Export of Goods and Non-Factor Services*

(Rs. million)	
Item	Value
1. Merchandise f.o.b.	1,877
2. Non-monetary gold (net)	3
3. Transportation and insurance	80
4. Foreign travels	6
5. Other	149
Total	2,115

These figures have been derived from the published Balance of Payments Statistics of Pakistan. The classification of items differs from the U.N. Standard Accounts formulated in the light of the Revised Manual of the International Monetary Fund. The State Bank of Pakistan, which is responsible for the publication of balance of payments statistics, has yet to adopt the I.M.F. classification. An explanation of the coverage of the items will clarify the difference of their scope from that of the U.N. items.

1. Merchandise f.o.b. – this represents the total value of exports excluding freight and insurance.
2. Non-monetary gold – needs no explanation.
3. Transportation and insurance – this item includes freight on goods as well as passenger fares, which in the U.N. System is to be shown separately.
4. Foreign travel – this item is identical in coverage with the U.N. item under the same head.
5. Other – this item includes all non-factor services not included elsewhere. It is considered that this item is an underestimate as some of the services are included under a separate head. 'Government expenditures' in the 'Balance of Payments Statistics of Pakistan' should properly belong to this item as per U.N. definitions. But since no breakdown of that item is available, the relevant items could not

be covered by this item. However, the magnitude of those items is not big enough to disturb the dimension of the total value of exports of goods and services.

### 7. *Import of Goods and non-Factor Services*

The following table gives the details of import of goods and non-factor services:

TABLE VII  
*Import of Goods and non-Factor Services*  
(Rs. million)

Item	Value
1. Merchandise f.o.b.	3,015
2. Transportation and insurance	256
3. Foreign travels	38
4. Others	123
Total	3,432

The explanation of methodology and source data for this table is the same as that for Table VI.

The following table shows the receipts and payments of factor income:

TABLE VIII  
*Net Factor Income Payments from the Rest of the World*  
(Rs. million)

Items	Receipts	Payments	Net
1. Investment income	44	78	- 34
2. Others	N.A.	N.A.	
Total	44	78	- 34

These figures have also been derived from the official balance of payments statistics published by the State Bank of Pakistan. The U.N. System based on the Revised Balance of Payments Manual of the I.M.F. envisages a very comprehensive breakdown of both the items shown in the table above. Limitation of source data restricted the adoption of the U.N. classification. It will be noticed that no figure has been shown against the item

'others'. This is because of non-availability of separate data relating to the receipts and payments of wages and salaries to local staff intended to be covered by this item. It is, however, estimated that the figure on this account is not very high.

### *Conclusion*

The foregoing discussion makes it clear that the estimates given in this paper are provisional. These are the results of an exploratory study by the author only to ascertain, in however rough a manner, the magnitude of the various streams of expenditure of the country. The author believes that, even with the imperfection inherent in the estimates, they do provide some indication of the pattern of income disposal of the various categories of economic agents. With these indicators one can analyse the economy to design the planning model for the country as well as to devise economic policy for development. To make these estimates more useful, it is intended to carry the work farther to attain further improvements of the estimates.