

Domestic Resources and Fiscal Policy in Pakistan's Second and Third Plans

by

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INTRODUCTION

Pakistan is now widely regarded as a successful case of movement toward self-sustaining economic growth. If one lets it become known that he has spent some time in Pakistan, other economists immediately want to know: What happened? What were the "real" causes? Is the success a mirage? How long will it last? An attitude of enthusiasm is a sharp contrast to the air of pessimism that prevailed as recently as two years ago. The notes here are not an attempt to establish what has happened to Pakistan's economy, or why it happened now and not five years ago. The aim is much more modest, but may have some bearing on the larger question. My primary interest is in examining certain aspects of government policy in general and fiscal policy in particular, excluding policy on government expenditures. I shall not be concerned with Plan allocations and government outlays.

In the macroeconomic framework of Pakistan's plans, present investment is the only determinant of future output. The problem of "mobilizing" resources is one of finding offsets to investment expenditure from either domestic or foreign sources. The *Third Plan* states [16, p. 20] that "the main task in the Perspective Plan will be to institutionalise the growth process and to finance it increasingly from domestic resources." The "domestic resources" with which the Plan is primarily concerned are domestic saving (to offset investment) and exports (to pay for imports). A related variable not treated in the discussion of the Perspective Plan is taxation, which is necessary to offset government expenditure on current and capital account. In order to reduce and eventually eliminate foreign assistance, while maintaining or increasing the proportion of income invested, domestic saving must increase more rapidly than investment, taxation must increase more rapidly than government current and capital expenditures, and exports must increase more rapidly than imports, since foreign assistance now offsets a large proportion of investment, government expenditure, and imports.

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The impact of government policy on the domestic efforts to "finance" economic growth (*i.e.*, investment and imports) can be thought of at macro economic and microeconomic levels. At the macro level, policy affects direct the level of taxation and the level of government saving, and it indirectly affects the level of private saving through taxation of groups with different marginal propensities to save. Macroeconomic policy can also be used to reduce domestic resource uses (presumably consumption) and provide greater export surpluses. At the micro level, government policy can operate through the price system to affect decisions of investors and manufacturers *i)* about the use of domestic or imported capital goods and raw materials and *ii)* about production for home or foreign markets. Government policy can also, presumably, affect the allocation of income between saving and consumption. I will limit comments in this paper to the levels, the movements and the composition (or sources) of domestic saving, taxes, and exports, in the past and those that are projected, and I shall try to indicate the impact of government policies on these variables. Since other contributors to this series of articles are discussing the balance of payments in greater detail, I have given less attention to the macroeconomic aspects of export performance and projections. The following section gives a summary of macroeconomic developments in the First and Second Plans and the projections for the Third Plan, along with some comments on measurement and interpretive problems. The general aims, attitudes and performance of the government in the three Plans are discussed in Section II, which is primarily concerned with microeconomic aspects of fiscal policy in the Plan documents and the *Evaluation Report* [15] of the Second Plan. There is an Appendix to the paper on aggregate economic statistics in Pakistan and the recent revisions in them.

II. PAST PERFORMANCE AND PROJECTIONS OF KEY AGGREGATES

The critical assumption in the Third Plan is that the economy would continue to save and reinvest roughly 22 per cent of the additional income generated during the Plan period. *Third Five Year Plan*. [16, Chap. V, para 5]¹

The balance of payments projections and the numerous explicit and implicit policies on which they depend, constitute one of the most crucial elements of the Third Plan. *Third Five Year Plan*. [16, Chap. VI, para 1].

¹ The *Evaluation Report* says that 22 per cent was chosen because it was the "trend in the marginal rate of savings over the entire [Second] Plan period." [15, p. 7]. It is not clear from the *Evaluation Report* whether this statement means the MRS is the ratio of the differences in the trend values of saving and income from 1959/60 to 1964/65, or the trend value of annual marginal rates of saving, or something else. The reader should note that Third Plan, or Second Plan, when italicized refer to the document, rather than this Plan period.

Despite the "critical" or "crucial" role played by the projections of saving, imports, and exports for the implicit *Third Plan* model, these projections, particularly of saving, have less basis in detailed empirical analysis than the key programmes in specific sectors, such as agriculture or manufacturing industry. One of the curious and interesting features of the Second Plan period is the relatively smooth behaviour of most important aggregates on a year-to-year basis. This phenomenon is called a "firmness in the growth rate" in Planning Commission publications, and, while one hopes it will continue, one should not forget *i*) that 1962/63 was the only year of the five during the Plan that saw any severe downward fluctuations in agricultural output due to weather, and *ii*) that there was a continual rise in the aid-financed current account deficit in the balance of payments and in imports. A combination of good luck and good management produced extremely uniform growth beginning in 1959/60. I think it is fair to say that such behaviour of aggregate statistics is unusual, and that one must be exceedingly careful in drawing conclusions that are too strong on the basis of four or five years' experience.

To illustrate the need for care in choosing benchmarks or in fixing coefficients, I have re-calculated some of the average and marginal rates of saving and taxation for the past and those projected for the future to compare the conclusions drawn from the most recent five years taken alone with those drawn from other bases. I have tried hard to get figures comparable to those used in the Planning Commission documents, though this is extremely difficult for a number of reasons². The exercise follows in the next three subsections.

Saving Rates

Table I contains, in its upper panel, a revised form of saving rates annual basis, along with the marginal rates between years, for the final pre-Plan period and the three Plan periods. There is a difference my Table I and Table 7 of *Third Plan* [16, Chapter I] in that the *Third* a decline in the rate of saving from 1954/55 to 1959/60, while here the The saving figure given in the *Third Plan* for 1959/60 is lower tha

² The concept of investment differs from that of development expenditure and unexplained differences in the figures from the *Evaluation* in March 1965, and the *Third Plan* [16] published in May 1965, for sometimes current prices are used, sometimes constant prices, and only of the deflator given; the changed procedure for estimating imports (therefore saving and saving ratios) is not explained for the early of the *Third Plan*, "Review of Planned Development"; Industries and PL 480 imports are included in some places and exclude have attached an Appendix for those who are interested in of using the available historical statistics in Pakistan.

³ The *Third Plan* figures are in constant prices, mixture of current and constant price investment and saving

Evaluation Report, [15], but the difference is unexplained. The lower *Third Plan* estimate of 1959/60 saving means a lower marginal rate from 1954/55 to 1959/60 and a higher marginal rate of saving from 1959/60 to 1964/65 than shown here.

The principal differences among various average and marginal saving figures, however, come from an examination of the average rates of saving over the entire Plan periods and the marginal rates *between* Plan periods, as shown in the lower panel of Table I⁴. Here one sees that the MRS *from* the First *to* the Second Plan periods was not 22 per cent but less than 13 per cent, and that the marginal rate from the Second *to* the Third Plan period is, again, not 22 per cent but 26 per cent. It is of course very easy to say the difference is due to the fact that there is an *acceleration* of the growth rate and the saving rate, and, therefore, calculations made by taking averages will give different

TABLE I
SUMMARY OF SAVING RATE DATA IN CURRENT PRICES
(in million rupees)

Savings Ratios, Annual Basis

	1954/55	1959/60	1964/65	1969/70
GNP at market price	21,920	32,705	45,541	62,765
GDS	1,463	2,320	4,608	8,515
GDS ÷ GNP	6.7%	7.1%	10.2%	13.6%
$\frac{\Delta \text{GNP}}{\Delta \text{GDS}}$		7.9%	17.8%	22.6%

Sources: 1954/55: GNP from *CSOSB*, April, 1965 [10], adjusted for indirect taxes.
GDS from *Third Five Year Plan*, 1965 [16] converted to current prices by Papanek [18] index.
1959/60, 1964/65 from *Evaluation Report* [15].
1969/70 from *Third Plan*, Table 1 [16, p. 62].

Ratios, Five-Year Basis

	First Plan		Second Plan	Third Plan
	A	B		
Market prices	117,590	142,187	202,304	275,960
	8,420	10,181	17,864	36,500
	7.2%	7.2%	8.9%	13.2%
IP			12.8%	26.1%

Estimate A from Lewis and Khan [5] since new investment estimates to new GNP estimates are not available. Rate of saving from estimate to new GNP estimates to obtain First Plan saving at the new GNP and new saving were used to calculate the marginal rate from the Plan.

Evaluation Report [15, p. 6].

Third Plan [16] by applying growth rate to 1964/65; GDS from [16] calculated as Plan size minus external resources.

Table I footnote and to the Appendix for the sources and

results than those made by taking end points, which is true enough. The problem is, however, first that we are presumably dealing with a real economy, not with a mathematical function, and second that the very acceleration in growth rates of GNP, investment, and particularly imports that took place between 1959/60 and 1964/65 probably had an effect on the rate of saving that will not be repeated when the growth rates of these variables level out, as they are in fact expected to do in the Third Plan period. Thus, the choice of a 22 per cent MRS for the Third Plan is in an important sense not a continuation of past performance. The somewhat arbitrary choice of the value of "the critical assumption" is not in keeping with the high levels of analytical ability and sophistication that have come more and more to characterize the work of the Planning Commission. The disregard for *any* kind of "saving function" when much of the rest of the aggregate framework of the plan is apparently based on fairly complex functional relationships is quite distressing. There is no way of truly evaluating whether the saving goal is too high, given the economic relationships and behaviour of various sectors of the economy, or whether it is too low. But the assumed goal is *not*, as is stated, simply that things will continue as they have been going.

Unfortunately, there exists at present no comprehensive study of saving in the economy by sectors. Aggregate domestic saving is computed by deducting some measure of the balance of payments deficit (the one chosen varies from time to time) from the estimated level of gross investment (the estimates of which change from time to time). Some preliminary estimates of noncorporate private saving were made two years ago by the Pakistan Institute of Development Economics [5] but these have not been kept up-to-date, nor have they been refined at all. There are some hit-or-miss estimates of private and public saving (with vague definitions, usually not corresponding to those of other countries) in the Planning Commission documents⁵. One of the problems of getting meaningful saving function, therefore, is to find some good empirical estimate of conceptually appropriate variables

I have prepared some rough estimates of gross private and public saving on an annual and a five-year average basis. Public saving is here taken to be "surplus on revenue account" as given in the Planning Commission documents. Such a concept is very close to an "income less expenditure" notion of saving. We apply to other sectors the same concept. Public saving is deducted from gross domestic saving to get gross domestic saving (GPDS). The measure of private incomes used is, I think, too inappropriate, it is found by deducting direct tax from gross domestic saving. That measure is called "gross disposable national income" in Tables II and III.

⁵ See the 1965 Mid-Plan Review [13] for examples.

TABLE II
PERCENTAGE SAVING RATES—ALTERNATIVE MEASURES (CURRENT PRICES)
(in million rupees)

	Annual basis				Plan averages			
	1959/60	1964/65	1969/70	1969/70 ^a	First Plan	Second Plan	Third Plan	Third Plan ^a
Market price	32,705	45,540	62,765	62,765	142,187	202,304	275,960	275,960
at factor cost	31,439	43,365	59,400	59,400	137,113	193,392	262,925	262,925
Direct taxes	603	940	1,322	1,540	2,517	4,464	5,748	6,975
GDMI	30,836	42,425	58,078	57,860	134,596	188,928	257,177	255,950
GDS	2,320	4,608	8,515	8,515	10,181	17,864	36,500	36,500
Revenue surplus	36	1,092	2,070	2,970	150	3,963	8,600	11,600
GPDS	2,290	3,516	6,445	5,545	10,031	13,901	27,900	24,900
GPDS ÷ GDNI	7.4%	8.3%	11.1%	9.6%	7.4%	7.4%	10.8%	9.7%
Δ GPDS	10.6%	18.6%	13.1%			7.1%	20.5%	16.4%
Revenue surplus ÷ JNP	0.1%	2.4%	3.3%	4.7%	0.1%	2.0%	3.1%	4.2%

Sources: GNP at market price: See Table I, Summary of Saving Rate Data.

GNP at factor cost: 1959/60, 1964/65, 1969/70, Third Plan [16].

First Plan: CSOSB, April 1965 [10].

Second Plan: Evaluation Report [15].

Third Plan: Third Plan [16].

GDS: See Table I, Summary of Saving Rate Data.

Revenue surplus: 1959/60 1969/70 from Third Plan [16] and 1964/65 from Evaluation Report [15].

Note again difference from Plan figures. First Plan taken as 1959/60 level for all years, probably overstates revenue surplus and therefore understates private saving.

1964/65 and First Plan from Economic Survey [8].

Direct taxes: 1964/65 and Second Plan from Evaluation Report [15].

1969/70 and Third Plan from Third Plan [16].

a) Including additional taxation.

b) Share of direct taxes in additional taxes taken to be the same as the share in 1964/65.

As in the case of total gross saving, the rate of private saving shows different behaviour if one measures the marginal rate between 1959/60, and 1964/65, from that when one measures the marginal rate from the First Plan to the Second Plan. If one uses the estimates of public and private saving assuming the implementation of additional tax measures (which I argue later is the more plausible assumption) the marginal rate of private saving projected from 1964/65 to 1969/70 is only one-third higher than the marginal rate from 1959/60 to 1964/65, while the marginal rate from the Second Plan to the Third Plan is more than twice the marginal rate from the First Plan to the Second. Again, while such a phenomenon *might* be consistent with the structural and behavioural relationships in Pakistan, it also might not be.

The lack of specification of functional or behavioural saving relations in the *Third Plan* and its supplementary documents was noted above. One example of the results of not specifying the relationships properly is related to the problem of additional taxation. The "Resources and Financing" chapter of the *Third Plan* [16] discusses government revenue projections *i)* under the assumption that rates will not change, and *ii)* on the assumption that there will be Rs. 3000 million additional taxation over the five years (or Rs. 900 million in 1969/70). These two alternatives are discussed without specifying the effect on private saving. That is, if taxation is increased by Rs. 3000 million, government expenditures on revenue account do not change, but neither do private consumption expenditures, since total saving remains the same. Therefore, the private marginal rate of saving out of taxed income is 100 per cent. Since this is clearly implausible, it is not at all obvious why the *Third Plan* makes so much of the problem of raising additional revenue. If the saving target is to be reached without the additional taxation, the marginal private rate of saving would have to be 18.6 per cent from 1964/65 to 1969/70, or it would have to be 20.5 per cent from the Second Plan to the Third Plan. The latter is almost three times the marginal rate from the First Plan to the Second Plan. It is quite obvious that the Rs. 3000 million additional taxation is absolutely necessary if the *Third Plan* saving targets are to be achieved.

In Table III, I have given the annual figures for total and for public and private saving, as well as some average and marginal rates of total and private saving for the period 1959/60 to 1964/65. Despite the danger of looking at short time periods, it is interesting to note that the rate of private saving (GPDS) out of gross disposable national income (GDNI) has remained virtually constant for the past three years, despite the rapid growth of imports, industrial production and agricultural output. Looking at the marginal rates from the first three years to the last three years one sees again that the private rate is below the

total rate, due to the rapid growth of public saving over the past five years. The marginal rates from 1959-61 to 1961-63 are much higher than those from 1961-63 to 1963-65. These figures point up again the fairly substantial difference between the first three years and the last three years of the six presented, or if one likes, between the first two and the last three years of the Second Plan. It is not at all clear which of the variety of "marginal rates of saving" is the appropriate one to use for projections into the next five years⁶.

TABLE III
AVERAGE AND MARGINAL RATES OF PRIVATE AND TOTAL GROSS
DOMESTIC SAVING: 1959 TO 1965
(Rs. million; current prices)

	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65
GNP at factor cost	31,439	34,622	36,192	38,258	40,955	43,365
GNP at market price	32,705	36,112	37,759	39,931	42,961	45,541
Direct taxes	603	623	720	725	853	940
GDNI	30,836	33,999	35,472	37,533	40,102	42,425
GPDS	2,290	1,690	2,335	3,100	3,314	3,516
Public saving	30	521	750	728	818	1,092
GDS	2,320	2,211	3,085	3,828	4,132	4,608
GDS ÷ GNP market price	7.1%	6.1%	8.2%	9.6%	9.6%	10.2%
GPDS ÷ GDNI	7.4%	5.0%	6.6%	8.2%	8.2%	8.3%
Public saving ÷ GNP market price	0.1%	1.4%	2.0%	1.8%	1.9%	2.4%

	Three-year averages		Two-year averages		
	1959/62	1962/65	1959/61	1961/63	1963/65
GDS ÷ GNP at market price	7.1%	9.7%	6.6%	8.9%	9.9%
Δ GDS/Δ GNP at market price	22.6%		26.9%	16.8%	
GPDS ÷ GDNI	6.3%	8.2%	6.1%	7.4%	8.3%
Δ GPDS ÷ Δ GDNI	18.2%		17.8%	14.6%	

Sources: GNP at factor cost: *Evaluation Report* [15, p. 6].
GNP at market prices: *Evaluation Report* [15, p. 6].
Direct taxes: 1959/60, *Economic Survey* [8].
1960/61 to 1964/65, *Evaluation Report* [15, p. 107].
GDNI: GNP at factor cost minus direct taxes.
Public saving (revenue surplus): 1959/60, *Third Plan* [16, p. 67]; 1960/61 to 1964/65, *Evaluation Report* [15, p. 107].

⁶ There is a troublesome point related to estimates of public saving and to government revenue for the Second Plan, particularly 1964/65. The figures for tax and non-tax revenue and for total current expenditure for 1964/65 differ greatly between the *Evaluation Report* of March 1965 [15] and the *Third Plan* of May 1965, with the result that the public saving figure for 1964/65 in the *Evaluation Report* is Rs. 290 million smaller than that given in the *Third Plan*; expenditures are lower by Rs. 54 million and revenue by only Rs. 274 million. Total saving for 1964/65 is the same in both documents, however, so that the estimate for 1964/65 private saving is Rs. 290 million lower in the *Third Plan* than in the *Evaluation Report*, which if true would make the private saving lower in 1964/65 than 1963/64. Such a conclusion is difficult to explain if the impact is to be a liberalization on private incomes in the industrial sector as great as it was expected to be. There is more problematic in some ways is that the estimate for public saving, or revenue surplus, for the whole Second Plan period is unchanged from the *Evaluation Report* to the *Third Plan*. There are, therefore, have been an equal but offsetting decrease in the estimate of public saving and national income for earlier years, which implies in turn an upward adjustment of the private saving for earlier years and a larger fall in the ratio of private saving to disposable national income for 1964/65. These points cannot be cleared up since the *Third Plan* does not discover a stable relationship of saving estimates for the earlier years of the Second Plan. The problem is difficult. The relationship of saving to income in total or by sectors becomes even more

Tax Ratios

While government policy cannot specify what the rate of saving out of income will be, it can have a good deal of influence on saving rates through adjustments in taxation and in public saving. On the matter of taxation the government of Pakistan deserves high marks for its aggregate performance over the past five years, as opposed to the fairly poor performance of tax revenue during the First Plan period. Table IV represents the relevant aggregate figures. The behaviour of the average and marginal ratios of tax and total revenue to GNP present a marked contrast to those of the saving ratios. Both the MRS and the marginal rate of taxation (MRT) are low when measured from 1954/55 to 1959/60, and both are much higher over the years from 1959/60 to 1964/65. The difference in the behaviour of the MRS and the MRT is in the projections for the Third Plan period. Looking first at the 1964/65 to 1969/70 projections, the implied MRT even under the "additional tax" assumption is lower than the rate from 1959/60 to 1964/65, while under the assumption of continued present rates the MRT is virtually the same as the average rate for 1964/65. The situation is a bit better when one looks at the Plan period averages, which are presented in the lower panel of Table IV. Here one sees that proposed MRT from

TABLE IV
SUMMARY OF TAX BEHAVIOUR (CURRENT PRICES)
(in million rupees)

Ratios of Taxes to GNP, Annual Basis

	1954/55	1959/60	1964/65	1969/70 at 1964/65 rates	1969/70 at new rates
Tax revenue	1,304	2,000	3,981	5,580	6,480
Total revenue	1,879	2,640	5,094	7,250	8,150
GNP at market price	21,920	32,705	45,540	62,765	62,765
Tax Rev. / GNP	5.9%	6.2%	8.4%	8.9%	10.3%
Marginal tax rate	6.5%	15.4%		9.3%	14.4%
Total Rev. / GNP	8.6%	8.2%	11.2%	11.6%	13.0%
Marginal revenue rate(MRT)	7.1%	19.2%		12.5%	17.6%

Sources: 1959/60, 1964/65 and 1969/70 from *Third Plan* [16]; 1954/55 revenue data from *Economic Survey* [8]; GNP from *CSOSB*, April 1965 [10] adjusted for indirect taxes to get GNP at market price.

Alternative Calculation of Tax Ratios

	First Plan	Second Plan	Third Plan 1964/65 rates	Third Plan new rates
Tax revenue	8,817	15,724	24,631	27,631
Total revenue	12,486	20,966	31,355	34,355
GNP at market price	142,187	202,304	275,960	275,960
Tax Rev. / GNP	5.9%	7.8%	8.9%	10.0%
Marginal tax rate	11.5%	12.1%	16.2%	
Total Rev. / GNP	8.8%	10.3%	11.4%	12.5%
Marginal revenue rate (MRT)	14.0%	14.0%	18.2%	

Sources: First Plan: GNP, *CSOSB*, April 1965 [10] adjusted to market price by indirect taxes. Taxes: *Economic Survey* [8].
Second Plan: GNP and Taxes, *Evaluation Report* [15].
Third Plan: GNP and Taxes, *Third Plan* [16].

the Second Plan period to the Third Plan period is about the same as the MRT from the First to the Second Plan on the low tax assumption, and four percentage points higher for the higher tax assumption. Here, then, is one answer to the problem mentioned above about the apparently excessive role given to private saving over the Third Plan period. By assuming an inappropriately high MRS for the economy as a whole, and by slowing down the tax and public saving efforts that were accelerated over the Second Plan period, the private sector received, as a residual, a very steep acceleration of projected performance in the Third Plan period. If there is anything at all significant about the stability of the private MRS over the past three years, accompanied by large increases in private sector incomes, the implicit MRS of the private sector in the *Third Plan* may be unrealistically high for the Third Plan period, even under the "high tax" assumption.

The line of criticism, or comment, spelled out above does not mean that I favour lowering Pakistan's sights for the Third Plan period. What I have tried to do is to indicate that the set of assumptions and projections for aggregate saving do not seem to be reasonable when one looks at past performance and at the components, or as near as one can get to components, of past saving. In particular, the effort to be made in the public sector is projected to be weak, despite the potential for additional taxation out of rapidly rising income in sectors like agriculture. The *Third Plan* notes, that the potential for additional tax contributions from the agricultural sector now exists, but there are no specific proposals for realizing more revenues⁷.

Import and Export Ratios

In order to have a complete and comparable set of data for the micro-economic variables of concern here, Table V gives the marginal and average ratios of imports and exports to GNP for the last years of each five year period and the average for the three Plan periods. The foreign trade relationships are in general more consistent with the interpretations and assumptions stated in the *Evaluation Report* [15] in the *Third Plan* [16] and than those of either saving or taxes. They show the stagnation of exports and the slow growth of imports during the First Plan period, the pick-up in growth of exports during the Second Plan (and from the First to the Second Plan period) as well as the tremendous acceleration in imports during the Second Plan that accompanied the foreign-financed "import liberalization" programme of the past five years. One can

⁷ While total revenue will rise 60 per cent under the *Third Plan's* high tax assumption, land taxes would rise only 16 per cent if they kept the same share in the increase that they had in total revenue in 1964/65, despite a projected increase in value added in agriculture of between 25 and 30 per cent.

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also see the further acceleration in exports that is expected during the Third Plan period.

The rapid decrease in the marginal rate of imports from 25.5 per cent over 1959/60 to 1964/65 to 9.2 per cent from 1964/65 to 1969/70 may be too much to expect, since it implies *i*) a very sharp deceleration in imports; *ii*) a marginal import ratio only slightly above that during the First Plan; and *iii*) a marginal rate that is lower than the average. Even with a very substantial programme of import substitution, such a ratio may be unrealistically low. The *Third Plan* [16]

TABLE V

AVERAGE AND MARGINAL RATIOS OF EXPORTS AND IMPORTS TO GNP

(in million rupees; current prices)

	1954/55	1959/60	1964/65	1969/70	First Plan	Second Plan	Third Plan
Imports of goods (M)	1,558	2,461	5,740	7,336	9,749	20,953	32,520
Exports of goods (X)	1,760	1,843	2,520	4,120	7,982	10,987	16,840
GNP at market prices	21,920	32,705	45,540	62,765	142,187	202,304	275,960
M/GNP	7.1%	7.5%	12.6%	11.7%	6.8%	10.4%	11.8%
X/GNP	8.0%	5.7%	5.5%	6.6%	5.6%	5.4%	6.1%
$\Delta M/\Delta GNP$		8.4%	25.5%	9.2%		18.6%	15.8%
$\Delta X/\Delta GNP$		0.8%	5.2%	9.3%		5.0%	7.9%

Note: Imports and Exports for 1954/55 were adjusted upward to reflect the devaluation in the rupee of August 1955. If the adjustment is not made, the marginal rates from 1954/55 to 1959/60 are unrealistically high. In addition, invisibles have been excluded from all figures, which, therefore, represent imports and exports of goods only.

Sources: Imports: 1954/55, CSOSB, April 1965 [10, p. 829].
 1964/65, *Evaluation Report* [15, p. 115].
 1969/70, *Third Plan* [16, p. 98] adjusted for PL 480 and Indus Basin imports.
 Exports: 1954/55, 1959/60, CSOSB, April 1965 [10, p. 829].
 1964/65, 1969/70, *Third Plan* [16, p. 84].
 First Plan: CSOSB, April 1965 [10, p. 829].
 Second Plan: *Evaluation Report* [15, p. 117].
 Third Plan: *Third Plan* [16, p. 98], exports adjusted to goods only by deducting 15 per cent for invisibles, the average of 1964/65 and 1969/70.

does expect the import ratio to be higher for the entire Third Plan period than it was for the Second Plan period, but the deceleration appears to be extremely rapid in the last few years of the Third Plan. The acceleration in exports from the Second to the Third Plan period does not seem too great. The marginal export rate, however, accelerates quite a bit from 1964/65 to 1969/70 compared to the rate from 1959/60 to 1964/65, when the average ratio of exports to GNP fell.

One measure of successful fiscal policy that would show up in fairly aggregate terms is the effect on exports. Although the rate of growth of export earnings was quite a bit higher than was anticipated, so was the rate of growth of GNP. We are told in the *Evaluation Report* [15] that "fiscal policies, particularly taxation measures, helped in curbing consumption and diverting a larger proportion of increased production into the export market" Evidence that this was the case would presumably be a marginal export rate that was above the average. Such was not the case, however, as the ratio of exports to GNP fell, regardless of whether one compares 1959/60 with 1964/65 or the First Plan with the Second Plan.

III: ASPECT OF PAST AND PROJECTED FISCAL POLICY

Tax Proposals

The growth in government tax revenue over the Second Plan period has, as noted, been quite satisfactory and represented a substantial break with the past. Important steps were taken both *i*) in raising the levels of tax rates to absorb more private resources and *ii*) in the direction most tax rises took. Table VI gives the projected and actual 1964/65 revenue by major revenue heads, though unfortunately the *Second Plan*, like the *Third Plan*, does not tell the amount by which taxes would be increased to reach the targets for new taxation. Conspicuous in its failure to meet even the target at the old rates of tax were taxes on agricultural land. This failure is even more important in view of *i*) the extended discussion in the *Second Plan* of the need to raise revenue from agriculture and *ii*) the greater than anticipated increases in agricultural incomes over the *Second Plan* period. In addition, income and corporation taxes did not rise as rapidly as indirect taxes on imported and domestically produced goods. As a result, the share of direct taxes in total revenue fell over the period. While such a movement, particularly over a short period, is not necessarily bad, the time must soon come to start raising the share of direct taxes as a concomitant of establishing a flexible, income-elastic, and relatively more equitable tax system that will adjust to a rapidly industrializing and urbanizing economy. In view of this need, the projected fall of the share of direct taxes in the *Third Plan* from 26 per cent in 1964/65 to less than 24 per cent of total taxes in 1969/70 is not encouraging. Improvements in the means of imposing relatively equitable income-elastic taxes in the agricultural sector command even greater urgency than they did in 1960.

The *direction* of indirect tax changes over the Second Plan period was in general an encouraging one. Since many of the changes that were enacted were in fact recommended by the *Second Plan*, the trend is even more important. The Second Plan period marked the ascendancy of the Planning Commission to a high place in the determination of economic policy. Indeed I would argue that it was as a framework for policy rather than as a blue print

of the Plan, some of the suggested conversions from specific to ad valorem duties were adopted. The *Second Plan* suggestion of a 2½ percentage point increase in the basic rate of sales tax was more than met, as the basic rate rose from 10 per cent in 1959/60 to 12.5 per cent in 1960/61, 15 per cent in 1963/64 and 16 per cent in 1964/65. On the other hand, the coverage of excise and sales taxes did not expand to the extent recommended by the *Second Plan*, nor, I would argue, to the extent necessary to make the indirect tax system a truly effective instrument of government policy. The failure of the government, particularly the provincial governments, to respond to the extensive discussion in the Plan about agricultural taxation and water rates has already been noted. A capital gains tax that the Plan suggested might be warranted, however, was adopted along with wealth and gift taxes (and a flurry of political opposition from the business community) in 1962/63. In general, one can say that the Planning Commission was quite successful in getting its tax programme adopted, particularly in terms of the *direction* of change, during the Second Plan period.

The *Third Plan* is much less specific than the *Second Plan* about the nature of future tax changes, due in part to the fact that the Commission on Taxation and Tariffs had not made a public report at the time the Plan was drafted. One could fairly say, however, that the direction of change indicated in the *Third Plan* is an extension of the policy of the *Second Plan*, with the exception of the attitude toward protection. The *Second Plan* clearly viewed the import taxes only as restrictive devices on "excessive" imports and as means of absorbing purchasing power from the private sector, not as protective devices. The *Third Plan*, however, explicitly treats protection and the encouragement of import substitution, as discussed below.

Fiscal and Exchange Rate Policy

In achieving the goal of eliminating foreign assistance at a level of income and an economic structure that can sustain its own needs for capital formation and imports, fiscal policy and its close cousins, exchange rate and commercial policy, play an important role. These policy instruments are supposed to create a structure of incentives that will encourage saving and discourage consumption, encourage production for export rather than for domestic markets in consumption goods industries, and encourage import substitution in capital and intermediate good industries. The export promotion and import substitution programmes are supposed to be "saving oriented", since *i*) increased export earnings would be used for "development" imports, *ii*) domestic production of capital goods

rather than of consumption goods would discourage any "unplanned" increase in consumption, and *iii*) import policy would reduce imports of consumer goods and promote imports of capital goods, thus encouraging saving and discouraging consumption¹⁰.

Export Promotion

The *Second Plan* proposed "to increase the output of commodities that can be sold in foreign markets, to curtail domestic consumption in order to have a surplus for export, and to provide adequate incentives and opportunities to exporters." To do this job, the *Second Plan* argued that "taxation levels will have to be high enough to restrain consumption, and that more specific measures will have to be taken to restrict consumption of particular goods that can find an export market" [11, p. 94]. The *Evaluation Report* explains that the achieved 7 per cent rate of growth of exports greatly exceeded the Plan target (3 per cent). Four factors were responsible for the more rapid growth: *i*) greatly increased production of cotton and fine rice, *ii*) diversification of markets, *iii*) strengthened incentives, and *iv*) stronger "institutional framework"¹¹. Strengthened incentives included in the *Second Plan* were the Export Bonus Scheme, essentially a multiple exchange rate device to selectively devalue the rupee¹², and "fiscal policies, particularly additional taxation measures, [which] also helped in curbing consumption and directing a larger proportion of increased production into the export market" [15, p. 18]. Unfortunately, the latter export policies do not seem to have been as successful as the *Evaluation Report* and the *Third Plan* would have one believe from their texts. Though there may have been some effect of the Bonus Scheme on minor exports and remittances from abroad, two industries singled out in the *Second Plan* [cotton textiles and tea, [11 pp. 94-95] for more than one-sentence treatment, both responded negatively over the period¹³. In these two industries, in which the fiscal policy package designed to restrict domestic consumption and increase exports should have had its quantitatively most important impact, fiscal policy did not simply fail to raise the share of exports in increased production, but it allowed total exports to fall¹⁴.

¹⁰ See, *Third Plan* [16, especially pp 33-35].

¹¹ See, *Third Plan* [16, pp. 81-82], and the *Evaluation Report* [15, p. 18].

¹² See, Bruton and Bose [1] for an explanation and analysis of the Bonus Scheme.

¹³ For extended discussions of the consumption-export problem in cotton textiles and tea, See Khan [3] and Thomas and Ahmad [24].

¹⁴ Exports as a percent of cotton, textile production fell from 19 per cent in 1959/60 to 11 per cent in 1963/64, while tea exports as a percent of production fell from 23 to less than one-tenth of one per cent over the same period. Figures are from Lewis and Soligo [6, pp. 124 and 126.]

The *Third Plan* notes that most production increases are projected in products that could be consumed at home and adds "it will be necessary, therefore, to adopt fiscal and other measures to restrain consumption of exportable commodities and channel increased production into the export market" [16]. It will certainly be necessary for the measures adopted to be stronger in the *Third Plan* than in the *Second* if the results are to be achieved.

Import Substitution

Literature on the subject of import substitution has blossomed extensively since the *Second Plan* was published. The extent of the *Second Plan* comment on the subject was: "it is necessary to substitute domestic production for imports wherever possible." [11, p. 96]. Virtually no discussion of principles, of policies, or of particular industries followed. Now, however, there exists a sizeable and rapidly growing literature on import substitution in Pakistan, including Power [19], Khan [3], Radhu [20], Lewis and Soligo [6], and Soligo and Stern [22]. The *Third Plan* itself argues that import substitution in consumer goods industries may lead to "domestic pressure for higher consumption levels which emerge when the capacity of consumer goods industries is expanded." The *Plan* adds, "it is a better strategy to limit the expansion of the capacity of the consumer goods sector in the very first instance and to deny the economy the temptation of an unplanned increase in its consumption." [16, p. 34]¹⁵. The *Third Plan* later argues that "within the field of import substitution, major emphasis will be on producer goods industries in order to meet the country's growing requirements of capital goods and machinery by domestic production." [16, p. 50]. In both the "Resources and Financing" and the "Balance of Payments" chapters, the *Third Plan* insists that there be a review of the tariff structure, with the preliminary recommendation as a rise in protection afforded to domestic capital goods industries¹⁶.

The initial arguments over import substitution took for granted that, since the level of protection was much lower for intermediate and capital goods industries, such industries had not been doing well in terms of either absolute

¹⁵ The *Third Plan* also states that "there is a great need for legislative action preventing monopolistic practices in all established industries, like textiles, where the freeplay of market forces should gradually bring down prices." [16, p. 119]. Later it notes that "blanket protection of the consumer goods sector has left no inducement for it to improve its efficiency so that some selective adjustments [in tariffs] will have to be made in order to introduce the possibility of foreign competition." Two points should be noted. First, the intention to bring down prices of such items as cotton textiles to the consumer is quite in conflict with the stated policy of using domestic indirect taxes to prevent consumption liberalization and to improve export surpluses. Second, the aim of introducing foreign competition to domestic import-competing consumption goods industries is in conflict with the goal of further orienting the import composition to development imports.

¹⁶ The same suggestion was made earlier in Lewis [4], Radhu [20] and Pal [17].

size or rate of growth. It was argued quite well by Power [19] and Khan [3] that investment in consumer goods industries had gone too far. Lewis and Soligo [6] showed, however, that the growth of the intermediate and capital goods industries and import substitution in these industries had been quite substantial despite the limited protection afforded these industries by the tariffs structure. More recently Soligo and Stern [22] have suggested that the expansion of many consumption goods industries has gone so far that the marginal productivity of labour and capital in consumer goods industries may even be negative when they are valued at a "correct" set of relative prices. Even if the latter conclusion is not strictly true, as may be the case when more adequate data are used and the methods are improved, the problem of the incentive structure given by indirect tax rates bears careful examination, as their results certainly point in the proper direction.

Combining Tax and Exchange Rate Incentives

In an effort to tie together somewhat the problems of export promotion and import substitution with those of indirect tax and exchange rate policies, I have given in Table VIII some rough estimates of the exchange rates for different types of goods implicitly facing various groups in the economy. Although the official rate of exchange is approximately Rs. 4.75 to one US dollar, export taxes, import duties, sales and excise taxes, and the Export Bonus Scheme introduce easily measurable distortions between world and domestic prices at an exchange rate of 4.75, and these distortions can be thought of as implicit exchange rates. I have not tried here to take account of the additional and important problem treated by Pal [17] of additional differentials due to the structure of import licensing (*i.e.*, quantitative restrictions), though these *i*) are quite substantial in many industries and *ii*) increase the general incentives for import substitution.

The "export rate" in Table VIII is the amount of rupees (or equivalent rupee value) received by an exporter for exports sold for one dollar abroad. Export taxes reduce this amount, and the Export Bonus Scheme increase it¹⁷. The "import rate facing users" is the total amount in rupees that would be paid *i*) foreign exchange, *ii*) import duties, and *iii*) sales taxes on imports in order to import goods worth one dollar from abroad. The "rate facing users" is not an appropriate measure to get the rate of protection, however, since there are disincentives to domestic production, in the form of excise and sales taxes, which must be subtracted to get the "import rate facing producers of substitutes".

In the absence of indirect taxes and subsidies, all exchange rates would be 4.75, but it is quite clear from Table VIII that the differences are quite sub-

¹⁷ Note that I have assumed here that foreign offer curves are perfectly elastic. Though this is not true for jute and jute goods, it is probably a fairly good approximation for other exports and for imports.

stantial, If one is interested in the problem of encouraging exports relative to import substitution, one compares Columns (2) and (4), and if one wishes to see the impact of domestic indirect taxes in attempting to divert production from domestic use to export, one compares Columns (3) and (4). The comparisons are revealing. For jute textiles domestic taxes forced near equality between export and domestic sale incentives, while for cotton textiles it would be much more profitable to sell in the domestic market rather than to export, on the basis of the tax and exchange rate incentives.

The implicit exchange rates given in Table VIII are somewhat less accurate for the goods classified by type, but the orders of magnitude are such that

TABLE VIII
ESTIMATED IMPLICIT EXCHANGE RATES FOR VARIOUS GOODS
BASED ON INDIRECT TAX AND EXPORT BONUS STRUCTURE

(rupees to US dollar)

(1)	Export rate (2)	Import rate facing users (3)	Import rate facing producers of substitutes (4)
Official exchange rate	4.75	4.75	4.75
Raw cotton	4.6		
Cotton textiles	6.2	12.4	10.2
Raw jute	4.5		
Jute textiles	6.2	8.1	6.3
Consumer goods			
essentials	4.75	7.4	7.4
	6.2		
	6.9		
Semi-luxuries	6.2	10.0	9.1
	6.9		
Durables	6.9	8.1	7.4
Luxuries	6.2	11.5	9.6
	6.9		
Capital goods and equipment	6.9	5.7	5.5

Note: Rates apply to 1963/64. Intermediate goods are omitted because comparable figures are not easily available. A more complete compilation is under way.

Sources: Export Rates: Export bonus rate is 20 per cent on cotton and jute textiles and 30 per cent on most other manufactured exports. The rate for raw cotton and raw jute computed from *i*) the specific duty on exports and *ii*) the prices of cotton and jute in 1964 to adjust exchange rate.

Import Rates Facing Users: This would be the exchange rate a person would pay inclusive of duties and sales taxes to import the group of items in question. Rates are from Radhu [21].

Import Rates Facing Producers of Substitutes: For cotton textiles, jute textiles, and capital goods, the exchange rate facing consumers was adjusted downward by the ratio of domestic indirect taxes to taxable domestic production from Lewis and Soligo [6] for 1963/64. Essential consumer goods are not adjusted since domestic indirect taxes are low. Semi-luxuries and durables taken at 10 per cent, luxury goods taken at 20 per cent, indirect tax rate for adjustment downward. See, Radhu [20; 21] for industry by industry figures that justify the use of the averages.

the comparison would not be changed substantially by further refinements. It is very difficult to find a rationale for the structure given here. The only group of commodities for which the exchange rate and indirect tax structure provides incentives for exports greater than those for import substitution and domestic use are the investment and related goods industries! Luxuries and semi-luxuries receive the greatest additional incentives for production for domestic rather than foreign markets, since the level of domestic indirect taxes does not offset the height of the explicit protection for these goods, and leaves the implicit exchange rate more favourable for import substitutes than for exports¹⁸.

While the *Third Plan* may be correct that there are limitations to exports imposed by "demand in the international market for Pakistan's industrial exports", it is quite clear that the incentive structure has not been set up to test the international market to its utmost. It is imperative that more adequate steps be taken in the Third Plan period to assure that proper incentives be given to production for export, greater disincentives to production of consumer goods for domestic uses, and greater incentives to production of investment and related goods for domestic use, since this category receives the most unfavourable exchange rate of any group of commodities except raw cotton, raw jute, and cotton yarn.

In view of the exchange rates implicit in Table VIII, as well as the general characteristics of Pakistan's growth, the size of the current balance of payments deficit and the extent of current overvaluation of the rupee [17] even at current levels of taxes and subsidies, one must dispute vigorously the statement in the *Third Plan* that "the ultimate objective (of export policy) must be to reduce and gradually eliminate the dependence of our industries on the Export Bonus Scheme, by strengthening our export incentives through other fiscal measures and increasing the efficiency of our industrial units." [16, p. 90]. It seems abundantly clear from all indications that the Pakistan rupee is still overvalued at rate of 4.75 to the US dollar, even with the current props to maintain the official rate. It would be more rational to move in the direction of providing adequate incentives to the export industries by a more realistic exchange rate. Since the value of a dollar's worth of imports to the economy is in the neighbourhood of 7.5 to 9 rupees, it is quite clear that valuing exports at 6.2 or 6.8 rupees represents a clear loss of welfare, since increased exports can buy increased imports, which have a higher value to the economy than import sub-

¹⁸ Soligo and Stern [22] also find that the rate of protection to *value added* is much higher for consumer goods industries than for intermediate and capital goods, thus strengthening the bias still further.

stitutes¹⁹. The political disagreeableness of talking about devaluation is quite obvious, and it is perfectly understandable that a government would prefer to solve its exchange rate problems by implicit rather than explicit devaluation. If, however, the aim of fiscal and balance of payments policy in the *Third Plan* is to try to "legitimize" an export exchange rate of 4.75, instead of at the bonus rate, the Plan is not very well conceived. Import substitution through higher protection will lead to lower real income than export promotion through more realistic exchange rates.

IV. SUMMARY AND CONCLUSION

An analysis of the reasons for improved growth performance of Pakistan's economy in recent years has not been attempted here. Some of the key macro-economic variables related to fiscal policy have been discussed with regard to past changes and the possible effects of government policy, and the Third Plan projections have been examined in light of the record of the past ten years. At the aggregate level, the major difficulties to be faced in light of the past record are the following:

i) attaining in the Third Plan the 22 per cent marginal rate of saving that was claimed as the Second Plan achievement; (in view of the scanty evidence one can hardly support any firm figure as "the" marginal rate of saving, and most alternative measures are below 22 per cent for the past).

ii) government efforts to increase tax revenues at a rate equal to that in the Second Plan; (private saving would have to accelerate its growth more than is realistically possible if total saving goals are to be reached under the present rates of revenue growth projected in the *Third Plan*).

iii) increasing once again the marginal rate of exports over the rate reached in the Second Plan; and

iv) decreasing the marginal import rate to one almost the same as that prevailing in the stagnation of the late 1950's; (the costs of pushing import substitution to the extent projected may be too high relative to the costs of further increasing the flow of exports to provide foreign exchange for greater imports.)

While the export target seems to be reasonable, the projected import rates may be inadequate to sustain the size of the development programme and the

¹⁹ On the value of import substitutes, see Soligo and Stern [22]. Note again that the value of a dollar's worth of imports is based solely on the exchange rate and indirect tax system. The substantial additional premium on imports reported by Pal [17] is not included. If it were included, however, the differential incentive for import substitution are even more pronounced.

growth projected for some sectors. Public saving targets (but particularly tax revenue targets) are too low at the aggregate level and are woefully inadequate with regard to such sectors as agriculture. Since the public saving targets are low and the aggregate saving target seems to be high, the expected increases in private saving implicit in the Plan are almost certainly unattainable in light of past performance.

The Appendix to this paper raises some doubts about the accuracy of the above judgments, in view of the many revisions in aggregate economic statistics that have been made recently and that will continue to be made. Since such questions of data adequacy apply equally to the Plan evaluation and projections, however, I shall not apologize unnecessarily for the results or the judgments made.

At the microeconomic level of differential tax, exchange rate, and fiscal policies, the performance during the Second Plan period was mixed. The movement toward substitution of indirect fiscal controls for direct administrative controls made considerable progress, due primarily, no doubt, to the large increase in resources made available in the form of greatly increased imports. Substantial rises in indirect tax rates took place in the directions the *Second Plan* had indicated. The increases that took place, however, were not adequate to restrict domestic consumption of important exportable commodities. There was some movement toward a more rational set of incentives for promotion of exports and for the improvement of incentives for import substitution in intermediate and capital goods. A major area of public policy yet to be resolved, however, is the establishment of a set of exchange rates and domestic indirect taxes that will sufficiently encourage production for export relative to production for the domestic market. The projected decline in the marginal and average import ratios and the massive size of the implied import substitution programme seem to be unwarranted until adequate incentives for export industries are established through exchange rate or indirect tax rate adjustments.

Progress during the Second Plan period was good, though it is impossible to say how good with much accuracy. Progress in the Third Plan period will continue to be made only if there are increased attempts to rationalize the exchange and tax rates systems and to tap additional domestic resources for public saving without reducing private saving. These are tough realities, tougher because of the deceleration of growth of imports and import surpluses projected for the Third Plan. The economy, and particular sectors of the economy, will not enjoy in the Third Plan period the initial lift they received from rapidly rising imports during the Second Plan. Adequate government policy measures

will have to be taken, and since they will be taken without the rapidly rising additions to resources from abroad, there are bound to be more decisions in the Third Plan that will hit particular sectors harder than the same measures would have during the Second Plan period when imports were being "liberalized" more and more each year.

When the stated objectives of increasing social and economic justice are added to these above difficulties, it is clear that Pakistan must devote herself to the development effort with even more vigour than she has in the past if the aims and objectives of the *Third Plan* are to be fulfilled.

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Appendix

A BRIEF INTRODUCTION TO SOME PROBLEMS OF USING PUBLISHED AGGREGATE ECONOMIC STATISTICS IN PAKISTAN

There are numerous serious problems in studying aggregate economic relations in Pakistan, particularly those dealing with saving relations. The basic problem is one of inadequate information about economic activity, price relationships and flows of goods and services in major sectors of the economy. The problem is compounded by the presence of a fairly large number of "official" estimates of various magnitudes, and by a fairly rapid rate of revision of part or all of the basic economic series or indicators. For example, if one picks up the two *Mid-Plan Reviews* of 1963 and 1964 and the *Evaluation Report* of 1965 (all produced by the Planning Commission) one finds three distinctly different estimates of GNP, each based on a separate method of estimation, and only the last of which agrees with the estimates being published at the same time by the Central Statistical Office. The basic revision in the national accounts done by the National Income Commission (see its *Interim Report* [9] of September 1964) was the first done only for 1959/60 to 1963/64. Fortunately, the CSO began publishing in its *Bulletin* in 1965 a revised national accounts series from 1949/50 to the present, both in current and in constant (1959/60) prices.

Saving is estimated in Pakistan by estimating investment and by deducting some measure of the import surplus from investment to find the amount of domestic investment that was offset by domestic saving. Saving estimates can therefore vary with *i*) the investment estimate; and *ii*) the estimate of import surplus which in turn depends on *a*) the estimate of imports; *b*) the estimate of exports; *c*) the concept of balance of payments deficit that is used; and *d*) the estimates of balance on invisibles account.

Investment estimates are made by the Planning Commission on the basis of availability of goods used in investment (cement, structural steel, machinery) and more recently, on the basis of scattered records of private but primarily public agencies making capital expenditures as well. Estimates of "non-monetized investment" are, to the best of my knowledge, just guesses, related in some way to value added in agriculture. The three Planning Commission documents mentioned also have three different estimates of investment activity. The 1963 *Mid-Plan Review* has investment estimates that are roughly comparable in method of estimation to those used by the Planning Commission for earlier years, and they are also quite close in concept to those used in Mahbubul Haq's *Strategy of Economic Planning* [2] which presents the first published estimates back to 1949/50. The two revisions of investment estimates, which appear in the

1964 *Mid-Plan Review* and the 1965 *Evaluation Report*, only go back as far as 1959/60, so that there are no revised estimates of investment before 1959/60 yet available on the same basis. Finally, Papanek [18] has his own set of industrial investment estimates which are based on an entirely different method of estimation, covering the period before 1959/60.

The balance of payments estimates, like those for investment, deserve much more space than is available here. I have noted elsewhere [5] some of the problems of the choice of concepts and of data, and showed the sensitivity of the saving estimates to the use of CSO or State Bank estimates of the payments deficit or a measure based on CSO's goods balance plus the State Bank invisibles balance. In addition to problems of different coverage in time and concept by the CSO (arrivals of goods) and the State Bank (payments for goods and services) there are certain goods, particularly aided goods, and especially PL 480 imports, which are apparently treated differently by the CSO and the State Bank. Therefore, the Planning Commission prepares its own estimates of imports, exports and other receipts and payments based on a variety of sources, and it is these latter estimates that appear in Planning Commission publications. The Planning Commission methods are given in the mimeographed document, *A Revised Balance of Payments 1960/61—1962/63* [14] Once again, however, the backward look for the Planning Commission balance of payments estimates ends in 1959/60, so one has to fend for oneself in the earlier period. In addition to these numerous problems of measuring imports and payments the Planning Commission occasionally uses different concepts of the payments deficit to subtracted from investment to get gross domestic saving. In the 1963 *Mid-Plan Review* they neglected to account for PL 480 imports thus, understating the deficit and overstating domestic saving. In parts of the *Third Plan* "external resources" are used, rather than the current payments gap, so that changes in foreign exchange reserves, which are saving or dissaving, are neglected.

The meaning of these different sets of estimates with their different conceptual bases is that one must be exceedingly careful in using published data, particularly that from the Planning Commission, whose explanations of changes made from time to time, when available, are usually in limited-circulation mimeographed form. Most series break in conceptual basis at 1959/60 and there are several sets for the post-1959/60 period. Presumably, the more recently made estimates are better than those made earlier. But since the new bases have not been used to fill in the earlier years, a part of differences between the fifties and sixties is due to different bodies of statistics. Different evaluations of the performance during the 1960's are due in part to the three new sets of GNP and investment estimates that have appeared in the past three years. While I would

definitely *not* join some cynics who have said that the successful completion of the Second Plan was due to a successful revision of the national accounts, a great deal of caution needs to be exercised in drawing specific conclusions (or calculating fixed coefficients) from this period when the estimates were changing so rapidly, and when they are likely to change still more.

To save others the time of comparing the effects of the revised estimates on some of the key macroeconomic magnitudes, I have prepared tables of comparison for the 1959/60 to 1964/65 years, which are given below. Table A-I compares the three successive estimates of investment, imports, exports, GNP, and saving that appeared in the 1963, 1964, and 1965 reports of the Planning Commission. Since the largest basic changes are in the investment series, Table A-II compared the components of gross investment from the three reports, and one can see that a principal source of the rise in the estimates for total investment was the increase in the "monetized" investment of the private sector. The various national product estimates that were available for the year 1959/60 are given in Table A-III, by sectors of origin of national product, so that one can compare the source of change in the aggregate estimates.

The most interesting differences are to be found between the Planning Commission estimates in the 1964 *Mid-Plan Review* and the new official estimates of the National Income Commission for 1959/60 as a base year, shown in Table A-III. The Planning Commission estimates were significantly higher in mining (by 28 per cent), large scale manufacturing (by 28 per cent), small scale manufacturing (by 28 per cent), construction (by 77 per cent), public utilities (by 40 per cent), and ownership of dwellings (by 95 per cent). It is also quite a bit higher in other services, but since the National Income Commission estimates are higher for wholesale and retail trade, for banking and insurance and for transport and communications, there may be an offset due to different classification among these three categories, while there is less likelihood of overlap among other sectors. The National Income Commission estimates are higher for the largest sector, agriculture, fisheries and forestry (by 10 per cent) and for the general services category (by 16 per cent). Using as a naive rule of thumb the notion that the official statistics generally understate the value of almost anything that they attempt to measure (*i.e.*, that undercoverage is much more important than double counting), I have shown in the last column of Table A-III a naive recomputation of GNP for 1959/60 based on the higher of the two (Planning Commission and National Income Commission) estimates for value added by sector for that year. The combined estimate gives a GNP of about 8 per cent higher than the Planning Commission's estimates and about 10 per cent higher than the new national accounts.

While I would certainly not claim much accuracy for the combined GNP estimates, one purpose in presenting it is to show that under a not unreasonable rule of thumb (compared to other estimation techniques for Pakistan's statistics) one can obtain a fairly different base year magnitude. The new higher GNP would, of course, lower investment and saving ratios for the base year, and they would lower the marginal ratios from that year to any future year if the *rates* of growth were kept the same, since the absolute change in the income (the denominator) would be larger than it had been¹. More important than this possibility are the differences in sectoral value added, which presumably reflect difference in sectoral gross output. Investment estimates, as mentioned, are prepared by the Planning Commission on the basis of, among other things, estimates of construction activity and output and imports of steel, cement and machinery. The Planning Commission estimates of value added in large and small scale manufacturing and particularly in construction are higher by a considerable margin than those of the National Income Commission. While the Planning Commission had adopted the National Income Commission GNP figure for aggregate presentation in the *Evaluation Report* and in the *Third Plan*, the investment estimates in both Planning Commission documents are based on the Planning Commission's old estimates of construction activity and the availability of certain manufactures, not on the new National Income Commission accounts. This fact can be seen in Chapter 3, "Investment Estimates and Equations," of Tims' *Growth Model for the Pakistan Economy* [25] which gives the only generally available discussion of the sources and methods for constructing the new (1959/60-1964/65) estimates of investment².

Thus, even the latest investment series and the latest official GNP series are not consistent in their basis. It is quite obvious that the pre-1959/60 investment series is not comparable to the pre-1959/60 GNP series. One doesn't know much about the pre-1959/60 trade balance figures, except that they have not been revised to be completely comparable to the post-1959/60 series. The saving series, therefore, is open to variation because of the differences in investment and trade balance definition, and the saving *ratio* series varies with the GNP estimates as well as the saving estimates.

¹ Since investment, and, therefore, saving estimates are already based on the higher sectoral value added figure, the numerator would not change.

² Tims also discusses in Chapter 5 the reasons for differences between Planning Commission and National Income Commission estimates of construction activity, the latter being based on cement availability only, while Tims' are more broadly based.

Price Data and Investment Deflators

There are other problems of using aggregate statistics on an historical basis, particularly when one wants to convert data to constant prices. For some commodities (particularly those that are somewhat homogenous, those that were relatively very important in terms of value produced or sold in the 1950's and those whose prices are not controlled) there are relatively good data with good coverage over time that appear to be fairly sensitive to changes in supply and demand conditions. Major foodgrains, cotton, jute and sugarcane, and many minor foodgrains, are well covered among agricultural commodities. Fruits and vegetables, and forestry, fishery, and livestock products (except hides and skins) are not well covered in either extent or accuracy. Cotton textiles, jute textiles, cigarettes, tea and a few other consumer goods are fairly well covered among manufactured goods, but prices of many manufactured goods are not well covered, regardless of whether the goods are of domestic or of foreign origin. Perhaps the worst coverage of all is in producers goods and manufactured raw materials, particularly those that are imported, which latter constitute the major share of such products. Since the weight of producers goods, and particularly imported producers goods, has increased over the past ten years in total domestic availability of manufactures (*see* Lewis and Soligo [6]) the most poorly registered goods are becoming more important in what should be the price index for manufacturers. Finally, if one wishes to construct a price index for investment goods that can be used to deflate or inflate historical series of investment (depending on whether they are estimated first in current or constant prices) one is almost completely at a loss for reasons both of conceptual definition and coverage of price statistics.

Why pick out an investment deflator or inflator as the least reliable? First of all, some prices were controlled during the period so the recorded price movements do not reflect movements in relative scarcities, which is presumably why we are interested in prices. Black markets existed and still do exist for cement and for imported goods of all types, machinery and equipment included. The domestic prices of imports, as shown by Pal [17], are well above c. and f. prices plus duties, due to currency overvaluation and artificial restrictions on imports. What we do not know is how this mark-up behaved over time, although there is a general feeling that it has fallen over the past decade as foreign exchange availability (and the volume of imports) increased and as the domestic supply of close or distant substitutes rose. (*See* again Lewis and Soligo [6]). In addition to the fact that the controlled prices, which are most likely to be recorded, do not reflect scarcities or movements in scarcities, there is extremely poor coverage of producers goods in official statistics. Despite the fact that domestic production of machinery (except electrical) in 1959/60 was less than 13 per cent

of total availability, the "machinery and equipment" sub-index of the CSO's wholesale price index is composed of the *list* prices of two domestic manufactures, for three and four pieces of machinery in East and West Pakistan, respectively. It is small wonder that there has been virtually no change in the wholesale price index for machinery over the past five to eight years. The index probably tells us nothing about the price movements of machinery and equipment. I do not mean to imply that it is a simple matter to get an appropriate price index for producers goods. My purpose is only to say that the data now available are definitely not up to the job.

The problem of price control and licensing severely affects the estimation of investment activity at either current or constant prices. If two identical factories are built and equipped by two different firms, one in possession of all proper sanctions which allow purchase of material at controlled prices, and one built with materials of foreign origin purchased locally from a commercial importer, the latter is likely to pay 60 per cent more for his material than the former (*see* Pal [17]). What, then, is the correct figure for investment activity in *i*) current and *ii*) constant prices? If we take actual expenditures on investment as the current price estimate how do we deflate from a future time period to get constant prices? Or, if investment estimates are made by obtaining an index of the availability of investment *goods* in different periods, choosing a base level, and getting constant price investment estimates first, how does one correct to current price estimates? And how was the base estimate arrived at, by the expenditures actually made, or by the expenditures that would have been made if all investors had had access to materials, equipment, and labour at approximately the same set of prices? What is the meaning of the constant price estimates when the share of properly licensed investors changes?

To illustrate this point I will use Papanek's estimates of industrial investment [18], but I wish to be perfectly clear that I am doing so because his are the most detailed in method that have been published. The price index Papanek uses for machinery and equipment is in part a GATT index for machinery and, for recent years, the CSO's machinery sub-index. Papanek corrects the GATT index to account for devaluation of the Pakistan rupee in 1955, which makes the price series rise sharply in that year. If one were interested in the prices paid by import license holders, this adjustment (plus an additional adjustment for import duties paid, if any) would be all right. But since all investors are not license holders, some were already paying the higher prices before the 1955 devaluation because of the scarcity of the imports that brought on devaluation itself. Finally, the GATT index for the c. and f. prices *in rupees* to license holders for imported machinery is spliced directly onto the CSO's index of list prices for three or four items of locally produced equipment, and the net result is called a price index for machinery and equipment.

Since Papanek's estimates for industrial investment in the 1950's are probably the best currently available, I need hardly say more about the reliance we can put on investment estimates, current or constant price, for that period. I have already mentioned investment estimates since 1959/60. Since saving estimates depend on estimates of investment, the level and the movement of the saving estimates are certainly questionable, and conclusions should be drawn with exceedingly great caution.

For all the above reasons, while there is no doubt that GNP is now growing faster than it was, that investment ratios are higher than they were, and that saving ratios are higher than they were, to put faith in specific values of these magnitudes seems to me quite unjustified. Since future government efforts and government policy would need to be more strict and more decisive the more pessimistic the outlook for marginal saving, export, and import ratios, it seems to me that it is dangerous to pick the rosy outlook for the Third Plan period and to say all that needs to be done is to continue what we have been doing. Maintaining the performance of the past five years may not be as easy as is implicitly and explicitly assumed in the *Third Plan*.

TABLE A-I

COMPARISON OF COMPONENTS OF NATIONAL EXPENDITURE AMONG
THREE SUCCESSIVE EVALUATION REPORTS

(in million rupees; current prices)

	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65
A. Gross Domestic Investment						
March 1963 estimate	2,890	3,440	4,220	—	—	—
May 1964 estimate	3,430	3,460	4,480	5,630	—	—
March 1965 estimate	3,430	3,775	4,760	5,965	7,280	8,400
% increase March 1963 to May 1964	19%	1%	6%	—	—	—
% increase May 1964 to March 1965	0	9%	6%	6%	—	—
% increase March 1963 to March 1965	19%	10%	13%	—	—	—
B. Total Imports						
March 1963 estimate	3,240	3,800	3,930	—	—	—
May 1964 estimate	3,270	3,790	3,980	4,790	—	—
March 1965 estimate	3,190	3,850	4,059	4,885	5,933	6,832
C. Exports						
March 1963	2,050	2,270	2,380	—	—	—
May 1964	2,080	2,296	2,380	2,750	—	—
March 1965	2,080	2,286	2,384	2,748	2,785	3,040
D. GNP at Market Prices						
March 1963	29,930	32,860	35,730	—	—	—
May 1964	33,280	35,660	38,700	39,720	—	—
March 1965	32,705	36,112	37,759	39,931	42,961	45,541
E. Gross Domestic Saving						
March 1963	1,600	1,910	2,670	—	—	—
May 1964	2,240	1,966	2,880	3,590	—	—
March 1965	2,320	2,211	3,085	3,828	4,132	4,608
% increase March 1963 to May 1964	40%	3%	8%	—	—	—
% increase May 1964 to March 1965	4%	12%	7%	7%	—	—
% increase March 1963 to March 1965	45%	16%	15%	—	—	—

Sources: March 1963 estimates from 1963 *Mid-Year Review* [12, p. 49].
 May 1964 estimates from 1964 *Mid-Year Review* [13, p. 91].
 March 1965 estimates from *Evaluation Report* [15, p. 100].

Plan Review [12, p. 49].
Mid-Year Review [13, p. 91].
Evaluation Report [15, p. 100].

TABLE A-II

COMPARISON OF COMPONENTS OF GROSS DOMESTIC CAPITAL FORMATION
OF THREE SUCCESSIVE EVALUATION REPORTS

(In million rupees; current prices)

	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Two-Year Review Estimates</i>						
Govt. plan investment	1,710	1,740	2,050	—	—	—
Indus Basin	—	20	50	—	—	—
Private monetized investment	940	1,060	1,350	—	—	—
Private non-monetized investment	400	450	500	—	—	—
Change in stocks	—160	170	270	—	—	—
Gross domestic investment	2,890	3,440	4,220	—	—	—
<i>Three-Year Review Estimates</i>						
Govt. plan investment	1,170	1,730	2,060	2,470	—	—
Indus Basin	—	100	350	700	—	—
Private monetized investment	890	1,060	1,580	1,710	—	—
Private non-monetized investment	400	400	450	430	—	—
Change in stocks	430	170	40	320	—	—
Gross domestic investment	3,430	3,460	4,480	5,630	—	—
<i>Evaluation Report Estimates</i>						
Govt. plan investment	1,795	1,823	2,184	2,602	3,131	3,595
Indus Basin	—	100	210	780	890	950
Private investment	1,205	1,682	2,326	2,263	3,009	3,605
Change in stocks	430	170	40	320	250	250
Gross domestic investment	3,430	3,775	4,760	5,965	7,280	8,400

Sources: Two-Year Revenue Estimates: 1963 *Mid-Plan Review* [12, p. 49].
 Three-Year Review Estimates: 1964 *Mid-Plan Review* [13, p. 91].
 Evaluation Report Estimates: *Evaluation Report* [15, p. 100].

TABLE A-III

VARIOUS ESTIMATES OF NATIONAL PRODUCT BY ORIGINATING SECTORS FOR 1959/60 IN 1959/60 PRICES

(in million rupees)

	Old CSO revised estimates (Net)	Two year Review estimates (Net)	Three year Review estimates (Gross)	National Income Commission estimates (Gross)	Naive Re-Computation (Gross)
Agriculture, fishery, forestry	14,873	15,430	15,200	16,753	16,753 (NIC)
Mining	79		90	70	90 (PC)
Large-scale manufacturing	2,008	3,680	2,010	1,565	2,010 (PC)
Small-Scale manufacturing	1,579		1,750	1,365	1,750 (PC)
Construction	589		1,150	651	1,150 (PC)
Electricity, gas, etc.	66		150	107	150 (PC)
Transport, communication, etc.	990		1,450	1,857	—
Wholesale/retail trade	2,532	7,100	2,700	3,665	—
Banking and insurance	136		150	224	—
Ownership of dwelling	1,447		3,470	1,772	3,470 (PC)
Public admin. defense	1,247	1,120	1,400	1,331	1,400 (PC)
Services	2,411		2,500	2,112	7,858 (NIC)
Factor services abroad	—33	—30	—30	—33	—33 (NIC)
NNP at factor cost or	27,924	27,300	—	—	—
GNP at factor cost	—	28,740	31,990	31,439	34,598

Sources: Old Revised CSO estimates: CSOSB, October 1963 [10, p. 1827].

Two-Year Review estimates: 1963 Mid-Plan Review [12, p. 50].

Three-Year Review estimates: 1964 Mid-Plan Review [13, p. 89].

National Income Commission estimates: CSOSB, April 1965 [10, pp. 930-39].

Naive re-computation: the higher of the estimates of value added in each sector was chosen from the Three Year Review and the National Income Commission estimates. See Appendix for discussion.