Policies for Rural Development in Pakistan*

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The notion of development is basic to the rural development and policies formulated and to be suggested for achieving the said objective. Therefore, it is imperative to understand the term development and its evolution in historical, global and social perspective. This concept is basically multidim^nsional, very subjective and not value free. This is evident from the controversy obout the definition of development between economists and other social scientists such as sociologists or political scientists and also amongst economists themselves. Economists while talking about development usually refere "to economic growth" and "economic development." Economic growth typically refers to the rate of growth of aggregate or per capita national income.

"While there is by no means unanimity to define growth, it is convenient to adhere to the convention that real per capita national income or output represents the most reliable indicator of a system's economic achievement at any point in time and that any change in real per capita income over time connotes economic growth. Statesmen and philosophers have joined economists in recognizing that economic growth defined in this way represents the most objective indicator of a society's welfare". (Ranis, 1968, p. 409).

This is a typical definition of development which was prevalent during 50s and 60s. But the experience of most of the developing countries during 50s and 60s indicated that although they achieved

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the objective of increasing national income and per capita income during these decades, a high percentage of the population in these conntries remained mal-nutritioned, unemployed uneducated, without health and housing facilities. This also happened in Pakistan. When Ayub's Government was celebrating the so called decade of development, people were protesting on roads against the problems of poverty, unemployment and maldistribution of income.

This led to a shift of emphasis in the definition of development in 70s from increase in per capita income to the improvements in the living standard of the people with regard to the factors such as employment, education, health, nutrition and the distribution of these improvements among the population.

"The questions to ask about a country's development are therefore what has been happening to poverty ? What has been happening to unemployment ? What has been happening to inequaliy ? If all three of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result 'development' even if the per capita income doubledy" (Seers, 1969, p. 3).

Another approach to the development which gained significant acceptance during 70's was of perpetuated, historically imposed dependence of the developing countries on developed countries and emphasis on self-reliance for development in these countries. For scholars advancing this approach, such is Frank (1969), Santos (1970), Galtun (1971), Amir (1974), Wallerstein (1974), Baratt-Brown (1974), Koufmanng (1975) and Petras (1978), development and underdevelopment are two faces of the same phenomenom and underdevelopment is the result of historical and continuing relations between the developed and developing countries.

"It is generally held that economic development occurs in a succession of capitalist stages and that today's underdeveloped countries are still in a stage, sometimes depicted as an original stage of history, through which the now developed countries passed long ago. Yet even a modest acquaintance with history

shows that underdevelopment is not original or traditional and that neither the past nor the present of the underdeveloped countries resembles in any important respect the past of the now developed countries. The now developed countries were never underdeveloped, though they may have been undeveloped. It is also widely believed that the contemporary underdevelopment of a country can be understood as the product or reflection solely of its own economic, political, social, and cultural characteristics or structure. Yet historical research demonstrates that contemporary underdevelopment is in large part the historical product of past and continuing economic and other relations between the satellite underdeveloped and the now developed metropolitan countries. Turthermore, these relations are an essential part of the structure and development of the capitalist system on a world scale as a whole. A related and also largely erroneous view is that the development of these underdeveloped countries and, within them of their most under-deveolped domestic areas, must and will be generated or stimula-ted by diffusing capital, institutions, values, etc., to them from the international and national capitalist metropoles. Historical perspective based on the underdeveloped countries past experience suggests that on the contrary in the underdeveloped countries economic development can now occur only independently of most of these relations of diffusion. (Frank, 1973, 94-95).

For the developing countries, it is essential to get out of the dependence situation and adopt the strategy of self-reliance in the development effort-through mass participation.

"Self-reliance is a dynamic movement from the periphery, at all levels——individual, local, national, regional. It is not something done for the periphery ; basically it is something done by the periphery. Thus, control over the economic machinery of a country by national or even by local, state or private capitalists in order to produce for the satisfaction of basic needs is not self-reliance. It may be to "Serve the people",——to use the chinese jargon. Self-reliance ultimately means that society is oranized in such a way that masses arrive at self-fulfillment

through self-reliance——in participation with other in the same situation" (Galtung, 1980, p. 401).

Other social scientists while talking about development usually take into account the social and political changes taking place in a society. They consider the economic definition of development as narrow and take into account the social and political changes as a part of development process. The term 'development' is synonymous with 'modernization' which is usually used by other social scientists. There are three major themes in the literature on modernization by Sociologists.

(a) The process of structural differentiation. (Smelser, 1959).

(b) The concept of individual modernity. (Lerner, 1958 ; Inkeles and David Smith, 1974).

(c) The development and structure of institutions similar to those of Western Europe and north Americe. (Eisenstadt, 1966).

Another approach to define development has been to talk about the socio-politic economic system as a whole rather than laying emphasis on one aspect or the other.

"It is possible to define or broadly conceptulize what we mean when we talk about development as the sustained elevation of an entire society and social system towards a 'better' or 'most humane' life. The question 'what constitutes the good life ?' is as old as philosophy and himself. It is timeless and perennial question which needs to re-evaluated and freshly answered with the changing environment of world society. The appropriate answer for Third World nations in the last quarters of the twentieth century is not necessarily the same as it would have been in the second or third quarters. But we believe with Professor Goulet and others that at least three basic components or core values 'should serve as a conceptual basis and practical guideline for understanding the inner meaning of development. These core values are life-sustenance, self esteem and freedom representing common goals sought by all individuals and societies". (Todaro, 1977, p. 62).

The purpose of the above detailed discussion about the concept of development is to show that it is multi-facted and value ladden. The policies suggested will be according to the definition one choses for the development. For the purpose of this paper, I should like to define development as a process of change which has its goals :

(a) Providing the basic necessities and improving the quality of life for all or the majority of the people ;

(b) Ensuring sense of security and certainity not only for ones own present and future but also for coming generations ;

(c) Self-reliance in deciding about the type of activities and their carrying out process for providing the basic necessities of life and improving its quality ;

(d) Self-fulfillment of the masses through participation with each other in decision making process and carrying out the activities related with the development ;

(e) Emancipation from alievating material conditions due to interference in the natural and cultural environment in which people live and imposing of foreign ideas and technology on them.

Pakistan's agriculture sector has been modernized in the narrow economic sense and there has also been many attempts for rural development but none of the above criterion of development has been met. If agricultural modernization is just more use of high yielding varieties of rice and wheat, improved irrgation facilities, use of modern pesticides and machinery, which lead to increase in the productivity of land and labour, then there has been agricultural development in some areas of Pakistan. Rather the increase in productivity was so tremendous in some areas of Pakistan". Compound annual growth rate of total crop output was 2.7 percent a year and compound annual growth rate of crop output per hectare was 1.5 percent a year during 1950—67, (U. S. Department of Agriculture, 1970, p. 16) indicating that there has been improvement in the agriculture sector. However, the increase in crop output and agricultural modernization is limited to only a few crops and certain areas of the country. It is mainly the cash crops such as cotton,

sugarcane and rize which showed an immense increase in production from 1959-60 to 1974-75 cotton production increased by 114 percent, rice production by 113 percent and sugarcane production by 99 percent. The production of wheat which is the main stiple diet of the people of Pakistan, also increased by 96 percent. (Government of Pakistan, 1976, 21-23) it.

The other two important factors contributing to the growth of crop output were the price support policy adopted by the Government and the increasing use of non-traditional inputs. Production Index of major agricultural crops as shown in table 1 also indicate the increase in agricultural production.

Yield per hectare also increased for wheat, rice, cotton and sugarcane between 1975-76 and 1980-81 as is indicated by the figures shown in the following table.

TABLE No. 1
Yield per Hectare of Wheat, Rice Cotton and Sugarcane

Year	Wheat (Kgs)	Rice (Kgs)	Cotton (Kgs)	Sugarcane (Tonnes)
1975-76	1420	1531	277	36.4
1976-77	1431	1565	233	37.5
1977-78	1316	1553	312	36.6
1978-79	1488	1615	250	36.3
1979-80	1563	1581	350	38.3
Average 1975-76 to 1979-80	1447	1571	284	37.0
1980-81 (Provisional)	1638	1601	347	39.0

Source : Government of Pakistan, Pakistan Economic Survey 1980-81.

TABLE No. 2

Production Index of Major Agricultural Crops
(1950-60 = 100)

Year (July-June)	All Crops	Food Crops	Fibre Crops	Other Crops
1948-49	89	—	—	—
1949-50	86	—	—	—
1950-51	90	—	—	—
1954-55	90	—	—	—
1955-56	86	—	—	—
1959-60	100	100	100	100
1960-61	100	98	103	103
1961-62	109	105	111	122
1962-63	119	108	128	151
1963-64	118	101	144	124
1964-65	128	120	130	162
1965-66	127	107	142	181
1966-67	135	114	156	189
1967-68	157	150	171	170
1968-59	168	160	181	184
1969-70	186	177	185	214
1970-71	174	164	188	195
1971-72	183	170	245	169
1972-73	188	181	243	163
1973-74	196	190	228	188
1974-75	187	183	220	171
1975-76	199	207	176	193
1976-77	203	212	149	224
1977-78	209	208	197	223
1978-79	219	238	162	212
1979-80	239	245	250	210
1980-81 (P)	249	251	250	240

Source : Government of Pakistan, Finance Division. Pakistan
Economic Survey 1980-81., Islamabad, June 1981, p. 7
(Statistical Annexure).

Price support policy and subsidizing the non-traditional inputs has been the continued policy adopted by the successive governments for increasing agricultural production. The subsidizing of inputs, however, has been reduced recently. Better weather conditions after 1977 are also responsible for better production and bumper crops during the last five years.

Similarly successive Governments in the past introduced a number of rural development programmes, such as Village Aid Programme. Rural Works Programme, Basic Democracies, Agricultural Development Corporation, Integrated Rural Works Programme and People's Works Programme, for improving living conditions in rural areas.

But all these efforts of agricultural development and rural uplift were more beneficial to big landlords of certain areas while masses did not benefit too much from such improvements.

"In the Fifth Plan, Rural Development has been conceived as an inextricable part of the overall planning endeavour. This is because about three-fourth of the country's population consists of rural population, scattered over an area of 796, 096 square Kilometres in some 45000 villages. The main occupation of the population is agriculture of which 78 percent consists of small and medium sized farmers. As compared to urban population, poverty, unemployment, food shortage and other socio-economic imbalances have visible effect on the life of rural masses. Disease, malnutrition and lack of approach for social services, inputs and technology are the principal constraints on the productivity of rural community and more so in the case of small farmers." (Government of Pakistan, Finance Division, 1980, p. 241).

The benefits of agricultural modernization of rural development were limited to big land owners of a certain areas because there was better irrigation system and more fertile land in such areas as compared to other areas. The distribution of land was skewed in all areas of Pakistan Gini coefficient of ownership in whole Pakistan is 0.6591, in Punjab, N.W.F.P., Sind and Baluchistan it is 0.6301. 0.6741, 0.6956 and 0.6919 respectively. (Naseem, 1981, p. 143). Even the land reforms of 1959 and 1972 although aimed at improving

the situation, had limited effect. Unemployment has been estimated between 1.7 to 13.0 percent. The figures for disguised unemployment and underemployment are over two million workers. Government of Pakistan, Finance Division, 1981, p. 7).

These facts and figures reveal that although various attempts have been made for rural development in Pakistan. but the conditions in the rural areas of Pakistan have not achieved a single objective of the development as defined earlier except for a limited success in improving the economic conditions of few number of people.

With these socio-economic conditions in mind and given the objectives to be achieved for development, we will look for the policies for rural development in Pakistan.

Self-reliance and self-fulfillment through mass participation in development efforts should be the corner stone of our policies for rural development.

The first step in this direction will be to get out of the existing type of relationship which exist in the rural set up of the society, between rural and urban areas and between developed and developing countries. As Galtung has rightly pointed out :

"self-reliance is not merely an abstract recipe, a way of organizing the economy with heavy emphasis on the use of local factors, but a highly concerete fight against any kind of center-periphery formation with the ultimate goal of arriving at a goal where "each part is center". As the essence of center-periphery formation is vertical division of labour with exchanges across a gap in evel of processing where trade is concerned, a gap in the level of initiative where politics is concerned and so on——the difference between the sender and receiver, the leader and the led ——the basic idea of self-reliance is to get out of this type of relationship." (Galtung, 1980, p. 399).

The first policy measure to be adopted for achieving the objectives of rural development, is to educate the people living in rural areas and to create conciousness about their socio-economic plight and causes for that. The awareness about the existing dependency

relationship and exploitation has to be created. Efforts should be directed to educate and mobilize support for structural changes in the society. The masses in rural areas have to be educated and made aware about the dependency and the way of getting out of it through self-reliance.

The strategy of self-reliance has to operate at national as well as local level.

At the national level self-reliance does not mean isolating a society from other countries. But self reliance, I mean depending of a nation on its own resources, defining its own socio-economic problems and deciding about policies independently according to its own social, cultural natural, environments and conditions.

Self-reliance at local level means involving people in defining the problems of development and measures to solve such problems given the local resources and social conditions. One concrete example of such strategy is the 'Ujama' (family hood) project of Nyerere in Tanzania (Nyerere, 1960) The other example is the 'Chinese Commune' system. Pakistan's rural development will not be possible without cooperative farming and formation of community organization and institutions. The initiative should come from Government but poeple should decide about the process and its implementation. Once again, it should be kept in mind that one does not have to follow the concept of 'Ujama' or 'Commune' blindly and the success of such measures depend on the adoption of such projects according to the local socio-economic conditions.

Mass participation in the decision making process is essential for self-reliance policy to succeed in Pakistan. Bottom-up planning rather than top-down planning should be given more importance and there should be more emphasis on local planning than centralized planning as adopted previously. The experiences of farmers, their views about their problems and solutions should be given main consideration in the rural development. Popular participation is key for the success of the strategy of self-reliance.

Integrated rural development is also very essential for achieving the objectives of development as mentioned earlier. Improvements

in agriculture, education, sanitation, nutrition and health should be taken care of at the same time.

> "Many rural programmes have low effectiveness because they are incomplete systems, much life an automobile lacking spark plugs, or a wheel barrow without a wheel. A common example of this is when a visiting engineer helps a village to install a safe water supply but no one explains convincingly to the villagers what they must do thereafter to keep it safe. A month latter the engineer returns to find the fence down and the bullocks once again polluting the 'protected' water supply. Another example of an incomplete system is the health service and unhappily there are many like this that concentrates on curative services and neglects preventive and promotive health measures. Without attacking the root causes of illness and disease, such a system can never catch up with the mounting curative load. (Coombs, 1980, p. 16).

Integrated rural development strategy is essential but once again the mass participation in decision making process for such development effort will be the pre-requisite for such development strategy to be successful in Pakistan.

Communication development can play an important role in the process of rural development. There can be three ways in which communication can be helpful in the process of change and walfare :

(*a*) There should be more emphasis placed on communication projects such as roads and railways to connect people in rural areas as well as to link them to the facilities in urban areas ;

(b) Local media and point-to-point media can play an important role in bringing about the changes in the attitude and behavior of the people by creating conciouness for reconstructing the socio-economic structure in developing countries.

(c) Cultural values of the rural people should be preserved through local media with the increasing literacy and a

cociousness created among masses to fight poverty and dependence.

Concluding, one can say that following policy measures should be adopted for rural development in Pakistan :

(a) educating the farmers about their plight, the dependency relationship, the need of structural rearrangement and self-reliance ;

(b) mass-participation in identifying the problems of rural areas and their solution ;

(c) 'bottom-up' planning rather than 'top-down' planning ;

(d) use of local resources and appropriate technology ;

(e) integrated rural development ;

(f) development to be defined by the people themselves and social and environmental imbalances be considered while deciding about policy measures ;

(g) cooperative farming and building up community institutions and organizations :

(h) There should be more emphasis on local media and point-to-point media for bringing changes in the rural areas.

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Effect of Foreign Capital Inflow on Domestic Savings

TOSEEF AZID* AND SHAKIL AHMAD**

Introduction

Saving is considered a main source of economic growth. Most of the developing countries are trying to accelerate the saving rate. They adopt such policies as are helpful in increasing the savings. But their economies are not self-sufficient as the most of their projects depend on foreign capital inflow. The policy makers of these countries suggest that there is a positive correlation between economic growth and capital inflow ; on the other hand, it has also been recognised that saving has positive effect on economic growth. So these two variables, saving and foreign capital inflow, are getting more and more importance for an under-developed economy. Now the experts of these economies are giving more emphasis on the estimation of the behavioural relation ship between saving and foreign capital inflow.

Some of them have an idea these two variables are positively correlated while the others are totaly against this relationship. Both groups have many arguments in the support of their hypothesis. Realistic economists conclude that this relationship of saving and foreign capital inflow depends on the circumstances and conditions of the economy.

In an underdeveloped country like Pakistan, it is necessary to estimate the relationship between savings and capital inflow and with the help of these estimates, the policy makers may be in a position

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to make a suitable policy for economic growth. The main purpose
of this paper is to study this phenomenon in the context of Pakistan's
economy.

> To what extent our savings have been responsive to the changes
> in capital inflow."

The Paper has been organized in the following manner :

In Section I, a review of literature on the effect of foreign capital
inflow on domestic savings has been made. In Section II, the
models, data and variables have been discussed. Section III deals
with the review of the statistical problem in estimating the savings
function. Section IV gives results obtained from the regression
analysis. Finally in Section V, the conclusions have been drawn
from the analysis.

SECTION I

Review of Literature

In recent years it has been argued that foreign capital inflows
reduce domestic savings, It is further argued that because of this
substitution effect, the net benefits of foreign capital may be signifi-
cantly less than what the inflow suggest. The literature on this
subject has recently been developed by many economists. In this
Section, we would like to summarize the main stages of the debate
very briefly.

Mikesell & Zinser (1) made an attempt to identify the effect of
different variables on the savings by estimating the saving function
for developing countries and concluded that :

> "Saving in developing countries is negatively related to net
> capital imports ; saving is positively associated with exports and
> that measured saving is responsive to charges in the real rate of
> interest. The general finding of a negative correlation between
> domestic savings and capital inflow is not accompanied by an
> agre ment of the hypothesis. Moreover, this finding may, in
> part, reflect a tautological relationship between capital inflow
> and gross domestic saving as measured."

There is also a statistic alproblem in the calculation of savings,

T. Haavelmo (2) pointed out the general principle that to the extent that foreign capital inflows increase the permanent income of a country, it would be expected to lead to increase in consumption as well as savings.

Enos & Griffin (3) tried to test the hypothesis by estimating cross country regressions of the following :

The found that 'B' to be significantly negative"

$$\frac{S}{Y} = A + B \frac{F}{Y}$$

S = Domestic Savings

Y = National Income

F Imports − Exports.

They concluded that, in general, foreign assistance has neither accelerated growth nor helped to foster democratic political regimes. If anything, aid may have retarded development by leading to lower domestic savings, by distorting the composition of investment, and thereby raising the capital output ratio, by frustrating the emergence of an indigenous enterpreneurial class, and by inhibiting institutional reforms. Further, they suggest that foreign aids are frequently counter-productive.

Rehman (4) emphasised the importance of "Psychological" factors in inducing the government to relax its saving efforts when foreign funds are available. The results suggest that Haavelmo hypothesis may be contain an insight into the behaviour of recipients of foreign capital that is yet to be recognized, specially by those who postulate domestic savings to be a function only of national income with the presumption that foreign capital is used only for augementing investment and not as a substitute for domestic savings.

Weiskopf (6) argued that Rahman and Griffon-Enos results were unsatisfactory because of the econometric problem of identification and are misleading in a trade-constrainted situation. He developed a technique for identifying saving constraint cases and tested the hypothesis for the cases where saving constraint was binding and found in support of the hypothesis that foreign capital inflow reduced domestic savings.

G. F. Papanek in an interesting article (6) has attacked his hypothesis from three angles. He argues, first, that the statistical relationship is in part the result of an accounting convention and not of a behavioral relationship.

Second, estimates of savings contain wide margin of errors. Lumping of different types of capital inflow together, is wrong. Strikingly different results obtained by different authors cast doubt on their reliability.

Third, he contends that these authors mistake association for causality. Exogenous factors may cause both high capital inflow and low saving rates.

According to his conclusion, he stated that, "In some circumstances, foreign inflows undoubtly stimulated savings, so that each dollar of inflows led to more than a dollar of investment, while in other cases they discouraged savings, and a dollar of inflows may have led to much less than a dollar of investment."

Chenery & Carter (7) have shown that even if the substitution hypothesis was correct, the implications drawn about the effects of foreign capital are wrong ; because the analysis ignores the interdependence between different variables and their dynamic effects. They further argue that "the proper test of the effectiveness of aid, however, is its effect on growth or other social objectives rather than on savings as conventionally measured".

In cases where there is a constraint other than savings, or where the constraints are mixed over time-period, the negative association can be expected as a result of export savings falling below Exante as the system is constructed elsewhere. The association between aid and savings in these cases is not direct and, in fact, were we to reduce current trade balance, saving would rise but output, investment, and consumption would fall.

There is much controversy in the literature on this area. It is difficult to be sure which may the balance will lie. However in the next sections, we will examine our estimations and results.

SECTION II

The Model and variables

Savings are estimated by deducting foreign capital inflow from investment and foreign capital inflow is calculated by deducting the exports of goods and services from the imports of goods and services.

Savings, however, depend on the following :

(a) Foreign Capital Inflow

(b) Gross Domestic Product

We have the following system of the determinations of savings.

$S = F(GDP, F_c)$

$S = I - F_c$

$F_c = M - X$

Where

S = Savings

I = Investment

F_c = Foreign Capital Inflow

M = Imports

X = Exports

Further we have another version of foreign capital inflow :

$F_{c1} = (M - H) - X$

$S_1 = I - F_{c1}$

Where H is home remittances ann next we have

$M = f(F_c, GDP)$, $X = f(F_c, GDP)$

Where 'M' is further disaggregated into raw material imports MR, and consumers imports M^c

Data

The data on gross national product at factor cost at current prices, investment at current prices and home remittances at current prices are available in statistical year books and Economic Survey.

In order to get the real values of imports and exports, deflate them by the import and export price indices. G.D.F.C.F.* Deflating by investment index and change in stock by whole sale price index, we get the real values of investment. Real values of Home Remittances accrue by deflating the import index.

The scope of our study is limited to a few number of fiscal year 1969-70 to 1 79-80, for which the data on all the relevant variables were available. This limitation must be kept in mind when conclusions are drawn on the basis of our findings.

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* Gross domestic fixed capital formation.

TABLE I

Investment at Current Market Prices (Million Rupees)

Year	Private Fixed Investment.	Public Fixed Investment.	Total Fixed Investment.	Changes in Stock.	Gross National Investment.
1969-70	3494.00	3341.00	6835.00	705.00	7541.00
1970-71	3531.00	3514.00	7045.00	847.00	7892.00
1971-72	3546.00	3267.00	6813.00	850.00	7663.00
1972-73	3727.00	3920.00	7646.00	1000.00	8647.00
1973-74	3840.00	6774.00	10641.00	1000.00	11614.00
19 4-75	5228.00	11010.00	16218.00	2000.00	18218.00
1975-76	6484.00	16286.00	23134.00	—	22770.00
1976-77	7780.00	18642.00	26422.00	1000.00	27421.00
1977-78	8894.00	20251.00	29288.00	1000.00	30228.00
1978-79	9556.00	21856.00	32471.00	1750.00	34221.00
1979-80	12441.00	24420.00	39187.00	2000.00	4118/.00
1980-81					

Sources : Pakistan Finance Division Pakistan Economic Survey (Various Issues)

TABLE II
TRADE GAP (MILLION REUPEES)

Year	Import Goods and Services	Exports of Goods and Services	Trade Gap (Exports-Imports)	
1969-70	4740.04	3195.01	—	1305.00
1970-71	5223.00	3922.00	—	1401.00
1971-72	4727.00	3923.00	—	804.00
1972-73	9598.00	9961.00	+	363.00
1973-74	15202.00	11960.00	—	3242.00
1974-75	23016.00	12994.00	—	10022.00
1975-76	23858.00	13881.00	—	9977.00
1976-77	26741.00	13991.00	—	12750.00
1977-78	32600.00	16629.00	—	15971.00
1978-79	42510.00	21519.00	—	20991.00
1979-80	54952.00	30222.00	—	24730.00

Sources : Pakistan Ministry of Finance : Pakistan Economic Survey (Various Issues)

TABLE III
DEFICIT SURPLUS AT CURRENT ACCOUNT
(MILLION RUPEES)

Year	Trade Gap		Private Unrequited Transfers to Pakistan.	Current Account Deficit	
1969-79	—	1305.00	508.08	—	1676.00
1970-71	—	1401.00	327.87	—	1604.00
1971-72	—	804.00	558.54	—	124.00
1972-73	+	363.00	1548.60	+	152.00
1073-74	—	3242.00	1497.00	—	3318.00
1974-75	—	10022.00	2276.00	—	10638.00
1975-76	—	9977.00	3498.66	—	9212.04
1976-77	—	12750.00	5848.92	—	11718.03
1977-78	—	15971.00	12139.38	—	14834.03
1978-79	—	20991.00	14819.00	—	19463.01
1979-80	—	24730.00	18765.00	—	14467.01

Sources ; (i) Pakistan Ministry of Finance : Pakistan Economic Survey (Various Issues) (ii) State Bank Publications.

TABLLE IV
Saving at Current Market Prices (Million Prices)

Years	National Savings	Domestic Savings
1969-70	6239 00	6236.00
1970-71	6409.00	6491.00
1971-72	6953.00	6859.00
1972-73	9470.30	9010.00
1973-74	8989.00	8372.00
1974-75	9343.00	8196.00
1975-76	15785.00	12793.00
1976-77	20151.00	14671.00
1977-78	26144.00	140051.00
1978-79	27152.00	13230.00
1979-80	33470.00	16457.00

Source : Saving = Investment − (Imports − Exports)=Domestic Savings+Net Factor income from abroad

TABLE V
GNP AT CURRENT PRICES (MILLION RUPEES)

Years	GNP at Current Factor Cost	GNP at Current Market Prices
1969-70	43348.00	47752.00
1970-71	45620.00	50405.00
1971-72	49268.00	54157.00
1972-73	61258.00	67336.00
1973-74	81058.00	87470.00
1974-75	105787.00	113413.00
1975-76	124415.00	135043.00
1977-77	141166.00	154932.00
1977-78	168701.00	184278.00
1978-79	191584.00	206976.00
1979-80	227617.00	246950.00

Source : Pakistan Ministry of Finance : Pakistan Economic Survey (Various Issues) GNP at Factor Cost = GNP at Market Prices − Indirect Taxes + Subsidles

TABLE VI

GNP, SAVING AT CONSTANT MARKET PRICES
(MILLION RUPEES)

Year	GNP at Market Prices	Savings
1969-70	35622.52	4654.23
1970-71	35770.34	4548.29
1971-72	36140.80	4643.30
1972-73	38963.08	5481.24
1973-74	41212.77	4235.29
1974-75	42695.85	3517.29
1975-76	42263.45	5290.94
1976-77	47644.99	6196.87
1977-78	52792.98	7452.67
1978-79	55057.32	7223.00
1979-80	58850.86	7976.26

Source : Estimates of GNP and Savsngs at Constant Prices are derived by deflating series at Current Market Prices by GDP deflator.

TABLE VII

FIXED IEVESTMENT AT CONSTANT MATKET PRICES
(MILLION RUPEES)

Year	Private Fixed Investment.	Public Fixed Investment.	Total Fixed Investment.	Gross National Investment.
1969-70	2531.11	2420.83	4952.53	5464.09
1970-71	2496.11	2484 09	4980.20	5578.96
1971-72	2467.64	2273.48	4741.12	5332.63
1972-73	2472,79	2600.84	5073.63	5737.12
1973-74	1737.16	3064.46	4801.62	5254.01
1974-75	1623.69	3432.36	5055.95	5679.45
1975-76	1696.14	4033.78	5729.92	56 9.91
1976-77	1759.42	4215.60	5975.02	6201.18
1977-78	1871.90	4279.67	6151.57	6362.04
1978-79	1859.29	4417.53	6276.82	6615.11
1979-80	1947.32	4365.61	6312.93	6635.12

Source : Estimates reported in Table I have been deflated by Investment Index.

SECTION III

The Review of Statistical Problems in Estimating the Saving Function

It is difficult to imagine a behavioural saving function for the economy as a whole. The saving behaviour of business sector as far as depreciation allowances are concerned depends mainly on tax laws and past investment pattern. Similarly, the government saving behaviour is influenced by different types of factors, political processes, and current expenditure retirements of past capital expenditures, etc. and should be analysed separately. Thus, it means difficult to imagine for purposes of economic analysis, a behavioral entity for the economy as a whole whose "income" is increase as a result of foreign capital inflow and which reacts in such a way as to reduce its domestic savings.

The statistical implementations are also faulty and fail to test the hypothesis. The statistical equation uses (Trade Balance) imports minus exports as the indicator of foreign capital inflow. Actually, if correctly tested statistically, it would require estimates of grant element of foreign capital by examining the terms of lending and sources of finance for the gap ; It cannot be approximated by trade balance which might have been financed by drawing down of foreign reserves, worker's remittances, and profits from foreign investment.

Similarly, if the influence of foreign capital inflow on saving is to be estimated, both should be measured independently. Actual savings are generally estimated by deducting trade balance from investment, so that if there is any error in measurement, so that if there is any error in measurement of trade balance it is not transmitted, one to one, to savings estimates, which are then being regressed on trade balance.

Another way to formulate the statistical problem will be to put it in Friendman's Language on consumption function. Even if the permanent saving behavior is affected by permanent inco m component in foreign capital, this influence cannot be measured by usual regressions of national accounts figures on savings, income and trade balance, especially when they certain, in addition to transient

elements, matually dependent observation errors. Because of some extraneous reasons, saving may decline leading to emergency imports and balance of trade deficit. However, both law savings and high trade deficits are caused by other factors, not one by the other e.g. a transient decline in income due to bad whether lead to decline in savings.

<div align="center">

SECTION IV
</div>

The Results of Estimation

The functional relationship, as derived in methodology, has been estimated in linear from using O L S technique. The results of estimation are discussed below. The values in paramthesis under the estimated co-efficients are computed 't' values. Any statistic ('t' or 'F') marked with an esteric (*) or double esteric (* *) shows that the computed value is significant at the loss of 5% or 10% level of sighificance respectively.

By testing the form used by Rehman and Enos and Griffon, we get

$$\frac{S}{Y} = 0.143 - 0.32 \frac{F_c}{Y} \qquad (1)$$

$$(7.3)^* \qquad (-.67)$$

$R^2 = .32 \qquad D.W = 1.45 \qquad F = 4.56$

However, if the same hypotheeis is stated in a different from, we get

$$S = -.53 + .24Y - .23 F_c \qquad (20)$$

$$(-.17) \ (4.13)^* \ (-.25)$$

$R^2 = .95 \quad D.W = 2.20 \qquad F = 10.20^*$

It is interesting to note that the co-efficient of F_c is not significantly different from unity which may well be the result of defining S as $I - F_c$. If we test by from using the definition of saving S_1, then :

$$S_1 = 2.14 + .67Y - .42 F_c \qquad (2b)$$

$$(2.27)^* \quad (3.95)^* \quad (-.14)$$

$R^2 = .87 \quad D.W = 1.94 \qquad F = 9.53^*$

S_1 has the same relationship with income and foreign capital inflow and there is not major difference between equati in 2 a and 2b.

However if we introduce a lag of one period F_c , we get

$$S = -45.3 + 1.94\ Y - .92\ F_{c\ 1-1} \qquad\qquad (3a)$$

$$(-1.9)^{**}\quad (4.15)^*\quad (-.47)$$

$$R^2 = ,69 \qquad D.W=1-97 \qquad\qquad F=9.15^*$$

$$S_1 = .435 + 1.83\ Y - .26\ F_c\ t - 1) \qquad\qquad (3b)$$

$$(1.39)^{**}\quad (4.77)^*\quad (-.11)$$

$$R^2 = .58 \qquad F=2.23 \qquad\qquad D.W=2.423$$

Eq. 2 (a, b) show that the incomes have highly significant positive effect on the domestic savings. The same holds for the eq. 3 (a, b) but in both sets of equations. the F_c and $F_{c\ t-1}$ have insignificant effects on savings.

In order to further examine the hypothesis, we also made a disaggregative analysis. In most cases, foreign capital inflows are not used to finance imports of non-capital goods directly. Therefore, the hypothesis of negative association between F_c and S, S_1 implies that due to the fungibility of foreign exchange, the availability of foreign capital either increases imports of consumer goods (M_c) or raw material (MR) or exports (X). In order to test this hypothesis we ran the following regressions.

$$M_c = 41.17 - .11\ F_c + .45\ Y$$

$$(.53)\qquad (-.78)\quad (2.32)^*$$

$$R^2 = .56 \qquad F = 5.29^{**}\ D.W = 1.47$$

$$MR = 6.23 + .25\ F_c + .86\ Y$$

$$(.21)\quad (.74)\qquad (2.03)^*$$

$$R^2 = .76 \qquad F\ a = 13.23^*\ DW = 1.19$$

$$X = 21.4 + .42\ F_c + 77\ Y$$

$$(.95)\quad (.14)\qquad (2.45)^*$$

$$R^2 = .98 \qquad F=31.72^*\quad D.W = 1.95$$

F_e has been insignificant in all cases. This would suggest that the foreign capital inflow has no significant effect on saving.

SECTION V

Summary and Conclusion

On the basis of our estimated results, we conclude that regression equations of expost aggregate savings on trade balance do not measure the effect of foreign capital inflow on domestic savings propensity. Because of the various conceptual and statistical problems involved, these simple minded regressions give completely misleading and unstable results. For more meaningful results we should analyse the problem in the frame work of a complete model where the saving functions are treated in a disaggregate fashion and the dynamic effects are studied.

However, if we can suggest some argument in favour of foreign capital inflow, with a lower level of foreign capital inflow, the level of income, investment and savings would have been lower, even though the partial effect of foreign capital on saving-income ratio were negative.

Our arguments and results should not be interpreted to mean that foreign capital inflow can do no harm. In fact, the foreign capital inflow can create debt servicing problem in the future. It is quite possible that when apparently easy foreign capital inflows are available, policy makers may ignore the harder alternatives of structural and policy changes and thus harm the long-run objectives of a country.

Our regression results are completely misleading due to insignificant co-efficients of F_c. It means that if some analyses the saving function in disaggregate manner, he may achieve better and significant results.

It is interesting to note that co-efficients of F_c are insignificant which may well be the result of all equations defining S as I-F_c. If this were a genuine behavioral response, one would expect some lag in response of saving to movement in F_c. But if we examine the equations 3 (a, b), here also the co-efficients of $F_{c\ t-1}$ are insignificant.

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Second Best Pricing Theory
For
Some Associated Public Goods in Pakistan

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1. Introduction :

From Prometheus magnum opus feat to the burning of Olympian
Flame, now the Sui Gas Pipe-ends remain aflame for cooking and
heating; flow for the manufacture of fertilizer and chemicals. Sui gas
besides providing jobs to thousands, has contributed greatly to a
change in production technology in Pakistan. Any decision by
Sui gas management, whether it relates to increasing Sui gas supply
or load/shedding, extending concessions or enhancing the Sui gas
rate, has far-reaching impact on cost-price line of the associated
public goods, besides productivity and profitability of associated
industrial enterprises.

The main concern of the present study is to formulate some
viable pricing policy for associated public goods like Sui gas, electri-
city, fertilizer and cement. During Jan. 1982 Sui gas tariff increased
from Rs. 12.00 M.C.F. to Rs. 14.00 M.C.F. for household and
Rs. 18.50 M.C.F. to Rs. 22.00 M.C.F. for commercial usage. Those
industrial enterprises which greatly depend on Sui gas made
some adjustment consequently. State Cement Corporation of
Pakistan was the first to react by enhancing the price of cement by
Rs. 2.50 per bag, followed by fertilizer manufacturers who increased
the rate by Rs. 16.00 per bag. Later on an adjustment in the wheat
price was made of Rs. 6.00 per maund. Sui gas or Electricity tariff
has its spillover effect on agricultural products e.g. wheat, rice and
cotton; on industry e.g. fertilizer and cement.

Under such a situation, instead of having MC pricing, we may
apply Second Best Pricing theory to public goods. It is specifically

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for those projects which are operating at sub-optimal level—faced with layoff, reduction in demand and transmitting economic stagnation elsewhere—resulting in big social loss. This economic loss can be converted into social gain by adopting Second Best Pricing Theory, for some associated public goods—Sui gas, fertilizer and cement.

While adopting MC pricing or Capital Cum Operating Cost Absorption pricing or a technique assimilating projected capital Investment—disposal of associated public goods is constrained with Esg <1 and Ec/Ef >1. Under such a situation Second Best Pricing Theory for the associated public goods, provides an alternative technique. It takes into account Social Time Preference to deal with Capital Cum-Operating costs and projected capital investment, while maximising Social Benfit. In this context the contributions of Marglin, Kenneth J. Arrow, Nordhous and O.C. Herfindahl (4, 1, 5 and 6) are ucte-worthy. For the rate of return and social Time Preference Rate regarding resource allocation, Baumal, Bradford, Boiteux, Rees and Turvey (2, 3, 7 & 8) have been drawn on.

In the second section an econometric frame-work for applying Second Best Pricing Theory to some associated public goods—Suigas, Fertilizer and cement, has been given. Section 3, provides a mathematical test of the econometric frame-work given in sec. 2, followed by concluding remarks in the last.
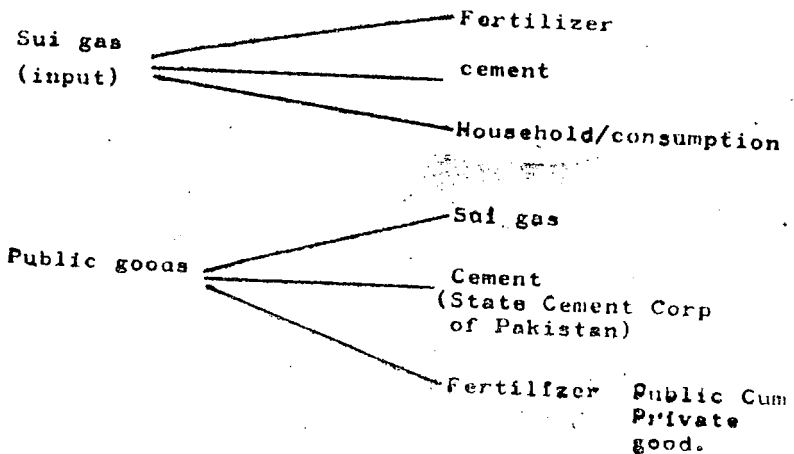
II

The following notations have been used in the analysis that follows :

Psg	= Price of Suigas per MCF (to—tl).
Psg (h)	= Price of Suigas for household per MCF.
Psg (cm)	= Price of Sui gas for commercial use per MCF.
Pf	= Price of fertilizer (urea) per bag.
Pc	= Price of Cement per bag.
Pai	= Price of alternate input.
$\triangle$Psg	= Change in the price of Sui gas.
$\triangle$Psg (h)	= Change in the price of Sui gas for household.
$\triangle$Psg (cm)	= Change in the price of Sui gas for commercial use.
$\triangle$Pf	= Change in the price of fertilizer (urea).
$\triangle$Pc	= Change in the price of cement.

$\triangle$Pai	=	Change in the price of alternate input.
Xsg	=	Output of Sui gas.
Xf	=	Output of fertilizer.
Xc	=	Output of cement.
$\triangle$Xsg	=	Change in the Output of Sui gas.
Uai	=	Units of alternate input.
$\triangle$Xf	=	Change in the output of fertilizer (Urea).
$\triangle$Xc	=	Change in the output of cement.
Ef	=	Elasticity of demand for fertilizer.
Ec	=	Elasticity of demand for cement.
Sb. sg (h)	=	Social benefit due to change in the price of Sui gas for household.
Sbsg (cm)	=	Social Benfit due to change in th price of Sui gas for commercial use.
Sbf	=	Social benefit due to change in the price of Fertilizer.
Sbc	=	Social Benefit due to change in the price of cement.
S.	=	Saving rate.
rc	=	Consumption rate of interest.
rk	=	Market rate of interest.
(Psg-Csg)	=	Price of Sui gas net of extraction Cost.

(*i*) Social Benefit $= \sum\limits_{sg=1}^{n} \int^{Xsg} Psg\ (Xsg)\ dxsg - C_{sg}\ (Xsg...X_{sgn})$

Sui gas (input)

Fertilizer

cement

Household/consumption

Public goods

Sui gas

Cement (State Cement Corp of Pakistan)

Fertilizer

Public Cum Private good.

(ii) $Rrf = \left(Pf + \dfrac{dPf}{2}\right) \cdot dXf + \left(Xf + \dfrac{dXf}{2}\right)dPf$

$$- \sum_{ai=1}^{n} Pai. \, dUai$$

Increase in the rate of return to fertilizer manufacturer on per unit increase in his output. (Rrf).

$$Rrf = \left(Pf + \dfrac{dPf}{2}\right) dXf. \left(1 + \dfrac{1}{Ef}\right) - \sum_{ai=1}^{n}$$

$$Ef = \dfrac{dXf/Xf + \dfrac{dXf}{2}}{dPf/Pf + \dfrac{dPf}{2}}$$

(iii) $Rrc = \left(Pc + \dfrac{dPc}{2}\right) dXc + \left(Xc + \dfrac{dxc}{2}\right) dPc$

$$- \sum_{ai=1}^{n} Pai. \, dUai$$

Increase in the rate of return to State Cement Corporation of Pakistan on per unit increase in its output (Rrc).

$$Rrc = \left(Pc + \dfrac{dpc}{2}\right) dXc \left(1 + \dfrac{1}{Ec}\right) - \sum_{ai=1}^{n} Pai. \, dUai$$

$$Ec = \dfrac{dXc/Xc + \dfrac{dXc}{2}}{dPc/Pc + \dfrac{dPc}{2}}$$

(iv) $Sbsg\,(h) = (\pm)\left\{ Xsg\,(h). \; \triangle Psg\,(h) \right.$

$$\left. + \dfrac{1}{2} \triangle Xsg\,(h). \; \triangle Psg\,(h) \right\}$$

$Sbsg\,(cm) = (\pm)\left\{ Xsg\,(cm). \; \triangle Psg\,(cm) \right.$

$$\left. + \dfrac{1}{2} \triangle Xsg\,(cm). \; \triangle Psg\,(cm) \right\}$$

$$\text{Sbf} = (\pm) \left\{ \text{Xf.} \quad \triangle \text{Pf} + \frac{1}{2} \triangle \text{Xf.} \quad \triangle \text{Pf} \right\}$$

$$\text{Sbc} = (\pm) \left\{ \text{Xc.} \quad \triangle \text{Pc} + \frac{1}{2} \triangle \text{Xc.} \quad \triangle \text{Pc} \right\}$$

(v) Psg < {rc+rk}

$$\frac{\text{Psg t1}}{\text{Psg-Csg.}} < (i-S)\,\text{rc} + \text{Srk}$$

III

The Secod Best Pricing Theory for some associated Public goods—Sui gas, fertilizer and cement, being used in the present study, is a diveragence from MC pricing. It helps in making the products of the Sub Optimality operating industrial units more competitive, generates additional demand; creates more job opportunities, thus making the enterprises optimal. The Second Best Pricing theory also brings more projects i to operation which due to certain rigidities are supposed to be abandoned—thereby increasing productivity and employment. In this perspective the analysis is being carried out to determine the Social Benefit from Second Best Pricing theory. First, the Rate of Return with Rs. 96.00 and Rs. 63.00 per bag of fertilizer and cement on the basis of formula given in the econometric framework in Section 2.

$$\text{Rrf} = \left(\text{Pf} + \frac{d\text{Pf}}{2} \right). \quad d\text{Xf} + \left(\text{Xf} + \frac{d\text{Xf}}{2} \right) d\text{Pf} - \sum_{ai=1}^{n} \text{Pai.} \quad d\text{Uai}$$

Increase in the rate of return to fertilizer manufacturer on per unit increase in his output (Rrf).

$$\text{Rrf} = \left(\text{Pf} + \frac{d\text{pf}}{2} \right). \quad d\text{Xf.} \left(1 + \frac{1}{\text{Ef}} \right) - \sum_{ai=1}^{n} \text{Pai.} \quad d\text{Uai}$$

$$\text{Ef} = \frac{d\text{Xf}/\text{Xf} + \frac{d\text{Xf}}{2}}{d\text{Pf}/\text{Pf} + \frac{d\text{pf}}{2}} = \frac{38.7}{16.8}$$

Ef $= 2.303.$

$$\text{Rrf} = \left(\text{Pf} + \frac{dpf}{2} \right). \quad dxp \left(1 + \frac{f}{\text{Ef}} - \sum_{ai=1}^{n} \text{Pai. dUai} \right.$$

Setting aside dPf.

$$\text{Rrf} = \left\{ \left\{ 96 \left(1 + \frac{1}{2.303} - \sum_{ai=1}^{n} 26 \right) = \frac{100}{95} \right\} - 100 \right.$$

Rrf $= 17.9$ per cent.

$$\text{Rrc} = \left(\text{Pc} + \frac{dPc}{2} \right) dXc \left(Xc + \frac{dXc}{2} \right) dPc - \sum_{ai=1}^{n} \text{Pai. duai}$$

Increase in the rate of return to State Cemen Corportion of Pakistae on per unit increase in its out-put (Rrc).

$$\text{Rrc} = \left(\text{Pc} + \frac{dPc}{2} \right) dXc \left(1 + \frac{1}{\text{Ec}} \right) - \sum_{ai=1}^{n} \text{Pai. duai}$$

$$\text{Ec} = \frac{dXc/Xc + \dfrac{dXc}{2}}{dPc/Pc + \dfrac{dPc}{2}} = \frac{3.98}{4.1}$$

Ec $= 0.97$

$$\text{Rrc} = \left(\text{Pc} + \frac{dPc}{2} \right) dXc \left(1 + \frac{1}{\text{Ec}} \right) - \sum_{ai=1}^{n} \text{Pai. duai}$$

$$\text{Rrc} = \left\{ \left\{ 63 \left(1 + \frac{1}{0.97} \right) - \sum_{ai=1}^{n} (29).2 \right\} \cdot \frac{100}{63} \right\} - 100$$

Rrc $= 4.78$ per cent.

Social benefit due to variation in Psg (h), Psg (cm), Pf and Pc has been calculated as follows :

Sbsg (h) $= (\pm) \{ Xsg (h). \quad \triangle \text{Psg (h)} + \frac{1}{2} \triangle Xsg (h).$
$\triangle \text{Psg (h)} \}$

Sbsg (cm) $= (+) \{ Xsg (cm). \quad \triangle \text{Psg (cm)} + \frac{1}{2} \triangle Xsg (cm).$
$\triangle \text{Psg (cm)} \}$

Sbf $= (\pm) \{ Xf. \quad \triangle Pf + \frac{1}{2} \triangle Xf. \quad \triangle Pf \}$

Sbc $= (\pm) \{ Xc. \quad \triangle Pc + \frac{1}{2} \triangle Xc. \quad \triangle Pc \}$

TABLE—A

1982	Xsg (000) M.C.M.	Δ Xsg (000) M.C.M.	Xf (000) Tons	Δ Xf (000) Tons	Xc (000) Tons	Δ Xc (000) Tons
January	856	35	101	− 15.5	312	10
February	754	33	60.4	− 56.1	299	− 3
March	866	45	86.9	− 29.6	318	16
April	808	− 13	90.1	− 26.4	302	−
May	831	10	91.6	− 24.9	345	43
June	836	15	162.1	45.6	334	32
July	815	− 6	129.3	22.8	256	− 46
August	802	− 19	168.7	52.2	263	− 39
September	−	−	158.7	42.2	293	− 9
	6568	100	1048.8	0.3	2722	4
σXsg	821					
σXfg	116.5					
σXc	302.4					

Note : The table is based on the Monthly statistical Bulletins (June and October, 1982).
Federal Bureau of Statistics.
Statistics Division, Government of Pakistan.

The values of the variables are :

$P_{sg}(h)$ = Rs. 12.00

$P_{sg}(cm)$ = 18.50

P_f = 96

P_c = 63.25

$\triangle P_{sg}(h)$ = 2

$\triangle P_{sg}(cm)$ = 3.50

$\triangle P_f$ = 16

$\triangle P_c$ = 2.50

$R_{sg}(h)$ = 0.289

$R_{sg}(cm)$ = 0.687

The ratio of Sui gas consumption by household ($R_{sg}(h)$) and commercial enterprises $R_{sg}(cm)$ are 0.289 and 0.687 respectively.

$S_{bsg}(h)/S_{bsg}(cm)/S_{bf}/S_{bc}$ is positive for every negative $\triangle P_{sg}$ (h)/ $\triangle P_{sg}(cm)/ \triangle P_f/ \triangle P_c$ and vice versa.

X_{sg} in M.C.F. and X_f/X_c taken at 30 bags per ton.

Calculations that follow are on the basis of table – A.

$$S_{bsg}(h) = \{X_{sg}(h). \ \triangle P_{sg}(h) + \tfrac{1}{2} \triangle X_{sg}(h). \ \triangle P_{sg}(h)\}$$

$$= \left\{ \begin{matrix} (000) \\ (6568) \end{matrix} . (0.289) . (3.1)^3 . (2) + \tfrac{1}{2} (100) . (0.289) . \right. $$
$$\left. (3.1)^3 . (2) \right\}$$

$$S_{bsg}(h) = \text{Rs. } 119.12m$$

$$S_{bsg}(cm) = \{X_{sg}(cm). \ \triangle P_{sg}(cm) + \tfrac{1}{2} \triangle X_{sg}(cm). \ \triangle P_{sg}(cm)\}$$

$$= \left\{ \begin{matrix} (000) \\ (6568) \end{matrix} . (0.687) . (3.1)^3 . (3.50) + \tfrac{1}{2} (100) . (0.687). \right.$$
$$\left. (3.1)^3 . (3.50) \right\}$$

$$S_{bsg}(cm) = \text{Rs. } 486.42m$$

$$S_{bf} = \{X_f . \ \triangle P_f + \tfrac{1}{2} \triangle X_f . \ \triangle P_f\}$$

$$= \left\{ \begin{matrix} (000) \\ (410) \end{matrix} . (30) . (16) + \tfrac{1}{2} (0.3) . (30) . (16) \right\}$$

$$Sbs \quad = Rs.\ 503m$$

$$Sbc \quad = \{Xc \cdot \triangle Pc + \tfrac{1}{2} \triangle Xc \cdot \triangle Pc\}$$

$$= \left\{ \begin{array}{l} (000) \\ (2722) \cdot (30) \cdot (2.50) + \tfrac{1}{2} (4) \cdot (30) \cdot (2.50) \end{array} \right\}$$

$$Sbc \quad = Rs.\ 204m$$

The Second Best Pricing Theory maximises Social Benefit, while giving due consideration to Social Time Preference. In this case Psg is to increase at a rate based on weighted sum of consumption rate of interest (rc) and market rate of interest (rk).

$$So\ Psg < (rc + rk)$$

or

$$\frac{Psgt}{Psg\text{-}CPsg} < (1-s)\ rc + Srk$$

With values of

$$S\ = 12\ percent,\ rc = .03$$

$$rk = 10\ percent.$$

$$\frac{Psgt}{Psg\text{-}CPsg} < (1-S)\ rc + Srk$$

$$\frac{Psgt}{Psg\text{-}CPsg} < (1-.12)\ .03 + (.12)\ (.1)$$

$$\frac{Psgt}{Psg\text{-}CPsg} < (.0264)) + .012$$

$$\frac{Psgt}{Psg\text{-}CPsg} < 3.8\ per\ cent.$$

State Cement Corporation of Pakistan and fertiliser manufacturers, having counter-balancing-advantage will generate Social Benefit = Rs. 707m. The Social Benefit from Second Best Pricing Theory for some associated products————Sui gas, fertiliser and Cement comes to Rs. 1,289.53m. The generation of additional demand, provision of job opportunities, increase in productivity and the spillover effect on the associated products—cum—sub-optimal enterprises, will be manifold in terms of Social Benefit.

(iv)
Conclusion

Second Best Pricing Theory being used fo:˙some associated goods———--—Sui gas, fertiliser and cement, presupposes the maximisation of Social Benefit, keeps the sub-optimal plants running, brings into operation the closed industrial enterprises, besides commissioning new projects abandoned due to strict adherence to MC pricing or COPCAP Theorem. Thus, the Second Best Pricing Theory helps in increasing productivity and employment. makes the associated products more competitive and generates additional demand. It also strikes the revenue balance in transition————the most-sought-after objective.

Those concerned with revenue balance of their enterprises must keep in view the fact of $Esg < 1$ and $Ef/Ec > 1$————a situation which makes revenue balance difficult elsewhere. The producers of associated products are put on sub-optimal condition. Still a few may be there to face below-sub-optimal condition. About 30 steel re-rolling industrial units from Lahore may be taken as those put at below-sub-optimal condition in late 1982.

The impact on productivity and financial balance may be assessed in this perspective. Under such a situation Second Best Pricing Theory not only ensures revenue balance in transition but also raises output, increases job opportunities and makes associated products more competitive.

The Second Best Pricing Theory overcomes the constraints of Capital-cum-Operating Cost Assimilation Pricing (COPCAP), giving due should grow within the limits of rc and rk.

On the basis of Second Best Pricing Theory for some associated public goods———Sui gas, fertiliser and cement, the social benefit $=$ Rs. 1,289.53m. While COPCAP Theorem puts the associated-sub-optimal enterprises below sub-optimal condition, the Second Best Pricing Theory provides the alternate solution.

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Effects of Foreign Aid on the Economy of
Pakistan (1960-80) *

Nadeem Khan **

Foreign aid can be divided into two heads, Tied aid and Untied aid. Tied aid is for specific projects, and it can be tied to the donor country. Tying it to a project means that the aid must be spent on the project, and tying it to a specific country means that the aid must be spent on that country's goods.

So tied aid is bound to many a condition.

The foreign aid to Pakistan has come to be increasingly tied as shown by the table and manifesting all the adverse affects on the economy which the tied aids have.

The tied aid may be further split into following categories.

Project Aid

It is a type of tied aid which is disbursed by the donor country for some specific project in the recepient country and the amount of aid cannot be used anywhere else. In the project tied aid a donor country pledges a certain amount to be spent on a particular project of their choice and leaves rest of the decisions like from where to buy technology, material and expertise, are left to the recipient country.

Tied aid is usually spread over a number of projects and at times these projects become burden on the recepient country since she has to spare funds from the scarce resources of the country to execute those projects. The project aid becomes more disadvantageous when project choosen by the donor (developed) country is usually not on the projority list of the recepient (under developed) country.

Table 5.1
Different Aids Received by Pakistan

Rupees in million

TYPE OF AIDS	1960-65	%age	1965-70	%age	1972-73	%age	1979-80	%age
PROJECT AID	3940	41	6775	50	990	28	6574	73
TECHNICAL AID	430	4	350	3	—	—	—	—
COMMODITY AID	3310	34	2958	30	1598	45	2155	23
PL 480	1970	21	2325	17	942	27	317	4

Source : Third Five Year, Plan, Planning Commission, p. 91 Fourth Plan, Planning Commision, p. 65 Pakistan Economic Survey 1972-73 p. 73. 1979-80 p. 155

For example, being a developing country, removal of poverty, provision of basic necessities education and even providing rural areas with clean drinking water, are the priorities of Pakistan. But we are given aid to develop tourism or sports.

Project-tied aid often forces a recepient country to adopt certain system of production which results in income inequality in the recepient countries.

On the other hand, the project aid is more advantageous for donors. They can exert more influence on recepient countries by giving project aid. The aid is given in phases, every instalment of aid is disbursed after the completion of the certain phase of the project. This way the donors are in a position to dictate their terms to the recepient countries and in this way ensure against their aid going waste. The project aid, therefore, has lot of political advantages. The aid is easily identifiable when attributed to project.

The tied aid becomes more stringent when it is further tied to a particular country. This procurement-tied or double-tied aid is the worst of all types of aid since it is given for a particular project and another condition of buying inputs ; technology etc. from a particular country, mostly the donor country, is also put on recepient country. This type of aid had proved very disadvantageous for the recepient countries. There has been manifold increase in cost of development since donor countries charge very high prices from recepient countries under tied aid agreements.

A study by Dr. Mahboob-ul-Haq shows that during the sixties the prices charged from Pakistan for supplying commodities under procurement-tied aid accords exceeded up to 170 per cent the lowest quotation in world market.

The primary reason for country-tied aid is perhaps political, stemming from pressure groups interested in export markets, Besides, donors advocate in favour of the double-tied aid since they do not want to create balance of payments difficulties for themselves and do not want bluk of their own currency to be piled up in some other country.

Sr.	Name of Project	Lowest Quotation from Tied Source (Country)	Lowest Quotin Int Bidding (Country)	Percentage Difference bet. Tied Source & Int. Bid.	Name of Equipment
1	2	3	4	(3)−(4)−(4)	
1.	Baluchistan Collieries	France	Germany, Japan U.K. Czechoslovakia, Denmark	87	Centrifugal pumps. shovel loaders, under ground locmotives, haulage engines, rails, ventilation tubes, air compressors.
2.	Table salt tanufacture plant	France	Germany, U.K.	71	Complete plant
3.	Khanpur Sugar Mills	France	U K.	61	Complete plant
4.	Village electrification and power distrioution	Italy	Belgium, Germany Yugoslavia, Japan	63	Steel poles, aluminium conductors, wire insulators, hydraulic comprcssors griostations.
5.	Eastern Chemical	Japan	Sweden U. K.	73	Urea formaldehyde package boiler.
6.	Hard-board Industries	Japan	Germany	123	Complete dlant.
7.	Khulna Rice Mill	Japan	Germany	120	Rice miling machinery 60 ton self-propelled floating crane.
8.	Karachi Port Trust	Japan	Netherlands	39	
9.	Nawab Brothers Steel Plant	Japan	Germany	39	Plant for manufacturing steel house.
10.	Karachi Port Trust	U.K.	Netherlands	33	Twin-screw bucket dredgers.
11.	Karachi Ship Yard and Engineering Works	U.K.	Germany	57	Propeller Plant, Pipe linefittings engine lubricatinpump.
12.	Nylon Twine Plant	U.S.A.	Germany	61	Complete Plant.

Sr. No. 1	Description of Items	Lowest Quotation from Tied Source (U.S.A.) 2	Lowest Quotation from other sources 3 (indicating country)	Percentage Difference (3) - (4) ÷ (4
1.	Channels	$ 172.60	$ 106.73 (Japan)	62
2.	Angles (equal)	$ 171.51	$ 96.06 (Japan)	79
3.	Angles (unequal)	$ 164.70	$ 119.42 (U.K.)	38
4.	Plates	$ 154.71	£ 102.34 (Japan)	51
5.	Tees	$ 207.35	£ 121.15 (U.K.)	71
6.	Sheets	$ 161.99	$ 113.52 (Japan)	41
7.	Billets	$ 172.22	$ 91.98 (Sweden)	87
8.	Sheels & axle assem./assembly.	$ 794.0	$ 308.70 (Japan)	157
9.	Galvanized iron pipes (1¼" dia, per 100 running feet).	Rs. 147.28	Rs. 94.91 (Germany)	55
10.	Corrugated iron sheets	Rs. 1,132.88	Rs. 868.49 (Japan)	30
11.	Mild steel bex	Rs. 1,275.60	Rs. 700.00 (Continent & Japan)	80
12.	Steel tool high speed 18% tungsten squares.	Rs. 16-984.00	Rs. 9,900.00 (Continent & Japan)	72
13.	Steel tool high speed 22% tungsten squares.	Rs. 23,096.00	Rs. 12,28C.00 (continhent & Japan)	88
14.	Rails 60 Lb. 39 long	Rs. 921.60	Rs. 573.10 (continent & Japan)	61
15.	Steel plates of 3/16"x4'x8'	Rs. 797.44	Rs. 494.J9 (Japan)	61
16.	Steel plates of 5/16"x4'x20'	Rs, 797 30	Rs. 292.14 (Germmany)	170

All prices C&F per ton unless indicated otherwise,

Source: "Tied Credits-A quantitative Analysis", by Dr. Mahbub-ul-Haq in Capital Movements and Economic Development, Edited by J. H. Adler.

Project aid can be analysed from another angle ; that is, how the aid drains out of the recepient countries to the other, usually to donor countries. When a project is proposed the donors send their expert teams for survey and feasibility report on the projects. These highly-paid foreign experts remain in the recepient countries for many years and huge amount is spent on their salaries, boarding, lodging and catering of other needs. Then an army of technocrats is sent, firstly to install and then to run the project. In this way, quite an amount spent on these personnel drains out of the recepient country. This is not the end, The recepient is again made dependent for procuring spare parts and technical advice from the donors for years to come.

Technical Assistance

This is another type of tied aid received by Pakistan. This type of aid is very beneficial from the recepient country's point of view. When people are recruited by donors for service overseas or scholarship and training facilites are provided by the donor country. The other kind of technical assistance which is provided by donor countries in the form of their advisors and technocrates, bears harmful effects and puts a recepient country under heavy influence of the donor countries.

The Development planning in Pakistan during the fifties and sixties was under the influence of Harvard Advisory Group which caused alarming income skewness In those days planning, East Pakistan was treated as colony which ultimately resulted in its separation in 1971.

Commodity Aid

Commodity aid, which is also a tied aid, ranges from food supply to consumer goods. This type of aid comprises seeond largest chunk of the total aid Pakistan has been receiving.

Aid under PL 180 (Public Law 180), which has already been discussed in chapter 1, has been treated separately.

The United states of America had been supplying its agricultural surplus under PL 480, the payment of which had been made in rupees till 1967. This type of aid served as a depressant to agricultural sector. It did not leave any incentive for agricultureal sector since the low prices of agricultural commodities squeezed the wages in agrieultural sector. But for the same reasons, commoditty aid and PL 480 reduced the cost of development in terms of industrialization in Pakistan because there was no glamour for high wages in agricultural sector and induced investment in industry.

I. M. F Aid

The only component which is untied is that which is advanced by the International Monetory Fund as a balance of payment support. In fact this aid is the most tied of all the aids which countries have been receiving since lot of strings are attached to this aid. The fund exerts lot of pressure and influence under so-called stabiliza ion programmes. The basic components of any such pro- grammes. The basic components of any such programme are following :

a. Abolition or libralization of foreign exchange controls.

b. Devaluation of exchage rate.

c. Domestic anti-infoationary programmes which includes controls of bank credits, curbs on government spending or increase in taxes, abolution of consumers subsidies and control of wage rises.

d. Greater hospitality for foreign investment.

Aid is, in fact, the integral part of the IMF stabilizing program- mes to encourage the borrowing country to stick to the agreed conditions and to assure the success of the programme.

Liberalizaiion of exchange and import controls is the heart of each IMP stabilization programme. All of the other components of the package ; exchange rate adjustment, stabilization measures, and foreign aid financing of the deficit, are measures which are necessary to counteract advverse effect on balance of payments, in the sense

that the absence of any one of them would necessitate a much more severe application of the others : if domestic anti-inflationary measures were not implemented, then the devaluation would have to be much sharper and/ot a much larger amount of aid would be necessary to cover the deficit.

The programmes result, typically, in the take-over of domestically owned businesses by their foreign competitors. The stabilization programme puts the squeeze on domestic capitalists in several ways. The depression which it causes cuts deeply into their sales. Devaluation raises the costs, in local currency, of all imports needed for their business, and of all the unpaid debts resulting from past imports. This is compounded by the fact that the contraction of bank credit makes it more difficult than before to get the loans they need to carry on operations. Finally, the liberalization of imports robs them of the protected markets they had enjoyed before.

Liberalization of imports tends to benefit the foreign-owned firms, which are dependent of foreign inputs-raw materials, machinery, and spare parts-imported from another branch of the same mult-national corporation. The price charged for these inputs often does not represent the real cost of the merchandise, but may be set much higher than cost in order to transfer profits out of the country (especially where there are controls on profit remittance) in the guise of payment for 'essential' imports.

The locally-owned firms, suffering from an IMF induced depression, may go bankrupt, or curtail operations and fire employees ; they they are ripe for take-over by a foreign firm.

The local entrepreneur forced to sell out to a foreign firm is, however, not the victim of the stabilization programme. The poorer consumers and wage-earners are the real losers. The failure of businesses throws many people out of work ; and the wage restraints which are a key part of any IMF programme will reduce the real income of those who do not lost their jobs. The elimination of multiple exchange rates, where they exist, means that devaluation will raise the local price of essential imported commodities as well as luxuries. If devaluation is successful in its aim stimulating export, then the price of local products, particularly food, which can be

exported will rise on the domestic market because less will be available for local consumption. It is an explicit and basic aim of IMF programmes to discaurage local consumption in order to free resources for export.

Another way in which the stabilization programme hits consumers is the end to consumer subsidies and the freeing of administered nrices. Public utility rates, if they have been below the level considered 'economical' by the IMF, will have to go up; public transportation usually becomes costly. In Sri Lanka the free rice ration for every citizen supplied by the woverment was a major target of the IMP's deficitcutting operation; it has been reduced. Because the subsidies, and in fact almost any interference with market forces are branded as undesirable 'distortions' by the IMF.

Although the majority of a courntry's citizens may suffer from the effects of an IMF programme, the Fund has important friends within most countries. The most enthusiastic allies are the exporters, whose profits will rise if the currency is devalued.

Government officials have conflicting interests, and are often divided among themselves about the desirability of accepting the conditions attached to IMF loans.

A special subcategory of government officials are the Western-educated economists called 'technocrats' who return to their native eountry to occupy important posts in the Ministrie: of Finance and Trade, and on the special commissions for economic planning and development. These technocrats have been indoctrinated with the Western liberal ideology of development, and tend to support IMF diagnoses and perscriptions. The fund itself runs an institute for the training of central bank and finance ministry officials.

People find an intimate relationship between IMF programes and military coups. IMF programmes are politically unpopular, for the very good concrete reasons that they hurt local busluess and depress the real income. A government which attempts to carry out the conditions in its Letter of Intent to the IMF is likely to find itself voted out of office. A government which does not carry out condit-

ions, is likely to find its international credit for imports cut off, which puts it into a popularity bind of a different variety and makes a rightist coup likely.

Brazil provides a classic illustration of the contribution of IMF programmes, combined with promises of foreign aid, to the overthrow of a democratic grovernment, The coups in Turkey (1960), Argentina (1966), and the Philippines (1972) provide other examples.

In 1973 military coup against Allende's government in Chile is the best-known example which falls into this pattern.

In Pakistan the fund started influoncing the economic policy by foreing the government for the largest* ever devaluation. They made it a precondition for aid and reschenduling of debt on the pretext to abolish Bonus. Voucher Scheme and free the trade from controls. It is now in everybody's knowledge what disastrous effects that drastic devaluation brought about.

Since then the IMF has been continuously dicctating its terms to Pakistan in spite of the fact that its aid, does not form a big fraction of the total aid.

The International Monetary Fund disbursed its credit under the extended fund facility to Pakistan. This programme was tied to lot of stringent conditions like :

    a. Delinking rupee from dollar :

    b. Increase in the pirce of public utilities like electricity and gas.

    c. Abolition of consumer subsidies of Fertilizers, wheat and kerosine oil.

Pakistan had to kneel down to these IMF conditions. Pakistan delinked rupee from dollar in 1983 and adopted floating exchange rate syetem which resulted in further devaluation of the currency.

On January 9, 1983, the Government also raised the gas and electricity charges.

The above mentioned description can at best be called a bird's eyeview, but it does serve the puropose of depicting the political, trade and economic effects of the foreign aid on a recepient country like Pakistan.

What Price Foreign Aid

The basic flaw in the models on the basis of which Pakistan projected its aid requirements, was that it did not incorporate the annual debt servicing which we are liable to pay on the loans we have been receiving in the past.

Foreign debt is a darker aspect of the aid. The accumulating debts have made us more and more dependent on the donor countries. After 1970, the debt position of Pakistan took a turn for the worse. Many a factor led to a tremendous increase in the debts of Pakistan. Earlier loans of Pakistan started getting mature and as the time passed not only the interest on loans was to be paid but the return of the principal was also due. The separation of East Pakistan increased Pakistan's debt liabilities.

Due to the oil price hike in the early seventies balance of payment position of donour countries also started going against them and they started pressurising for the return of their loans.

There had been a great change in the terms and conditions of the aid. Besides it has always been the modus operandi of the aid giving countries to make underdeveloped countries addict of the foreign aid by giving grants initially and then slowly recede all the concessions. In this way they make underdeveloped countries dependent on them and establish their hegemony. The Table 6.1 shows how the composition of aid received by Pakistan changed over a period of time.

It can be clearly seen from the table how the grant eliment in aid is gradually reducing. Grants decreased from 64 per cent of the total aid during pre-plans period to only 18 per cent in 1979-80. The other concessional element in aid received by Pakistan in the form of soft loans* first decreased and then vanished in the seventies.

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* A foreign loan repayable in receiving country's own soft currency. Soft loan are considered a compromise between hard loans and grants.

Mainly the aid has been disbursed to Pakistan in the form of hard loans**. The share of hard loans increased sharply during the seventies. The total aid disbursed to Pakistan during 1979-80

TABLE 6.1

Shift in Composition of Capital Inflow

Period	Grants As Percentage of Total Aid	Percentage of Loans Payable in Rupees	Hard Loans as Percentage of Total Aid
Pre-First Plan	64	6	30
First Plan	54	25	21
Second Plan	38	8	54
Third Plan	24	6	70
1970-75	10	—	90
1975-76	11	—	89
1976-77	17	–-	83
1977-78	15	—	85
1978-79	16	—	84
1979-80	18	—	82

Source : Pakistan Economic Survey, 1982-83, p. 66.

contained 82 per cent hard loans compare to only 21 per cent during the first five year plan period. On the other hand total foreign resources inflow has been increasing every successive year. Uptil the mid fifties the total foreign assistance compared with the country's gross national product was neglegible. In 1955 the total foreign aid was only 1.1 per cent of the GNP.

	1955	1960	1965	1970	1975	1980
Foreign Aid as Percentage of GNP	1.1	2.24	7.31	3.01	9.81	4.44

Foreign aid as percentage of gross national product was highest in 1975, making 9.81 per cent of the GNP. But this ratio reduced to 4.4 per cent during 1980. In the later half of the seventies the

** A foreign loan repayable in hard currency (foreign currency usually in American dollars). This type of loan has high interest rate.

remittance of Pakistanis working abroad made a significant portion of GNP.

This increase and change in the composition of foreign aid led to an ever increasing debt servicing with the passage of time. Therefore the not resources inflow in Pakistan, after deducting debt servicing from total aid, has been dwindling.

From the table it is clear that the net aid inflow for the utilization in Pakistan has been reducing gradually. In 1961, 84 per cent of the total aid was available for our use and this ratio remained around 85 per cent during the first half of the sixties. Then situation slowly started worsening. Pakistan had to draw attention of the creditor countries to this problem. The issue was raised in the 11th meeting of the consortium in May 1968, when Pakistan asked its members to improve the terms of assistance extended by them. But the not transfer of resources kept a declining tread. The progress in the not flow of aid shown by the table in early years of the seventies does not mean any improvement in terms and conditions of aid or any reduction in debt servicing. In fact it was the other way round. The liquidity crisis in the wake of East Pakistan fall coupled with the heavy debt burden, Pakistan was forced to cry for rescue. Pakistan was granted moratorium on debt servicing.

On June 28, 1974 agreement for debt rescheduling was signed in Paris with the consortium in the form of Memorandum of Understanding. Under this multilateral accord the consortium provided approximately 650 million dollar debt relief over the period of 1974-1978. The moratorium only procrastinates the disaster does not forestall it. Besides the ratio of debt relief to annual debt service declined gradually. In 1974-75 the relief of 160 million dollars was provided, making 38 per cent of the total annual debt servicing, which declined to only 12 per cent during 1979-80.

Despite the provision of relief on debt, the debt servicing of Pakistan is increasing day by day. The annual debt servicing which was 17 million dollars in 1961 swelled to 751 million dollars during 1979-80, pushing the country from bad to worse position The percentage of net inflaw of resources to the total aid disburned to

TABLE 6.2

($ in million)

Year	Gross Disburse-ment of aid	Debit Servicing	Net Transfer	Net Transfer as Percentage of Gross Aid
1961	106	17	89	84
1962	236	31	205	87
1963	307	47	260	85
1964	484	61	423	87
1965	376	62	414	84
1966	456	74	382	84
1967	498	96	402	81
1968	517	103	409	79
1969	561	154	407	73
1970	534	175	359	67
1971	612	182	403	66
1972	409	122	287	70
1973	355	193	162	46
1974	498	209	71	58
1975	976	259	717	73
1976	1099	281	783	73
1977	961	364	597	62
1978	856	371	485	56
1979	948	496	454	48
1980	1127	661	466	41

Source : Pakistan Economic Survey, various issues, lifted from article "Impact of foreign aid on Economic Development in Pakistan.

Pakistan shrunk drastically. During the early sixties 85 per cent of total aid was available to Pakistan, after paying the annual debt servicing, but during 1979-80 only 41 per cent of the total aid was transfered to Pakistan for its use and the rest 50 per cent went back to the creditor countries in the form of debt servicing.

TABLE 6.3

($ in million)

Year	Total Debt Servicing	Relief Provided	Relief as Percentage of Debt Servicing
1975	419	160	38.19
1976	457	176	38.51
1977	531	167	41.45
1978	615	244	39.67
1979	845	151	17.90
1980	751	90	11.98

Source : Pakistan Economic Survey : 1979-80, p. 153, 1980-81, p. 156, 1981-82, p. 117.

Therefore, to finance this increasing annual debt servicing, the Government has to resort to different measures to generate resources, One measure which our Government adopted was the gradual increase in the indirect taxes over the period of time, which is shown by the Table 6.4.

The direct taxes have also increased during last twenty years but the major increase is in indirect taxes, new surplus, duties, taxes, excise, customs etc., since they have least announcement effect. In this way the debt burden is not only creating economic and political pressures on the country but is also influencing the individuals by increase in per capita debt and mounting cuts from their incomes in the form of indirect taxes and inlation.

Therefore, there has been a change composition of foreign aid from grants and soft loans to hard loans and harder* conditions laid down by the creditor countries in advancing loans has put Pakistan constantly under heavy indebtedness.

* The terms and condition on which Pakistan has been receiving loans gradually deteriorated for Pakistan. The interest rate on the average rising from 2 5 per cent in the early fifties, repayable in forty year increased to 3.9 per cent repayable in 22 years in the late sixties. In 1979-80 interest rate further increased to 5.9 per cent repayable in 21 years.

TABLE 6.4

(Million rupees)

Year	Indirect Tax
1959-60	1088.2
1960-61	1344.8
1961-62	1329.2
1962-63	1401.3
1963-64	1597.9
1964-65	1862.1
1965-66	2266.4
1966-67	2942.5
1967-68	3089.8
1968-69	3878.0
1969-70	4317.9
1970-71	4024.3
1971-72	4384.8
1972-73	4188.9
1973-74	7751.4
1974-75	9778.3
1975-76	10487.1
1976-77	13428.1
1977-78	17141.1
1978-79	20050.9
1979-80	25389.9

The total extend debts of Pakistan increased from $0.2 billion in 1960 $ 3.6 billion in 1971.[1] During the seventies the accumulated debt increased sharply more than doubled, reaching $ 8.9 billion in 1980*.

The increasing debt burden and decreasing net inflow of resources is the predicament of the planners who also have the overous task of figuring the future role of foreign aid and our dependency on it and finding ways and means to preclude this parasite which is eating into the flesh of the under-nourished teeming millions.

1* Capital flows and Developing countries debt. World Bank staff working. Paper No. 352. August 1979, World Bank Report, 1981, 1982.

CAPITAL FORMATION THROUGH STOCK MARKET

M. NAEEM-UL-HAQ *

Rapid economic development has become a major goal of every developing state. The achievement of this goal largely depends on the pace of industrialization.

The main factors which lead to much interest in industrialization are not hard to find. The developing countries have long been producers of raw materials. They have observed a strong and positive correlation between the wealth and standards of living of the people in a country on the one hand and the extent to which a country is industrialized on the other. These countries have also experienced that, prices of raw materials fluctuate much more than the prices for manufactured goods especially capital goods. The developing economies which are mainly based on the export of a few basic commodeties suffer instability of national income and are vulnerable to disturbance more than economics which are highly industrialized.

Observing these facts, people in the developing countries have naturally come to believe that in order to achieve greater stability, higher growth rates and better standards of living their countries must become industrialized.

The process of Industrialization cannot be accelerated without effective mobilization of domestic resources. Under the mixed economy system prevalent in a number of developing countries, both the sectors (public and private) contribute in the implementation of policies aimed at achieving higher targets of economic growth.

It has become a usual practice on the part of economic planners

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that they impressed by the growth rates of the ludustrialized societies, suggest capital intensive projects for the realization of goals already stated. But in reality these developing states (excluding countries belonging to OPEC) face an acute shortage of capital which becomes a serious barrier in the establishment of the industrial projects.

A capital intensive project requires capital for two purposes :

1. For the purchase of capital equipment and other fixed assets i.e. fixed costs.

2. For holding the stocks and raw materials and finished goods, and also for making payments of wages to workers i.e. variable costs.

The huge amounts of capital required for industrial units can't be made available by one single individual in the form of sole proprietorship or by a few persons in the form of partnership. Therefore, some other sources of finance are to be tapped by those (entrepreneurs) who want to establish industrial units. Various types and sources of financing are available for any industrial project. Some of these are domestic equity capital, domestic loans, foreign equity capital, private foreign loans and world bank loans etc. etc. Amongst all these the most desirable method of seeking finance for industrial project in developing country is domestic equity capital. This is due to the simple reason that equity and longs raised from outside the country make the economy of recipient country more dependent on foreign countries both economically and politically besides mortgaging its future to alien hands.

Therefore, raising as much of the required capital as possible in the form of domestic equity capital i.e. share capital is of great importance to both the industrial project as well as the developing country. To the project it is important because it ensures a sound financial structure with more margin of safety to fall back upon if difficulty arises. To the economy as a whole it is important because if more share capital in the aggregate is raised in a given period it is likely to mean more industrialization than would other-wise take place, for the amount of equity which can be secured is

usually a major limiting factor on the quantum of industrial development which can be undertaken. Additional share capital investments also give the investors increased incentive to work for success of the projects they help finance.[1]

Share investment provides a means of transfer of wealth in a country from who save but have no ability to utilize their savings directly for industrial activity to those who have the ability to initiate industrial activity but do not have enough funds for this purpose. Hence, the need arises for a market mechanism which facilitates the transfer of funds from those who have to those who need. This necessitates the presence of an organized capital market. The capital market is a medium of channalization of long term funds. It deals with long term papers and securities. Its main task is to mobilize saving funds and direct the same for investment purposes thus, helping the industrialization process in the country. The absence of industrial type capital market becames a serious limitation on both the size and number of industrial projects in a country.

The whole activity of an industrial type capital market revolves around the institution of Stock Exchage. This institution helps the entrepreneur to raise capital and provides the mechanism for speedy liquefaction of financial investments. Stock Exchange is, therefore, of vital importance to both the government and industry, for it is there and there alone that long term capital, life blood of capital intensive projects, can be raised voluntarily from the general public and at a large scale in a short span of time. F.E. Armstrong defines stock exchange in the following words :

"The Stock Exchange as an institution has been evolved by time and perfected by experience. It exists for the purpose of providing a market wherein to buy and sell the world's capitalized values. Here, interests small or large, in whole of man's activies can be exchanged. It is the citadel of capital, the temple of values. It is the axle on which the whole financial structure of the capitalistic system turns. It is the bazar of human effort and endeavour, the mart, where man's courage, ingeduity and

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1. Murray D. Bryce, *Industrial Developmen: A Guide for accelerating economie growth*, Tokyo : McGraw-Hill Book Company, Inc., 1960, p. 174.

labour are marketed".[2]

In other words absence of such an institution would make the capital of the country immobile because once invested there would be no means of liquifying it. Besides providing a continous and open market for the purchase and sale of securities stock exchange channelizes savings towards productive activity, centralizes information regarding prices of shares, dividends, share issues, guarantees the soundness of a scrip and serves as a clearing house.

In the case of Pakistan two such institutions one at Karachi (1948)[3] and the second at Lahore (1971)[4], operate as autnomous bodies and provide a market place to the present and prospective investors. These exchanges have separate articles of Association and articles of memorandum. The functioning and business at the exchanges is monitered by the SEAP (Securities Exchange Authority of Pakistan). SEAP was established in 1970 in view of certain cases of corruption, mis-management and other irregularities which took place at Karachi Stock Exchange, Membership of these stock exchanges and the number of listed companies has increased to a considerable extent as is evident from the tables below:

<div align="center">

Table 1

Table Showing the Growth of Membership at
Stock exchanges in Pakistan

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Year	Karachi + Stock Exchange	Lahore ** Stock Exchange	Total
1948	72	—	72
1972	200	83	283
1981	200	107	307 ·

Source : * Karachi Stock Exchange Annual Reports.
        ** Information obtained from the office of the Secretary, Lahore Stock Exchange.

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2. R. J. Briston, *The Stock Exchange and Investment Analysis*, London : George Allen & Unwin Ltd., 1975, p. 13.

3. Karachi Stock Exchange was established in September 1948. The Exchange was registered as a "Limited by Guarantee" Association on March 10, 1949.

4. Lahore Stock Exchange was established in May, 1971.

Table 2
Table Showing the Growth in the Number of Listed
Companies at Stock Exchange in Pakistan.

Year	Karachi Stock Exchange. *	Lahore Stock. Exchange. **	Highest No, of Listed Companies
1949	13	—	13
1961	94	—	94
1971	318	130	318
1981	311	209	311

The table is based on the assumption that companies listed on Lahore Stock Exchange are also listed on Karachi Stock Exchange.

Souree :   * Karachi Stock Exchange Annual Reports, 1981.
       ** Information obtained from the office of the Secretary, Lahore Stock Exchange.

Stock Exchanges in Pakistan are serving several groups viz. their respective members, investors and joint stock companies. Besides. institutions like ICP and NIT also benefit from the Exchanges as these exchanges provide necessary stimulant to these institutions in carrying out their aims and objectives.

To the members Stock Exchanges offer highly organized trading facilities and have established norms of fiduciary behavior for the members through rules and regulations. Members also avail the facility of clearing house to settle their transactions. Clearing house rules govern the clearing operations. The publication of daily qoutation sheet is a great service to the afore-mentioned beneficiaries as it centralizes all the pertinent information needed by these groups for investment decisions. Qoutation sheet normally contains inform-ation regarding market prices of shares, dividends, share issues, notices of Aunual General Meeting of listed companies and closing date of books etc. etc.

Stock Exchanges through strict rules and regulations have succe-eded in gaining the confidence of the private investors ; in popularising the idea of investment in shares of joint stock companies thereby arousing the desire of small investors to become a micro•

schpic partner in gigantic industries to earn their share of profits through dividends and bonuses. The growth of investors from a negligible figure to 4 lacs[5] is in itself a reflection of the confidence of private investors in operation of the stock markets.

To joint stock companies the Stock Exchange offers two important services. In the first pleace much needed liquidity is provided to the capital invested in industrial projects and secondly it helps the entrepreneurs to raise equity capital. Joint Stock companies in Pakistan prior to their enlistment on the Boards of Stock Exchanges are required, by law, to offer a portion of paid up capital, after proper sanctions have been obtained from the relevant authorities, to the general public. The contribution of Pakistani Stock Exchanges in capital formation can be assessed with the help of the data (Table 3) regarding subscription to new issues by the general public.

TABLE 3
Subscription to new Issues by the General Public

Period	No. of New Issues.	Amount offered to general public.	Subscription by general public.	Amount subscribed over/under
1977-78	16	91.00	448.00	+357.00
1978-79	12	378.00	475.00	+ 97.00
1979-80	4	42.04	32.01	− 10.03
1980-81	7	48.90	178.70	+129.10

The table is based on the assumption that the issues were offered through both the Stock Exchanges i.e. Lahore Stock Exchange and Karachi Exchanges.

Source : Information obtained from the office of the Secretary, Lahore Stock Exchange.

While evaluating data about over subscription to the new issue one must not ignore the following factors which heavily influence the decisions of the investors and offect the level of participation of

5. M. I. Chaudhry, "Significance and Role of Stock Exchange in the Economy of Pakistan", Pakistan Economist, April 28—May 4, Vol. 13 No. 17, 1973. Special Supplement.

general public to such new issues. The factors are :

(a) The capital market in Pakistan is a thin market.

(b) Participation of rural population in equity capital is negligible.

(c) A very small percentage of urban investors understands the mechanism of Stock Exchange.

(d) Stock Market activity is restricted to only two cities i.e. Karachi and Lahore.

(e) Saving Accounts/PLS Accounts and Saving Scheme offer more attractive terms and conditions for investment and also cover the element of risk to a great extent.

The above table reflects that Stock Exchanges in this country can attract and mobilize the savings of the private investors for industrials projects as and when required. The data also supports the idea that there exists a desire on the part of general public to invest in the shares of joint stock companies. The data leads us to the conclusion that Stock Exchanges can help the entrepreneurs to raise as much capital as required by them for the industrial projects they plan to initiate in this country.

In view of the over subscriptions to the new issues it may be suggested that the entrepreneurs must utilize the channel of Stock Exchange more frequently for raising capital. This would not only solve the problem of inadequacy of capital for industrial projects but would also help the Government to contain inflationary pressures.

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BOOK REVIEW

'A new concept of development'
Francois Perroux

Croom Helm, Vnesco 1983 PP. 212. £ 9.95.

M. Francois Perroux is a great political economist. Paul P. Streeten credits him for introducing valuations explicitly in the normative analysis of conventional economics. According to him, he is that rare economist who pours out the bathwater and displays the baby in its full splendour'. He is described as a man of 'tempestuous energy' who uses it for the creation of a better world.

Mr. Francois Perroux's book 'A new concept of economic development. shows a synthesis of a science and values. This is a sociologically based approach to economic development, which can not be reduced to the formulation of macro-growth models. Eonomic development stands for all the people and for the whole person. If economic development brings within its purview only a few privileged groups, it becomes a futile exercise since 'reality cannot escape from the hold of truth and that a rigorous approach is indispensible'.

The goal

Francois Perroux is of the view that 'the development of the whole man and of all men is goal that should be unanimously accepeted by politicians, economists and research workers'. (Ibid p.15). In most of the Third World developing countries with free enterprise economy during the 1960s, the traditional theory of economic growth with emphasis on the maximisation of GNP was followed. The planners having been baked in the neoclassical traditions thought that the best way of achieving high growth rate lay in increasing the mass of gross national product (GNP) by pursuing policies to promote savings and investments.

The pursuit of pure theory of economic growth led to the creation of income inequalities, which were considered necessary for

accelerating development. It was thought to take up income distribution at a later stage when GNP had registered substantial increases. The income distribution was postponed till such time as the GNP had increased for making a dent in the economic poverty. The planners thought it imperative to increase the GNP for raising the income levels of the people. The net result of the pursuit of economic growth was that whatever growth was generated was cornered by a few privileged, leaving the poor majority not only poor but also marginalised.

Growth strategy

The growth strategy followed in Pakistan during the 1960s, showed a bias in favour of the privileged higher income groups, and the lower incoine groups least received the growth benefits, which had a tendency to concentrate in the former. That could be explained in terms of power elitist structure. It is relezant to quote an extract from M.L. Qureshi's book 'Planning and Development in Pakistan: Review and Alternatives—1947—1982' in the context under reference. 'The prevailing power structure is elitist in character. The development institutions and the various layers of power in the administrative heirarchy from the political leadership downwards, are largely manned by members of the upper and middle income groups who have an unconscious bias in favour of their own classes and who tend to think about the interests of the country in terms of the interests of their own classes which are frequently different from those of the lower income groups......The development strategy did not have an appreciation of the impact of the prevailing power structure of the determination of priorities and the distribution of the benefits of development. No devices were introduced in the development strategy to ensure the participation of the people, particularly of the lower income groups, in the decision making process. It is therefore, not surprising that past development has largely by-passed the lower income groups and has benifited mainly the higher and middle income groups'. (pp. 294-295). That shows that the growth strategy has not stood for all the people in Pakistan, though the Sixth Five-Year Plan, by putting accent on the basic human needs, seeks to reverse this trend.

It must be borne in mind that the growth models followed in the developing countries are based on the European and American experiences. They reflect European logic and quantitative approach, and miserably fail to comprehend the complex socio-economic realities of the developing countries. The models could be regarded as too simplistic to account for the realities characterising the developing world, Hence there arises a need to evolve a comprehensive model of development to reckon with the specific realities prevailing in the Third World developing countries. In other words, there could be no single development style model, and that could be possible when the planners get away from the universal theories of development.

Western type

The macro growth models reflecting the Western perceptions are not appropriate for goal setting and policy decisions in the developing countries. A development model acting on the recipe of Francois Perroux, should envisage the development of the person as a whole. This shows that the purpose of development is to promote a better quality of life. Higher income growth and more consumer goods alone could not ensure high quality of life. However, it is still the view of the growthmen that more choice of goods yields more satisfaction to the people. That is why they insist on more growth, and there is no escape from the fact. What they suggest is to increase the employment opportunities for those who do not have access to the consumer goods, but that is not sufficient to promote better quality of life. The following ingredients are thought to constitute good quality of life. :-

(i) Provision of life —sustaining goods and services like food, clothing, housing, health/education services ;

(ii) To create a social situation for promoting the sense of be-longingness of an individual. This calls for the generation of a congenial social atmospher for the stimulation of creativity, self-confidence, sense of security, love and trust, affection and respect for others.

(iii) Growth of freedom for dividuals and groups from servitude
of any kind including natural, human institutional, govern-
mental, technological, etc.

No specific model

The aforesaid criterion can be deployed to promote and enhance
the quality of life of all the people in a society. This style of develop-
ment runs contrary to the Western macro growth models. Any style
of development that leads to expansion of production, and growth of
technology, and many other related social and economic changes may
not be construed as good until it aims at a better quality of life it
thus implies that there could be no universal model of development.

The present products of development, like growth, technological
advance, modernisation, social justice, have also by-products, such as
environmental deterioration, loss of freedom, mental diseases, of
cultural identity, sense of belonging and participation etc. Economic
development could in a broader perspective be conceived of as a
process unfolding the heritage of a culture and an increasing attain-
ment of the values and ethos of this culthre. It thus means a
perceived advance toward specified ends based on societal values' and
'as a system of inter-related societal changes that underlies and
conditions the feasibility of the advance (UNESCO, Report of
Unified Approach, p. 9).

The theme is upheld by Francois Perroux in his book under
reference. 'Many other instances can be cited to show the strength
of cultures in resisting invasion by economics. At all events, the
point is most directly demonstrated once it is grasped that economic
phenomena and institutions depend for their existence on cultural
values'. (P. 172). The developing countries thus should have culture
specific model of development.

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