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April 25, 1985

To: Members of the Executive Board

From: The Secretary

Subject: Fund-Supported Programs, Fiscal Policy, and the Distribution of Income

There is attached for the information of the Executive Directors a paper on Fund-supported programs, fiscal policy, and the distribution of income.

Mr. Tait (ext. 8725), or in his absence Mr. Tanzi (ext. 8723), is available to answer technical or factual questions relating to this paper.

Att: (1)

Other Distribution:
Department Heads

INTERNATIONAL MONETARY FUND

Fund-Supported Programs, Fiscal Policy, and the Distribution of Income

Prepared by Fiscal Affairs Department
(In consultation with other departments)

Approved by Vito Tanzi

April 23, 1985

I. Introduction and Summary of the Discussion

A major role of the Fund in the international financial system is, in the context of balance of payments needs, to provide temporary finance to help economic adjustment. Adjustment is not necessarily synonymous with austerity, 1/ but recently an increasing number of critics have argued that it is as the Fund practices adjustment. Fund-supported adjustment programs, they claim, worsen internal income distribution. While the Fund has, indirectly, always been concerned with distribution and resource allocation issues, it has nonetheless officially maintained that distributional issues are primarily an internal political concern. However, if the statements that Fund-supported adjustment programs worsen internal income distribution were correct, they would have important implications for countries which are considering the use of Fund resources. If Fund-supported adjustment programs necessarily imply that specific income classes (and in particular, the poor) bear the brunt of Fund-supported adjustment policies, they would be both less acceptable and, in the long run, less effective than the available alternatives. This paper explores the distributional issue by looking at Fund-supported programs over the last few years, concentrating particularly on the fiscal content of those programs, to determine what, if any, effect these programs had on domestic income distribution.

The evidence in this paper does not provide a basis for concluding that Fund-supported adjustment programs significantly worsen income distributions as compared to any practical alternative. Why then have adjustment programs raised such criticisms? Two main reasons are suggested from this review: (1) compared to the gradual erosion of living standards or the unsustainable consumption pattern of a country before the program, the adjustment looked for by the Fund is often sharp and quick; and (2) the adjustment also often has an effect

1/ J. de Larosière, (1984a).

on particular groups and especially on groups likely to be vocal and cohesive in their opposition (e.g., urban workers, civil servants, the military, owners of protected businesses). Distributional concerns probably require the brunt of adjustment to be borne by such groups (and perhaps as swiftly as possible), but it is important to recognize and anticipate the source of such complaint and be prepared to meet it.

The very nature of Fund-supported adjustment programs and the environment in which they are formulated make the assessment of their effect on income distribution difficult. Countries which enter into Fund-supported adjustment programs typically do so because they otherwise face an even greater shortage of foreign exchange which will retard growth, and may well lead to severe economic disruptions. Under these circumstances, the objective of these programs is to restore a country's external balance and establish the environment for higher growth; this necessarily focuses on adjusting the levels of macroeconomic aggregates, usually emphasizing movements in aggregate demand in the context of measures to remove supply constraints (particularly for export supply).

While in theory under certain conditions the desired change in the macroeconomic aggregates could be accomplished without affecting relative prices and hence without distributional impact, in practice, the focus on supply-side considerations has emphasized changes in relative prices as a key element in the adjustment process. It is through these changes that appropriate incentives are transmitted through the economy. The issue is thus not whether various income classes, socioeconomic groups, or factors of production are affected by a Fund-supported program, for they must be if the economy is to adjust. Instead, the critical issue is whether income size and distribution would be enhanced or worsened in the medium term without a Fund-supported program. Is there an alternative set of policies which would promote the social and growth objectives more effectively than Fund-supported adjustment programs?

There are two primary obstacles to such a study, one conceptual and one of application. Ideally, Fund-supported programs would have to be compared to the set of policies which the country would have pursued without a Fund-supported program--that is, it would have to be compared with a "counterfactual" argument--and the time frame for this comparison would have to be sufficiently long to allow the economy to achieve a new equilibrium. Clearly, economic analysis has not progressed to the point where this approach can be undertaken successfully. Not only are there no economic models sufficiently accurate to undertake this comparison with confidence, but it is difficult to elaborate on any set of alternative policies when most countries do not by themselves identify an adequate adjustment program before approaching the Fund. In these circumstances simple extrapolation of existing policies leads to the conclusion that income size would be

seriously depressed, with uncertain but probably unfavorable consequences for the overall income distribution.

The second obstacle is the very nature of Fund-supported adjustment programs. It must be emphasized that the term "Fund-supported" used in describing these programs denotes in a very important manner the Fund's role in the adjustment process. There are no "Fund" programs in the sense that the set of policies adopted are what the Fund would have advocated solely on economic grounds. Countries normally choose policy mixes with little regard for outside concerns of equity, and often emphasize economic or political objectives other than those of the income distribution. Moreover, subsequent changes in various policies, with their differing implications for income distribution, may still be consistent with the key macroeconomic objectives of the programs and observance of the performance criteria under the arrangement.

In this context, it may be useful to note that the relationship between distributional concerns and fiscal policies is different than that for policies which act through private markets and the pricing system. Changes in the exchange rate, for example, have an immediate effect on resource allocation, but the most far-reaching structural changes in fiscal policies with which the Fund has been connected typically take several years to implement and are frequently not technically part of Fund-supported programs at all. Typically the best and most fundamental fiscal reforms are achieved through technical assistance undertaken with full collaboration and support of the authorities separate from discussion on a program with financial support, performance criteria, and policy reviews. This said, it is not uncommon for previous technical assistance recommendations to be implemented within the framework of a Fund program, and technical assistance requests often originate from and are given impetus by the requirements for an orderly adjustment program supported by the Fund.

Given the impossibility of satisfactory empirical analysis (the difficulties of which are discussed more fully in Appendix II), this study proceeds by considering the problems likely to face a typical country about to undertake a Fund-supported program (Section II). The types of economic policies which the country may choose are discussed and their distributional implications assessed, and the need for adjustment is emphasized through a counterfactual argument depicting the likely outturn if the authorities do not act decisively to cope with economic realities.

The study itself is contained in Sections III through IX, and is based on an examination of 78 Fund-supported adjustment programs undertaken from 1980 to 1984. The results of this study are summarized in

text tables; a detailed look at the characteristics of specific programs is provided in Appendix I. The discussion focuses on the measures undertaken in Fund programs, and attempts to characterize the likely effects of these measures on income distribution. All programs used limits on monetary or credit expansion, making this instrument a primary means of monitoring Fund-supported adjustment programs. Among other principal policy actions, 54 percent included measures to liberalize and reform external trade, and 91 percent included measures to restrain government expenditure. Also, measures to improve revenue performance included the personal income tax in 44 percent of the programs, corporate taxes in 33 percent, and taxes on domestic goods and services in 76 percent. And finally, expenditure restraints included limits on the growth of wages and salaries in 56 percent of the programs, on purchases of goods and services in 58 percent, and on different types of transfers and subsidies in 60 percent.

The study begins (Section III) with a brief discussion of the effects of monetary policies and exchange rate movements on the distribution of income. Exchange rate action is often regarded as the single most important policy instrument of structural adjustment employed in Fund-supported financial programs, but its full effect on income distribution is obscured by the relatively long adjustment process it initiates. Broadly, labor and capital employed in sectors favored by the devaluation will enjoy relatively higher incomes than those in other sectors. This could enhance the position of, say, traditional agriculture at the expense of urban dwellers in many developing countries, but it does not necessarily follow that "the poor" suffered, for both sectors may include large proportions of poor people. In the longer run, increased growth and employment should raise the level of income and improve everyone's position. The Fund-supported program may have improved the absolute standard of living of the poorest quartile at the expense, temporarily, of the overall level of income. The immediate impact may also favor those with capital held abroad (often a small, wealthy, urban class) compared to those with domestically invested capital (typically farmers and smaller businessmen).

Keeping in mind the effects of these macroeconomic policy changes, the rest of the paper examines how fiscal policies affect the adjustment process, with frequent references to the linkage between fiscal policies and monetary developments. The next main focus of the study is the revenue system, including both direct and indirect taxes (Section IV). The thrust of the examination of corporate and personal income taxation is that changes in these taxes in the context of Fund-supported programs are unlikely to have had much effect on the distribution of income. Not only have they had little effect, it is doubtful whether they could have been designed to be more effective given the constraints of effective tax administration, political expediency, the uncertainty of incidence engendered by variations in taxpayer compliance, and the lags in legislation, collection, and enforcement.

Taxes on goods and services (Section V) have been important fiscal instruments in Fund-supported adjustment programs. However, the evidence regarding these taxes is that they affect the distribution between sectors (rural versus urban) and between different consumption patterns of individuals (e.g., smokers and drinkers versus those who do not smoke or drink) more than they redistribute between households. Short-run revenue needs often lead to increases in indirect taxes which may be regressive, but this is a phenomenon which is not restricted uniquely to developing countries or countries undertaking Fund-supported adjustment programs.

One conclusion that can be drawn from the discussion on the revenue system is that the tax proposals contained in the Fund-supported programs can be structured to improve their distributive impact. Such tax measures to improve income distribution would include: (a) broadening the base of taxes on services; (b) removing any exemption of luxury and other income-elastic goods from the tax base for import duties and domestic indirect taxes; (c) introducing property taxes, or increasing reliance on them wherever their overall impact is at present small; (d) removing or reducing export duties, especially where they clearly fall on small farmers or producers; (e) reducing or eliminating import quotas and other restrictions on trade; and (f) broadening the base of the personal income tax. Such measures are frequently proposed by Fund staff but are often rejected by the authorities for political reasons. In any case some of these proposed changes normally require a longer time than is available in a Fund program.

Fund views have had little influence on specific functional expenditures (Section VI); usually the authorities decide where to cut expenditures. Only 3 of the 78 programs studied had an explicit reference to a government functional expenditure and less than one third of the programs refer to government functional expenditure policies at all. In this area the Fund's impact has been relatively minor, although staff views are frequently placed before the authorities for consideration.

In contrast, efforts to limit excessively expansionary fiscal policies through changes in expenditure policies relating to the economic categories of expenditure, especially on wages and salaries, food and petroleum subsidies, and transfers to cover the losses of public enterprises, are perhaps the most important and controversial aspects of Fund-supported adjustment programs (Sections VII and VIII). This study suggests that wage and salary policies in programs have tended to redistribute income in favor of the agricultural poor and that pricing policies have been directed at reducing the incomes of firms and individuals who profit from government-created monopolies in the importation and distribution of goods. The reassessment of food subsidies under Fund-supported adjustment programs often redistributes the benefits away from the urban to the rural population. There also

have been some successes in targeting subsidies more accurately to those who most need subsidized food. Moreover, the removal of petroleum subsidies redistributes income away from factors employed in the existing inefficient technological base toward a more broadly based employment-generating technology and, by removing subsidies to the use of private vehicles, promotes the development of mass transport systems which are typically used by lower-income groups. Thus, in these respects the most controversial aspects of Fund-supported adjustment programs may well have ironically been those which have had the most obvious success in improving income distribution.

Although government participation in the market economy is often justified by its effects on the existing income distributions, in practice nonfinancial public enterprises frequently become a major financial burden on the economy involving incalculable allocative consequences, and with distributional implications which favor only the labor and capital employed in the (usually large, urban) loss-making enterprises (Section VIII). Although Fund-supported programs often encourage the government to raise public enterprises' prices, these measures may have little distributive impact. The higher official prices frequently only validate prices already charged in parallel markets and thus merely act to recognize the hitherto hidden transfer of resources but, at the same time, transfer incomes from the unofficial, untaxed sectors to individuals and companies liable to taxation (both direct and indirect) thus, probably, improving equity.

Public debt fiscal policy is concerned with the ownership and maturity structure of the debt. The distributional consequences are diffuse and difficult to assess but it is argued (Section IX) that typical program recommendations to limit public sector borrowing, to broaden the ownership of public debt, and to finance domestic borrowings at positive real interest rates are likely to improve the allocation of capital, increase the long-term productive potential of the economy, secure a better funding for social security provident funds, retirement plans, life insurance schemes, and other programs which form a captive financing source, and thus reduce future needs for taxation. This environment is likely to be more favorable for distributional concerns than a system which is constrained by low levels of capital investment, an unvested social security program, and the need to increase taxation to finance domestic and foreign interest payments.

Finally, Section X draws together some of the lessons of this review, and observes that the concern about the implications of Fund-supported policies on the distribution of income and wealth is understandable. However, it concludes that the available evidence provides no basis to contend that Fund-supported adjustment programs lead to significantly worse income distributions when compared to any practical alternative.

Under these circumstances, it is only natural to ask why Fund-supported adjustment programs have provoked such criticism. An obvious reason is the overall compression in domestic consumption that the demand management aspects of programs frequently require. A second but perhaps no less important factor is the nature of policies which seek to redress years of poor economic management. Demand management problems often result from a gradual economic decline characterized by the establishment of inappropriate economic policies which benefit relatively small population groups. The costs of these policies are by definition transferred to the population as a whole, and in the process the costs are spread so thinly that they do not excite public interest until late in the process. The reversal of these policies in even a phased manner thus adversely affects a limited group more than it benefits the general population. Moreover, often the adversely affected group is vocal and cohesive in its response; these factors are usually the reason why they were favored in the first place. The beneficiaries of preferential treatment are frequently urban workers, civil servants (including the military), and owners or controllers of protected industries, all of whom are more likely to speak out and threaten retaliation than rural agricultural workers. The furor over Fund-supported adjustment programs may thus be more directly related to who is being affected than to the burden of adjustment which is imposed.

While there is no unambiguous evidence that Fund-supported adjustment policies necessarily worsen income distributions compared to alternative policies, it is clear that they are widely perceived to do so, and the existing policy of ignoring this aspect of Fund programs encourages comment about distributional concerns. 1/

The official Fund view that distributional policies are entirely a sovereign issue thus has the practical advantage of circumventing a potentially contentious issue. 2/ If the Fund moves away from this position, which has served it well in the past, it may be difficult to see where the limits on policy advice can be drawn. It should be noted, however, that while the Fund has in the past omitted explicit recognition of distributional issues in the programs it has supported, those concerns are clearly an important consideration in determining

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1/ As a recent critique concluded "...is it not unwise for the Fund management to refuse as a matter of policy to consider such repercussions (on distribution) when designing and calculating their programs.... No doubt this is primarily a matter for governments but that is true of all aspects of national policy, Fund missions provide policy advice on the BOP price stabilization, and growth aspects of its programmes; on what principle can it decline to do so for the distribution results?" (Killick, 1984).

2/ This view was expressed in E.B. Decision No. 6056-(79/38), Selected Decisions (1983).

the political feasibility of programs and how much of the adjustment can be maintained beyond the program period, and are thus an inherent if unspecified element of all Fund-supported adjustment programs. Moreover, if the authorities ask the Fund to evaluate alternative approaches to meeting their distributional concerns the Fund is (and has 1/) been prepared to do so.

1/ See list in Appendix II, footnotes 2 and 3.

II. Problems of Methodology and the Counterfactual Argument

1. Methodology of the study

Any economic study confronts methodological issues which limit its application and the conclusions which it can offer, but by its very nature this study must be more limited than most. The scope of the issue is as broad as it is complex, encompassing the welfare of entire populations in many diverse countries, while by its primary focus on developing countries the data base is extremely limited. Appendix II discusses those problems in detail, but some of the more salient methodological issues are:

a. The definition of the distribution of income

The distribution of income and wealth may be classified by six main types, and all of them are touched upon in the text of this paper. They are:

(1) By each individual in the society;
(2) By households;
(3) By "institutional distributions," especially between government, firms, and households;
(4) By the division between the rural and urban sectors;
(5) By other socioeconomic groups, such as large and small farmers, self-employed and corporations, skilled and unskilled, domestic and foreign-owned corporations; and
(6) Finally, it is often useful to relate the distributional issues between factors of production, e.g., labor and capital.

No one distributional classification is adequate to fully encompass the concepts of poverty or "the poor" which is evidently at the base of criticisms of income distributions under Fund-supported adjustment programs. On the whole, this paper tries to specify those who constitute the poor more precisely (e.g., the rural poor, the urban unemployed) as this seems more useful than any general concept of poverty which can quickly decay into disputes about relative poverty. Thus in what follows the economic policies in Fund-supported programs are analyzed in the context of the six categories identified above. However, to contain the discussion, only the most relevant comparisons are selected in each case.

b. The basis of comparison

The existing income distribution of a country seeking balance of payments support from the Fund is itself the product of the prevailing

economic disequilibrium and is unsustainable over the longer term. Hence, simple comparisons between preprogram and postprogram distribution are not useful for evaluating the distributional impact of Fund-supported adjustment programs. Should the comparison be to the income distribution that would have evolved in each country in the absence of a program (the counterfactual argument), or in the light of an alternative policy regime? If the latter, what policies should have been adopted? In any case, economic analysis is not sufficiently advanced to permit a detailed comparison of this nature.

c. The time frame for the study

By focusing on resource allocation rather than on income distribution per se, the impact of traditional Fund-supported adjustment policies necessarily has longer-term implications than any simple income transfer, just as the adverse effects of factor-price distortions may manifest themselves slowly. However, most Fund programs are short term (and extended facilities only focus on the medium term) and that must form the basis for much of the discussion.

d. Data requirements

A comparison of income distributions would require extensive information on individual income groups, both before and after the program. These data requirements would necessarily include detailed information on consumption, both from personal expenditure and the use of public services, and on personal income levels, including the source of that income. The distributional implications of government policies would further depend on government transfers and services received, who is employed by the public sector, nonmonetary sources of income, and the composition of investment portfolios. In practice, existing surveys are most inadequate and are rarely ever collected on a consistent basis except for such specialized purposes as preparing a cost-of-living index.

e. Ambiguity of the comparison

Even if the necessary data were available, a comparison of preprogram and postprogram income distributions would not necessarily lead to useful results. It is well known that the most common methods of comparing income distributions do not lead to unambiguous conclusions except in exceptional circumstances. 1/ Moreover, the movement in prices during the course of the program will affect the consumption possibilities available to each individual, leading to further ambiguities with index comparisons.

1/ See Champernowne (1974).

f. Scope of the comparison

While the focus of most criticisms of Fund-supported adjustment programs has been directed at the effect on income distributions, the real issue is the effect of these programs on the sense of "well-being" among different socioeconomic groups in program countries. As such, issues relating to the income distribution should be viewed as an important factor in assessing the effects of Fund-supported adjustment programs, but not necessarily as an end in itself. Distributional issues must be viewed in the context of achieving an efficient use of resources and a satisfactory rate of economic growth. A more equitable income distribution may be unacceptable if it entails a substantially lower level of economic activity for the society as a whole.

g. The nature of the analysis

No Fund-supported policies take place in isolation; numerous variables are changing at the same time and most changes affect the size and direction of other changes. Is it analytically meaningful to view the impact of taxation in isolation from that of expenditure, or to analyze the effects of various individual components of taxation as if they operate independently of each other? In essence, the evaluation of every adjustment policy requires the solution of a general equilibrium model. This is simply impossible for most countries and certainly impractical for most countries with Fund-supported programs. It is this complexity, together with the impossibility of defining a single "desirable" distribution pattern applicable to all cases, that makes it impossible to give even an ordinal a priori ranking to the fiscal measures.

h. The nature of Fund-supported adjustment programs

The very definition of "Fund-supported adjustment programs" implies limits on the role the Fund can play in determining the policies which can be supported by Fund resources. The program objectives and the policies undertaken to achieve these objectives are, in the final analysis, those acceptable to the authorities, and are often determined on the basis of political priorities rather than efficiency or distributional concerns. As these studies demonstrate, in contrast to performance criteria which are normally confined to a few macroeconomic variables necessary to evaluate implementation of the program, Fund-supported adjustment programs typically include measures relating to a wide range of policies. As long as the income distribution policy is not covered by a review or other performance clause (and, in view of the preceding discussion, it is difficult to see how it could be or even should be), the authorities have great discretion in their choice of policies, which may lead to any politically acceptable distribution of income.

Empirical evaluation was considered but, as the summary above indicates and as Appendix II details, had to be rejected as impractical. Instead, the first question which must be dealt with is with what set of circumstances should a Fund-supported program be compared? First, a typical (composite) example of a country about to draw on the Fund is discussed and this is followed by a description of what might happen to the economy if the country decides not to use a Fund-supported program. These descriptions set the context for the extended discussion of policies in the rest of the paper.

2. An outline position of a country about to draw on the Fund

Countries that undertake a balance of payments adjustment program face disequilibria from a wide variety of causes. The imbalances may be due to exogenous factors or domestic structural imbalances with the resulting balance of payments difficulties only one aspect of the stabilization problem. Usually, the balance of payments pressures originate from some combination of the two causes, and the authorities must undertake a wide-ranging economic program if an acceptable level of economic performance is to be resumed and the balance of payments is to be financed in the medium term.

The imbalances arising from the foreign sector are at times due to factors beyond the authorities' control (particularly in the short run), such as a deterioration in the terms of trade, which may stem from depressed export prices or sharp increases in the prices of major imports, such as petroleum. In other cases, the imbalance in the current account is the result of inappropriate policies pursued by the authorities over an extended period, such as an overvalued exchange rate which encourages the use of imports at the expense of domestic production (and discourages worker remittances from abroad), or unrealistically low producer prices (often related to an overvalued currency), leading to a stagnant export sector. In some cases the problem may be related to the capital account, and again the imbalance may evolve from recent developments or longer-term policies. A sudden reduction in aid flows may create a financing gap which the authorities cannot easily close, while a major development effort with little export response may lead to burdensome debt servicing requirements. Furthermore, foreign exchange reserves may be so low that any shortfall in the external sector has severe and immediate repercussions on import flows.

Domestic imbalances may also arise from factors outside the authorities' control, such as those caused by unusual weather patterns which suddenly reduce domestic food output. Often, however, they arise from factors which are subject to the authorities' control, as when inappropriate monetary and fiscal policies increase domestic demand to unsustainable levels.

In most cases domestic fiscal policies are the cause of, or at least exacerbate, the imbalances which emerge in the external sector. Large government deficits, normally financed mainly by the domestic banking system, lead to domestic absorption levels which may place excessive pressures on the indigenous productive capacity, resulting in increased imports and the rationing of available goods through higher prices or the creation of queues.

An economy in which some or many of the conditions identified above exist may seek to use Fund resources to help finance a short-run balance of payments gap while measures are being implemented that will move the economy toward a more sustainable medium-run balance of payments. Indeed, the majority of countries undertaking Fund-supported adjustment programs in recent years have exhibited, in varying degrees, a substantial number of these problems. If the balance of payments disequilibria result from terms of trade or other exogenous developments outside the authorities' control (e.g., adverse weather) which are expected to be temporary, access to Fund resources may be limited to drawings under the compensatory financing facility. More often the balance of payments imbalance is due to inadequate demand and supply policies and an adjustment program is warranted. The program may focus on either demand management issues or structural reforms, and frequently has elements of both. In either case, the primary objective of a Fund program is to provide for the resumption of a viable balance of payments position and a reduction of inflation, both of which are needed to ensure a more satisfactory and sustainable rate of economic growth over the medium term.

3. The counterfactual argument

Following this outline of the problems confronting many countries which approach the Fund for balance of payments support, it may be helpful to examine the likely developments in an economy which, when confronted by economic disequilibria, does not pursue an adjustment program supported by the use of Fund resources. This counterfactual discussion provides some overview of the topics discussed and also provides some insight into the trade-off between economic equity and growth. This difficult topic is considered under three subheadings: the social choice, economic controls, and the medium-term development.

a. The social choice

Perhaps the most natural starting point is to assume that the authorities have, for what seem compelling reasons, determined that the government should intervene in the economy to implement social policies more in accordance with their objectives. In developing countries, these motives usually begin with the understandable desire to improve the material and social well-being of the citizens, but it may also

originate from an intellectual debate over the future course of the economy, the desire to protect local nationals from a worsening in the terms of trade, or even the need to encourage popular support for the existing government. In any case, the decision to intervene in the market can be expected to result in some form of price controls and a larger public sector. If, as is usually the case, there is also emphasis on diversifying the economy and expanding domestic value added, there will also be increased public sector investment to develop local industrial capacity.

These decisions may touch off a series of second round effects which can quickly exacerbate the existing economic disequilibria instead of containing them. All these initiatives--expansion of the public sector, increased public sector investment, and the regulation of prices--can lead to an expansion of domestic absorption which the economy may not be able to satisfy. For example, an expansion of the civil service for the purpose of monitoring an inefficient system of prices is unlikely to stimulate production but will have the immediate effect of increasing government expenditure. An ambitious public sector investment program may in time produce a reasonable return if the projects are well conceived, well managed, and have access to the necessary inputs to operate efficiently, but these conditions are often absent. A complicating factor with respect to input availability is that often these projects are undertaken with external financial resources to protect existing domestic investment levels, but by the time they are completed the external position has deteriorated (for reasons discussed below) to the point that debt servicing charges compete with the importation of required inputs for the increasingly scarce supply of foreign exchange. In regard to regulated prices in general, artificially low consumer prices will invariably stimulate the consumption of "cheap" commodities.

b. The need for economic control

The imposition of widespread price controls is not likely to cause severe economic disruptions immediately, but in the long term a pricing system which departs significantly from underlying market forces is likely to seriously misallocate resources. Normally, the thrust of these policies is to maintain consumer purchasing power and to suppress inflationary pressures, but the retention of prices below market-clearing levels either chokes off supplies as producers do not receive adequate incentives or exacerbates budgetary pressures through the payment of production subsidies. Almost always the desire to protect the consumer extends to the external sector through an overvalued exchange rate. As long as foreign sources of capital are available, the demand for goods is met through a deficit in the current account often rationed by quantitative restrictions.

The price distortions caused under these conditions can permeate the economy. Domestically, as agricultural incentives deteriorate, market agricultural activity may die in those markets where prices are artificially controlled by the government. Countries which have provisioned the market at subsidized market-clearing prices when resources are abundant, resort to underprovisioning the official markets as imports dwindle and resources become scarce, with the result that consumers turn from the underprovisioned official market and pay market-clearing prices in unofficial markets. Commonly under these circumstances, exclusive facilities, open only to members of select groups, e.g., civil servants, military, and/or workers in select industries, continue to be adequately stocked at a level consistent with price-clearing at the administered, subsidized price. Thus better-off consumers with employment in the official or formal sectors purchase products at subsidized prices while those in the informal sector are forced to purchase at "black market" prices.

c. Medium-term developments under economic controls

Over time, the initial problems become chronic, and the policies to compensate for these first order market structural rigidities become more and more extreme. Usually they manifest themselves in increasingly expansionary fiscal policies as the need to subsidize normal economic activities increase while revenues stagnate. The overvalued exchange rate acts as a damper on exports, worsening the scarcity of foreign exchange and transmitting the external imbalance throughout the economy. Although short-lived improvements in the terms of trade may mask the adverse external sector developments temporarily, a widening gap between the official exchange rate and the underlying market-clearing rate eventually creates a balance of payments crisis which the authorities must address. If the decision is to avoid major exchange rate adjustments, the authorities may react to the non-competitiveness of their country's exports by offering export rebate schemes to stimulate domestic production and/or to accommodate producer price increases. Such direct subsidies may prove useful in expanding exports; however, their implications for the domestic economy are substantially less favorable. Under a more appropriate exchange rate, the export sector could be expected to contribute resources to the budget rather than requiring subsidization. If the primary export commodities are also the main sources of domestic food supply, the final result may be still larger budgetary subsidies. The authorities may attempt to increase external borrowing for these purposes, which will alleviate the immediate shortage of foreign exchange at the cost of a larger debt servicing problem in the future.

Usually, a shortage of foreign exchange precipitates a series of restrictions on imports, which works to equate supply and demand of traded goods by imposing a scarcity premium on imports and thus lowering demand. In addition to the interesting issue of who benefits from

the scarcity premium, this approach also has important budgetary implications as import duty receipts reflect a constrained volume of imports but not the implicit price of these imports. Much of the reduction in import volume is likely to be in inputs for domestic production, the decline of which further restricts excise and income tax collections as it contributes to domestic demand pressures.

The budget thus bears the brunt of official attempts to avoid structural adjustment. This prominence is one of the principal reasons behind concerns with the fiscal position in Fund-supported programs to restore external stability. But the financial system also shares in the burden; the rising budget deficit necessitates additional bank financing, contributing to monetary expansion. The development of parallel markets to relieve pent-up demand substantially accelerates the underlying inflation rate, leading to increased wage demands and the public's desire to hold currency (the only medium of exchange in these markets) rather than demand deposits. 1/ With increases in inflation, real interest rates are lowered still further making deposit rates unattractive and access to credit very important, and increasing the opportunity for corruption.

If the gap between the official and a market determined price system continues to widen, government intervention in official markets will become more pervasive. The unrealistic prices in these markets will ultimately discourage economic activity in the markets in favor of a flourishing system of parallel markets where goods are more readily available, albeit at a significantly higher price. The decline in business activity in official markets will erode budgetary revenues even further as many tax bases (e.g., for corporate income, excises, and sales taxes) contract. With an increasing share of the economic activity moving to the parallel markets, individuals have less interest in reporting the true magnitude of their incomes for tax purposes or to channel the financial resources needed for these activities through official markets for fear of having these activities revealed. The combination of stagnant export levels and large external borrowing leads to a sharply higher debt servicing ratio, with the likely development that the central bank does not have an adequate supply of foreign exchange to supply the foreign exchange needs of the country, and the country begins to incur external arrears. The growing imbalance between government revenue and expenditure needs may even induce the emergence of domestic arrears, although a more likely vent for the excess demand will be still larger domestic bank financing. Heavy recourse to domestic bank borrowing for budgetary financing serves to transmit the adjustment back to the private sector in the form of a currency which has been effectively devalued, whether the government chooses to recognize it or not.

1/ In some cases dollar bills may replace the domestic currency as the phenomenon of currency substitution becomes prevalent.

With the slowdown in activity in official markets, the related price controls, and rapid inflation, hoarding of goods or foreign exchange becomes a more profitable form of investment than investment in plant and equipment, which ultimately further constricts domestic supply. In time, overall business activity shrinks, the public becomes reluctant to hold the domestic currency, and, in the extreme, the country gravitates toward a barter economy.

Stability is achieved under these circumstances, if at all, through rapid migration of human, financial, and mobile agricultural resources. The initial effect of policies to support imports through an overvalued exchange rate and budget subsidies is to encourage urban migration. The resources for supporting the urban sector, both in domestic currency and foreign exchange come from a combination of an explicit and implicit (exchange rate) tax on major, generally extractive, export industries with a strong comparative advantage. Where such industry exists the economy continues on a downward spiral, with the agricultural sector essentially abandoned and a steadily diminishing number of people that can be subsidized from the shrinking national product. Over time, the failure of these policies can lead to a second migration as individuals seek to maintain an acceptable standard of living by returning to a subsistence economy that at least provides food.

Adjustment has taken place, in the sense that the system the authorities attempted to maintain was untenable, but it was uncontrolled adjustment, and not the most efficient use of resources the economy could achieve. The income distribution cost through this adjustment may have been spread equally, but this is the equality of poverty achieved by great sacrifice in the overall level of economic activity which the country could realize and it is likely that most of the population is worse off than it would have been under a program which would have permitted more growth. The policy to establish a predetermined pattern of income can thus be viewed as another type of expenditure program, albeit a very expensive one, and one which extracts a contribution from the poor as well as from the rich in the form of a lower absolute level of income.

Of course, not all countries manage their affairs as badly. There are many steps and pauses on the downward spiral, but there are sufficient worldwide parallels to make this description of adjustment without a Fund program a fairly typical one. It is against this background and with these possibilities in mind that actual Fund-supported programs and policies should be considered.

III. A Brief Review of Measures, Other than Fiscal, In Fund-Supported Adjustment Programs

Several studies have surveyed the adjustment measures which have been employed in Fund-supported programs in recent years, concentrating on both the external and domestic fiscal adjustment efforts. 1/ The more common of these measures are listed in Appendix I, and the common macroeconomic measures are discussed in this section. As these studies demonstrate, Fund-supported adjustment programs contain understandings about the economy, of which some are identified through performance criteria and other measures intended to ensure that the desired progress is achieved. In many cases, important policy measures are undertaken as prior actions before the beginning of the program period. This paper concentrates on the distributional impact of fiscal policy which is normally framed within the broader context of monetary and exchange rate policies that will also, if not as directly, affect the distribution of income and wealth. A brief review of this macroeconomic context for fiscal policy follows.

1. Money and credit policies

A key element of all Fund-supported adjustment programs is the maintenance of demand management policies consistent with achievement of the program's objectives of re-establishing a viable balance of payments in a context of relative price stability and a sustainable level and growth rate of economic activity. Appropriate money and credit policies are thus key elements of all Fund-supported adjustment programs. Reflecting both the importance of credit policy to the overall adjustment process and the timely availability of reliable data, credit aggregates are also used in most cases as performance criteria.

Within these overall limits, constraints are normally placed on the public sector access to credit to ensure that the private sector receives an adequate share of the total credit. Most often this restriction takes the form of a subceiling on government borrowing from the banking system, and less frequently a subceiling on public sector borrowing or borrowing by particular nonfinancial public enterprises (NPEs). Other approaches to the same objective have been quantitative limits on the public sector and government overall deficits, and less often the use of special performance clauses which limit the growth of government outlays or specify a specific increase in government revenues.

The financial measures undertaken as part of a Fund-supported adjustment process encompass a wide range (see Table 1). Controls on

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1/ For details see (a) Doe (1983); (b) Beveridge and Kelly (1980); (c) Kelly (1982); (d) Donovan (1982); and (e) ETR review papers (1982 and 1983).

Table 1. Monetary Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Limit on credit expansion:		
Ceilings on:	77	99
Net domestic assets or total bank credit	67	86
Bank credit to central government	41	53
Bank credit to public sector including NPE	30	39
Separate ceiling on bank credit to parastatals	6	8
Reduction in the rate of growth of liquidity	20	26
Interest rate reform	21	27
Adequate share of credit to private sector	18	23
Measures to mobilize domestic savings	41	53
Interest rate measures	33	43
Reform of the financial system	19	25
Other	15	19

Source: Appendix I.

credit allocation may be reduced and interest rates raised toward positive rates in real terms to improve the allocation and supply of financial resources to foster growth and reduce domestic inflation. A more equitable income distribution can be facilitated by expanding access to credit markets. Other policies which support this objective include those which limit insider loans and those which promote the ability of each sector to compete for credit, such as fixing farm loan interest rates at free market levels instead of fixing them at such unrealistically low levels that little credit is available. Such policies undoubtedly have distributional implications which are touched on elsewhere in this paper (e.g., Section IX) but this paper concentrates on the effects of fiscal measures on the distribution of income and wealth; these have to be put in the framework of the other policy measures which, at the same time, have a profound effect on distribution. A most powerful and pervasive measure is a change in the exchange rate.

2. The exchange rate

For a devaluation to succeed real domestic resources have to be released and diverted to satisfy external demand. The release of such resources usually can come only from reduced factor rewards to labor and capital in nontraded production; real household income must somehow be reduced. If the exchange rate change operates with no immediate attempt by labor or capital to recoup any reduction in their income, then the distribution of the impact of the devaluation will depend on the mix of imports of goods and services and the elasticity of demand for them, and on the elasticity of demand for traditional and nontraditional exports with measures to remove quantitative restrictions on trade and rationalize the tariff. Broadly speaking, labor and capital employed in sectors favored by the devaluation will enjoy relatively higher incomes than those factors in sectors hit by the devaluation. The devaluation could, for instance, reduce the real incomes of the urban poor (who might consume a large share of imported goods and use services reliant on imported fuels); the agricultural sector and nontraditional export industries might benefit. It would be impossible to say that "the poor" suffered; more likely the effects of the exchange rate change would be distributed so that some of the urban poor suffered, some might find employment where previously there was none, and the agricultural poor would be better off. In the longer run, increased growth and employment should increase the level of national income and thus offer the opportunity for all to share in the community's gain.

This raises the issue of defining who, exactly, are the "poor." The poor are not likely to be the most vocal, they are more likely to be in remote places where even their plight is difficult to identify,

and those who are vocal on behalf of the poor may turn out to be more concerned with maintaining their own standard of living than improving the lot of the economically and politically underprivileged.

However, if an attempt is made to compensate fully those whose income was reduced by a devaluation, inflationary pressures would increase. With a domestic price level rising, the relative improvement achieved through devaluation will be eroded and the distribution of income, compared to the original state of affairs, is unlikely to be altered significantly. However, the initial balance of payments disequilibrium will remain which implies that long-term growth will be lower and everyone, except those enjoying privileged access to goods made cheaper by an overvalued exchange rate, will be worse off eventually. If the returns to capital are reduced to protect labor's real income, capital may emigrate, investment stagnate, and long-term growth may be reduced. These developments also would reduce the income of capital holders in the short run, and all other incomes in the long run.

The effect of devaluation upon the distribution of wealth can be important. Normally those holding capital abroad are better off (in terms of domestic purchasing power) and those with domestic capital, compared to those external capital holders, are worse off. Succinctly, the initial effect of a devaluation is to favor over everyone else the capital owner who (possibly anticipating the eventual devaluation) was in a position where, perhaps through overinvoicing imports and underinvoicing exports or by political protection, was able to move capital abroad. Clearly this is a distributional impact which will affect an assessment of devaluation; of course little can be done about it unless government can force the repatriation of foreign assets or it can find an effective way of identifying and taxing the capital gains made on wealth held abroad.

Exchange and trade policy measures were a common feature of Fund-supported adjustment programs, occurring in nearly three fourths of all those programs (see Table 2). In most instances, those measures focused on exchange rate action with more frequent adjustment of the exchange rate but in other cases where multiple exchange rates existed reunification of the exchange rate became an important objective. In some cases the appropriateness of the exchange rate was monitored by a target on net foreign assets. Usually, understandings with members that impose or maintain exchange measures subject to approval under Article VIII involve policies and measures that eliminate the need for the exchange measures and facilitate their removal during the program period. In some cases, therefore, the understandings on the jurisdictional side has called for the removal of exchange and other taxes on international transactions consistent with the position of the Fund that all taxes on international transactions must be applied outside the exchange system.

Table 2. External Sector Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Liberalization and reform of exchange rate arrangement:	42	54
Frequently adjusted rates	39	50
Gradual merging or unification of exchange rate	14	18
Other	3	4
Target on net foreign assets	15	19

Source: Appendix I.

3. Other macroeconomic policies

Most Fund-supported programs included other macroeconomic policies, which in a few cases mitigated the effects of exchange rate or other policies on certain sectors of society. Nearly all of the measures, however, were directed at restraining demand or improving supply as they introduced a more rational system of incentives through limits on wage increases, price flexibility, and structural adjustments in the economy (see Table 3).

Increases in public sector wages and salaries were frequently limited (41 percent of the programs) but differentiated so that higher-paid employees received smaller increases or no increase at all (see also Section VIII). In one case, the private sector was authorized an increase similar to that granted to lower-paid government employees. In another, the impact of the higher cost of living on lower-income groups was mitigated by increasing minimum wages, unemployment benefits, and pensions. The intention to establish a more flexible pricing system was present in more than a third (37 percent) of the programs surveyed, but most generally this was to be achieved within the context of simplifying the existing price control system instead of relying exclusively on market forces. Much of the interest in price flexibility focused on energy prices, which were adjusted upward in nearly half (46 percent) of these programs.

Table 3. Other Macroeconomic Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Wages and Prices	72	92
Partial or general wage restraint 1/	32	41
Wage guidelines or wage reform policies	36	46
Flexible pricing system	29	37
Reduction in price-cost distortions	23	29
Review or increase sector prices	23	29
Increases in energy prices	36	46
Review price control system	19	25
Structural adjustment measures	56	72
Development and restructuring of a sector	51	65
Shift of overall management	7	9
Shift of resource from public to private	19	25
Investment planning and execution procedures	28	36

Source: Appendix I.
1/ One policy measure in the opposite direction.

One of the most common measures to upgrade a particular sector's performance was through a specific review of that sector's policies, frequently including a change in investment policies and operational objectives (also see Section IX). One quarter of the programs included transfers of state-owned enterprises to the private sector.

Following this overview of macroeconomic policies in Fund-supported adjustment programs, the study turns to a detailed evaluation of typical government taxation and expenditure measures in these programs and their distributional effects.

IV. Tax Administration and Direct Taxation

Many Fund-supported programs contain specific statements about revenue policies and the increased ratio of revenue to GNP. Programs in the 1970s often planned an increase in the ratio of revenue to GNP of at least 1 percentage point during the program year and some aimed at even larger increases. However, as was pointed out earlier, the authorities often find it difficult to introduce new tax measures when real incomes are under pressure following other measures undertaken to reduce domestic absorption (such as devaluation of the currency, expenditure cuts, and/or greater price flexibility). These difficulties will be compounded if, as is often the case, the tax system exhibits little elasticity with specific rate excises, tax bases eroded by exemptions, and imports limited by shortages of foreign exchange.

1. Administration

A recurrent theme in a majority of these earlier programs was a general statement about improvements in tax administration. In a sample of 78 Fund-supported programs during 1980-84, improvements in tax administration, including tightening of tax enforcement procedures, identifying and registering new taxpayers, intensifying tax collection efforts, strengthening tax legislation, closing loopholes, and collecting tax arrears, were mentioned in 43 programs; however, their revenue impact was not assessed (see Table 4). There is no doubt, from the point of view of distribution, that improved tax administration, especially of personal and corporate income taxes, would be one of the best ways to improve equity. Regrettably, it is also one of the most difficult, involving widespread staffing reform which can take years to implement; it also requires fundamental changes in the resolve of officials to apply legislation already enacted, knowing there is a commitment on the part of the politicians and the judiciary to back them up. While improved tax administration is undoubtedly desirable, short-run adjustment programs cannot place primary reliance on promises to achieve in the future what had proved impossible earlier.

In general, then, it is unlikely that improved tax administration holds much potential to increase tax collection in the short run. This has implications for the redistributional impact of tax measures in Fund programs, because the current tax policies of most developing countries apparently do not affect the prevailing income distribution to a significant extent. 1/ The reason is relatively simple:

1/ In a recent cross-sectional study of 26 developing countries in Africa, Asia, Europe, and South America, the primary determinants considered for income distribution in the sample countries were increases in population, short-term economic growth, and educational equality. See Ram (1984). In general, taxation policies tend to play a rather marginal role in cross-sectional studies of income distribution.

Table 4. Administrative Improvements and Direct Tax Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Improve or reform of tax administration	43	55
Personal income tax	34	44
Move from schedular to global 1/	2	3
Reduction of personal income tax	5	7
Increase of surcharge in personal income tax	10	13
Income tax reform or extension	14	18
Increase in payroll tax or social security contributions	6	8
Collection of tax arrears	1	1
Corporate tax	27	35
Income tax surcharge	10	13
Collection of tax arrears	6	8
Shorten lag for corporate tax payment	6	8
Modification or reduction of income or profit tax	10	13
Tax on property	9	12
Introduce or raise land tax	4	5
Introduce or raise urban property tax	5	6
Other property tax	6	8

Source: Appendix I.
1/ In one country the reverse policy was undertaken.

developing economies have been unable to levy successfully the direct taxes needed to introduce marked progressivity into the revenue system; such taxes are generally insignificant in the revenue structures of most developing countries. Indirect taxes, on the other hand, are significant in the revenue structures of developing countries but are known to be regressive. 1/ On the whole, therefore, the tax systems in developing countries have been found to reduce income inequalities only to a small extent. 2/ Given these circumstances and the fact that Fund-supported programs only marginally change the basic structure of the tax system, it would be unrealistic to expect that tax measures in these programs will have very significant effects on income distribution. Moreover, most tax measures take some time to become effective (corporate taxes are typically collected 18 months in arrears), further reducing the redistributive effect of tax change in the short run.

2. Direct taxation

Changes in direct taxation have not played as important a role in Fund-supported programs as revisions of indirect taxation. Altogether, 69 out of the 78 programs surveyed proposed changes in the tax system; however, indirect taxes were changed in 59 programs, and direct taxes in only 34. Nevertheless, the use of direct taxes in 44 percent of the programs represents in itself a considerable emphasis on such tax measures.

a. Personal income tax

The direct tax policy instrument of choice is the personal income tax. Normally, it is described very broadly as a general reform of income and wealth taxation, and as such was employed in 14 of the 78 programs surveyed. A surcharge on upper-income brackets was adopted in 10, while some programs simplified the rate structure and reduced exemptions. Other reforms, such as changes in the basis of assessment, the introduction of a minimum tax, increases in tax rates on interest

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1/ In some countries the sales tax is progressive up to ranges at which the (progressive) income tax is applicable, so that the tax system as a whole may be progressive.

2/ In a survey of tax incidence studies of 32 developing countries none were found that indicated a tax incidence that was more than moderately progressive. See Bird and De Wulf (1973); For a similar pessimistic view see Harberger (1974); and De Wulf (1983). As another study points out: "The problem is that in less developed countries the direct tax base is too small to make direct taxes the major instrument of redistribution policy" (Adelman and Robinson 1978).

and dividends or in withholding or coverage, or indexation for inflation, were used even less often. Thus, the thrust of the policy actions remains reform and simplification of the existing tax structure, rather than major revisions of the current tax system.

The personal income tax is generally considered to be the main progressive element in any country's tax structure. There are, however, several arguments which suggest this role is exaggerated. First, the existence of substantial tax evasion in both developed and developing countries reduces its effective progressivity. 1/ Second, the distributional impact of the personal income tax may be somewhat exaggerated by virtue of its being an intensely discussed topic by the urban middle and upper classes who bear most of the burden of the tax and who are convinced that the tax tends to distribute income away from them. Third, the usual presumption that the ultimate incidence of the tax is on the immediate taxpayer does not distinguish between short-term and long-term effects. While in the short run tax shifting may be unlikely, in the longer run an elastic labor supply may affect the total labor pool as well as the composition across vocations, particularly if marginal tax rates are high. In developed economies wage negotiations increasingly emphasize take home pay, which enables the increasing burden of an unindexed personal income tax (in an inflationary situation) to be shifted to the cost of production. 2/ In developing economies the most talented and most responsive to after-tax differentials are often the most internationally mobile.

Other features of personal income tax structure also have redistributional effects. Exemptions may have a progressive impact, even though inflation erodes the effect. The effective tax base after deductions, income splitting, maximum taxes, capital gains tax preferences, and so on, also affects the effective progressivity of the system. Schedular income taxation, which taxes income from different sources separately and often differently, has different distribution implications compared to a global income tax system in which pooled income is taxed. Last, but not least, as mentioned earlier, the effectiveness of tax administration, or the lack of it, also plays an important, probably the most important, role in determining the ultimate burden of the personal income tax. The effective application of the personal income tax is usually restricted to a PAYE system levied on employees in the public sector and in a few large firms, as professionals and small traders are often difficult to tax.

1/ See Tanzi (1982).

2/ See Tanzi and Iden (1982). Expatriates receive a disproportionate share of the jobs with high salaries in developing countries, and they often specify and obtain their salaries net of tax.

Despite those problems, developing country studies reveal that the effective personal income tax structure is usually progressive in the modern sector, although frequently less so than the apparent or legal income tax structure. A comparison of 28 developing countries indicates that while the marginal personal income tax rates reach on average 55 to 60 percent at incomes equal to an average of 40 times per capita incomes, the effective marginal rates, after accounting for the different forms of exemptions and deductions cited above, are about 40 percent at incomes equivalent on average to 30 times the per capita incomes. 1/

Country-specific studies have also tended to show a progressivity in the personal income tax structure, or a U-shaped incidence curve with the highest income groups facing the highest effective tax rates. 2/ The personal income tax measures in Fund-supported programs typically do not increase the regressivity of the income tax, since they are usually geared toward administrative improvements to reduce evasion, reduce exemptions, increase tax rates on interest and dividends, surcharges on upper income brackets, and to globalize income for tax purposes, which are all directed toward the upper income groups. If anything, they, along with surcharges on income taxes, should add to the progressivity of the effective tax structure.

b. Corporation income tax

The main use of the corporation income tax to raise revenue in Fund-supported programs has been a once-and-for-all basis, moving assessments and collections into current year basis (in 6 programs out of 78). Most of the explicit discussions of the corporate income tax measures focused on simplifying the rate structure, and 5 out of the 78 programs surveyed specified a reduction in the tax rate. Other reforms, such as the elimination of tax preferences and increases in coverage, were mentioned even less frequently.

Given the controversies surrounding the short-run incidence of the corporate income tax, no definitive statement can be made regarding the distributive impact of such corporate tax reforms. 3/ To the extent that corporate taxes are an instrument of adjustment in Fund-supported programs, it may be asserted that the tax falls on capital owners once factor movements stop and intersectoral rates of return of the factors equalize. In this sense corporate tax incidence would not

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1/ The level of income represented by the multiple of 30 times per capita income after exemptions and deductions is equivalent to that represented by the multiple of 40 times per capita income before deductions and exemptions.

2/ See Mann (1976); McLure (1974); Booth (1980); Krongkaew (1975); and Tan (1975).

3/ See Goode (1984).

be regressive. In practice, in many countries the corporate profits tax is often levied efficiently only on a few large firms (often foreign-owned) and subject to erosion through generous provisions to encourage investment and exports.

In any event, the policies included in Fund-supported adjustment programs have been in the nature of adjustments in tax rates or the simplification of the rate structure which, by themselves, would not add to whatever regressivities might be present in the existing structure. Such recommendations might, in the long run, favor a more efficient allocation of capital.

3. Property tax

Property taxes have played only a marginal role in Fund-supported programs. Of the 78 programs surveyed, only 9 proposed introducing or raising land or urban property taxes or improvements in the valuation of property, while 6 changed other property taxes, such as some modification in real estate taxes or taxes on transfer of property.

There is a very active debate on the distributional implications of property taxes, but it is clear that given the rather marginal role they play in Fund-supported programs they rarely raise important distributional issues, for several reasons. First, property taxes frequently form a very small percentage of total tax revenue of developing countries. 1/ Second, reform of the property tax is usually considered a structural issue and the country's authorities are often unwilling or unable to do much to overhaul property taxes in the short run. Third, even in the context of an extended arrangement, time may be much too short to conduct the cadastral survey, valuations, and overhaul of collection procedures needed to improve property and property taxes. Thus, while property taxes may or may not be significantly progressive, Fund-supported programs tend to ignore them for reasons of administrative and political feasibility, urgency, and their meager effectiveness for increases in revenue.

Overall, it is unlikely that fiscal recommendations on direct changes in Fund programs have had much effect on the distribution of income and wealth. Not only have they had little effect, it is doubtful whether they could have been designed to have a greater effect given the limits on effective tax administration, political expediency, the uncertainty of incidence, taxpayer compliance, and the lags in legislation, collection, and enforcement.

1/ See Tanzi (publication forthcoming). In a sample of 82 developing countries in Africa, Asia, Europe, and South America, the reliance on wealth and property taxes in overall tax revenue was 2.55 percent in 1979.

V. Indirect Taxation

1. Domestic indirect taxes

Fund-supported programs have depended heavily on indirect taxes for generating revenues; 59 out of 78 programs in 1980-84 involved changes in domestic taxes on goods and services and, in 46, changes in import duties (see Table 5). Taxes on petroleum products and sumptuary goods have been raised frequently, as have the rates of broad-based consumption taxes such as the sales tax, value-added tax, and turnover tax. Taxes on selected services have also been raised in a few cases. As the incidence of indirect taxes is generally assumed to be on the consumer, the burden of all these tax increases can be presumed to have fallen on various segments of the population in proportion to their consumption of the taxed goods and services.

a. Selective taxes on goods

The distributional impact of taxes on petroleum products is tied principally to the ownership of a private automobile by higher-income families and the use of public transportation by lower-income urban families. However, other aspects of petroleum usage are also politically important. Often the price of kerosene, which is extensively used by the poor for lighting and cooking, is the most politically sensitive of all price issues. Moreover, in many countries the authorities attempt to minimize the cost of transporting local foodstuffs to urban markets through special tax rates on diesel fuel. Electricity tariffs are related to the cost of hydrocarbon fired generating stations and power consumption rises with household income. On the whole, with these differential rates a tax on petroleum products tends to be progressive in incidence, so that the increases in the tax rate frequently enacted under the Fund-supported programs (in 29 out of the 78 programs) can be expected to enhance the progressivity of the tax system. This outcome is particularly likely given the emphasis in these programs on the full passthrough of all increases in petroleum costs (including those from devaluation).

In contrast, the consumption of sumptuary goods (beer, liquor, and cigarettes) increases more slowly than income. 1/ Household budget surveys of selected developing countries reveal that alcohol and tobacco together generally count for about 5 to 6 percent of taxable expenditures of the lower-income classes and only 2 to 3 percent of the upper-income classes, so that the demand for sumptuary goods is generally income inelastic. 2/ The incidence of excise duties on sumptuary goods

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1/ At the very lowest income ranges the consumption of sumptuary goods on which taxes are paid may increase faster than income due to the common practice of low-income residents drinking untaxed home brews and smoking tobacco which is grown for personal consumption.

2/ See Cnossen (1977); and Gandhi (1979).

Table 5. Indirect Tax Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Domestic tax on goods and services	59	76
Raise excise tax rates (alcohol, cigarettes, etc.)	42	54
Increase tax on petroleum	29	37
Raise or modify sales tax	21	27
Temporary selected tax reduction	2	3
Raise taxes on other domestic goods and services	13	17
Import duties	46	59
General or selected increases in customs duties	25	32
Increase of petroleum import duties	10	13
Reduction or elimination of selected import duties	3	4
Tariff reform (exemptions)	30	39
Import duty surcharge	6	8
Export duties	20	26
Increase in rates 1/	7	9
Extension of coverage	5	6
Export compensation schemes	6	8
Others (reform/reduction)	5	6
Other tax and nontax	36	46
Tariffs, fees, and charges	35	45
Other	5	6

Source: Appendix I.
1/ In one country the reverse policy was undertaken.

(especially when they are undifferentiated with respect to quality and price), tends to be regressive. An increase in the tax rates on these items can be seen as increasing the regressivity of the tax system. 1/ However, the regressive distributional effects of sumptuary taxation are often accepted by policymakers as necessary to restrict the consumption of alcohol and tobacco on social grounds or to generate substantial budgetary revenues--they are generally price inelastic--to meet fiscal deficits. Moreover, the redistributive impact of such taxation can be viewed as affecting not so much the transfer of resources between rich and poor but more within income groups according to consumption patterns, for example, from those who drink and smoke to those who do not.

Taxes on alcohol and tobacco were increased in 42 of the 78 programs. In most cases these were used because excises are easy and cheap to administer, the revenue is reliable, and the accrual is immediate; these are the same reasons that lead developed countries to rely heavily on precisely these taxes despite their likely regressive impact on low-income households. Another frequent reason for discretionary increases in these taxes is that they are usually specific and not ad valorem and must be updated during an inflation to ensure that the real tax yield does not decline.

b. General taxes on goods

Broad-based consumption taxes in developing countries take a variety of forms--sales tax, value-added tax, turnover tax--but the consensus is that their burden is regressive, 2/ primarily because consumption forms a larger proportion of the incomes of lower-income groups. As a result, a uniform rate tax on all consumption becomes a larger burden on the lower than upper-income households. Even a consumption tax which exempts unprocessed and essential food and levies a relatively higher tax rate for luxury goods is rarely progressive with respect to income in developing countries. 3/ A uniform increase in the rate or rates of taxes on consumption, an element in 27 percent of the 78 programs surveyed, intensifies rather than counteracts the inherent regressivity of the tax. It is only when the consumption tax rate differential is widened, and/or luxuries are taxed at higher rates than before, that the regressivity of consumption taxation can be expected to decline.

1/ Cf., McLure and Thirsk (1973).

2/ See Musgrave (1959); Davies (1959); Schaefer (1969); and Heller (1981).

3/ See Gandhi (1979). As discussed earlier there may be income levels for which a tax is progressive even though the general impact is regressive. With respect to consumer expenditures, of course, such consumption taxes can, and frequently are, progressive. For evidence on this see Government of India (1969).

c. Selected taxes on services

Finally, some Fund-supported programs widen the tax net to include additional services or increase the rates of tax on services that are already taxed. The impact of these indirect tax measures on distribution is favorable, for the income elasticity of taxable consumer services in developing countries is substantially greater than unity. Taxation of such services therefore improves the progressivity of tax burdens, and additional taxation of services supports further efforts to redistribute incomes. 1/

Fund-supported programs have sometimes also included measures for widening the indirect tax base so that commodities or taxpayers that were formally exempt from excise duties or other forms of consumption taxes now become subject to taxation. Depending upon the income elasticity of the commodities on which taxes were introduced--viz., whether they were basic necessities or conspicuous luxuries--the distributive impact could be negative or positive. Frequently, the documentation for the Fund-supported programs does not spell out the new items brought into the tax net, so that little can be said with confidence about the distributive effect of such tax measures. However, such changes often involve the taxation of electricity and telecommunications, which generally constitute a larger share of household expenditure as income increases; in these circumstances the progressivity of the tax system is probably increased.

2. Taxes on international trade

a. Import duties

Import duties are relatively direct instruments of income redistribution: they clearly serve to increase the prices of consumer-imported finished goods, and thus in practice they generally redistribute income from consumers to traders of imported items or to the capital and labor used to produce import substitutes. They also affect the prices of many goods which are domestically manufactured when the imports of intermediate goods used in production are subject to import duties. Given the frequency of increases in these taxes in Fund-supported adjustment programs (which occurred in 46 out of the 78 programs), it is important to determine their significance for overall tax progressivity.

Given the obvious significance of these taxes, the authorities of developing countries frequently impose differentiated import duties to improve their impact on social equity. Commonly, the rates of duties increase as goods are perceived to represent luxury consumption, in the belief that the consumption patterns of richer individuals are more import intensive than those of less well-off individuals.

1/ Cf., Gandhi (1977).

In respect of equity, import duties tend to be much like excise duties or sales taxes and often do not have a sigificant positive redistributive impact. However, while it is difficult to assess the distributional impact of changes in import taxes, sometimes the comparison is between a system of import duties and quantitative restrictions on imports, and here the conclusion is less ambiguous. The general approach in Fund-supported programs is that quantitative restrictions on imports should be replaced by tariffs so that the economic rent from the limited volume legally imported is transferred from private sector importers to the government. As such favored importers tend to belong to the higher-income groups, such a policy clearly supports a more equitable income distribution.

Many Fund-supported programs contain measures such as an across-the-board increase in the rates of import duties, sometimes in the form of an import surcharge, to contain imports and improve balance of payments. As stated above, such measures do not necessarily serve to improve the income distribution. However, if the tax increases can be linked to items commonly purchased by higher-income groups, then they support improvements in the income distribution. These circumstances can include: (a) increases in the rates of import duties on luxury items, (b) differential increases in the rates of import duties, (c) an across-the-board reduction of all duty rates following devaluation, and (d) the removal of exemptions which have favored particular groups (which was a policy in 30 of the 78 programs surveyed). Similarly, any measure widening the tax base of import duties to cover hitherto exempt items of a semiluxury or luxury nature whose demand is income elastic also tends to favor redistribution, if it can be successfully implemented.

b. Export duties

Fund-supported programs do not usually rely significantly on export duties for quick revenue even though several authors have defended them as a good tax revenue source. 1/ Some Fund-supported programs have called for increases in taxes on traditional exports, while a few others have included income tax relief to exporters. Altogether 20 programs out of 78 included policies on export duties: 7 included increases in export duty rates, 5 an extension of the coverage, and 5 a reform and reduction of export taxes.

Countries whose exports have high elasticities of demand and low elasticities of supply, such as many developing countries, typically find a higher percentage of the overall incidence of export duties tends to be borne by the domestic producer in the short run. As time

1/ See Corden (1974); and Booth (1980); who suggest that if governments need a minimum amount of revenue, export taxes could form part of the first-best tax package, especially if such taxes are easy to collect and administer.

passes, the incidence depends on the relative abilities of the domestic exporters and foreign importers to adjust to the tax, i.e., to the relative differences between the short-run and long-run elasticities of supply and demand. To the extent that demand for a country's export is inelastic, in the short run the country may be successful in shifting the burden of the export duty to the consumers of its exports. More commonly, however, the country is a price taker in international markets and its producers must bear any such tax. 1/

The share of the overall burden on the producer may, however, be further divided among different economic agents of the domestic economy, as the incidence of export taxes also depends on how exporters of different goods are treated by the tax regimes of developing countries. Usually, while exporters of traditional exports, with low supply elasticities face high export duties, those of nontraditional exports--light manufacturing, textiles, and so on--may actually receive subsidies and/or tax holidays. Indeed, this distinction is present in most countries with Fund-supported adjustment programs that proposed changes in export duties.

Another aspect of export tax incidence is that agricultural small holders frequently pay higher tax by way of export duties than their counterparts in urban areas pay by way of income tax, especially where traditional exports in the agricultural sector are heavily taxed. 2/ Export duties, thus, affect the pattern of intersectoral distribution. Export duties also affect the intrasectoral distribution between domestic consumers and producers of the exportable commodity. For example, in the case of staples, such as rice or mass-consumed items such as tea and coffee, export duties may be sufficiently high to discourage growers from exporting their crops. To the extent this policy lowers domestic prices for these items, and if the consumers are from lower-income groups than the producers, these export duties have a redistributional impact in favor of the lowest decile of both rural as well as urban consumers.

The effect is by no means always favorable to redistributional efforts, however. In many countries producers of exportable commodities (particularly agricultural commodities) have lower incomes than the average consumer, and the export tax favors the higher-income consumers at the expense of the lower-income producers. Moreover, if domestic consumption of the taxed goods is relatively small, the effect may be to discourage any domestic production.

1/ See Goode (1984).

2/ This argument has been made for small rice producers in Thailand by Usher (1978); as well as by Lam (1977). A similar argument has been made for coffee producers in Haiti by Tanzi (1976).

Finally, export tax incidence depends on the administration of export taxes. Marketing boards and stabilization funds often levy and administer these duties in lieu of the central government in addition to functioning as the marketing agency. To the extent that the revenues of these boards and funds are often higher than their expenditures and that they transfer their surpluses to the general budget, the exporters, often comprising small producers, subsidize the rest of the economy. 1/

On the whole, then, little can be said with any certainty about the incidence of export duties in general and the effect of an increase or decrease in their rates on income distribution. Nevertheless, Fund-supported programs have tried to anticipate potential windfall gains to exporters arising from devaluation and made recommendations to channel a part of extraordinary gains to the budget through progressive temporary export duties. In one case, the need for budgetary revenue was so acute and the increase in profitability related to the devaluation so great that the marginal tax rate on coffee exports was 100 percent.

In conclusion, quick adjustment policies designed to yield reliable revenue, using unreliable administrations, often fall back on sharp increases in taxes on specific goods and services. These can be progressive (on gasoline, electricity, telephones) or regressive (on alcohol and tobacco). Insofar as import duties replace quantitative restrictions, their impact may be progressive; otherwise they may redistribute between sectors from the urban consumer good users to the least import-biased agricultural sector, i.e., those not relying on substantial amounts of imported fertilizers or machinery. Export duties are also likely to redistribute income and wealth between sectors rather than between country-wide income groups. The evidence is that the framers of Fund programs have paid attention to the distributive impact of indirect taxes. However, short-run revenue needs frequently force recourse to regressive increases in excise taxes, a phenomenon not restricted to developing countries or to Fund-supported programs.

1/ De Wulf (1983), op. cit., p. 365, makes this argument and cites U. Okonkwo, (unpublished, 1978) as having demonstrated the case for cocoa taxation in West Africa.

VI. Functional Expenditure and Its Impact on Income Distribution

Redistribution of income and wealth can occur not only through government decisions on taxation but also through government expenditure decisions, which can be categorized either in functional or economic terms. This section will consider the distributional effects of functional expenditure, while the next two will discuss changes in expenditures classified on an economic basis.

A functional classification of government expenditure often provides useful insight into important social issues. From a practical standpoint, most budgetary accounts under the "vote accounting" systems are roughly presented in this fashion and the authorities are familiar with this presentation. Moreover, expenditures can be organized and monitored in an analytical framework which permits and encourages appraisal of government outlays to determine how successfully the government is addressing major social objectives, such as educating its population. Thus this accounting framework provides an answer to the question "What share of government expenditures is spent on education?" When more sophisticated analysis is possible, an "achievement by objective" approach to government expenditure decisions can lead to benefit-cost comparisons that maximize the efficiency of government expenditures while achieving the stated policy objective. In the case of educational systems, for example, the choice may be one of choosing a delivery system (such as school consolidation, a system of radio or television programs, or more traditional programs) which will most efficiently spread literacy. 1/

In the context of the income redistribution effects of Fund-supported adjustment programs it is also appropriate to discuss the relationship between the functional expenditure pattern and income distribution within a country, and then to examine how a Fund-supported program affects the functional expenditure pattern and hence the income distribution. There are, however, several obstacles to such a study.

The difficulties with this approach may be more immediately obvious if a particular type of functional expenditure is considered.

1/ This argument could be generalized to any of the functional expenditure categories, which are identified by the GFS Manual (pp. 181-82) as:

1. General Public Service
2. Defense
3. Education
4. Health
5. Social Security and Welfare
6. Housing and Community Amenities
7. Other Community and Social Services
8. Economic Services
9. Unallocable and Other Purposes

Educational expenditures may be seen as an investment to enable society's poor to compete on an equal basis with the rich. 1/ Will an increase in educational outlays thus foster income redistribution? Not necessarily, for if the poor are generally also elderly, educational outlays will have little effect on existing income patterns. Under these circumstances, increased old age benefits would be a more effective redistributional tool, no matter how large the return on educational outlays. Moreover, even if higher education expenditure holds the potential to improve the income distribution (if the poor are the young), the absolute level of educational expenditure may be less important than its distribution. Higher educational outlays will serve little redistributional purpose if they are targeted at urban children and most of the poor reside in rural areas or if they do not promote basic education for all.

Usually, it is difficult to determine who benefits from government programs or what benefits have been conferred. It has often been suggested, for example, that educational outlays provide "externalties" that everyone enjoys in the form of a better educated society, so that everyone gains from these programs. The allocation problem is even more acute in the case of pure public goods such as defense where the exclusion principle totally fails and there is no obvious means of imputing the benefits from public expenditure 2/ to individuals in the society. Another issue is the value of these benefits. Some goods and services provided by the government are sold through the marketplace and thus are explicitly valued by the market system, but many goods and services such as education are normally provided free of charge to the recipients. Without a market-determined price, what is the value of these programs to the recipient? Finally, as mentioned above, public expenditures such as education frequently are imbued with a large element of investment, so that immediate imputation of the full amount of expenditure to the presumed target group may substantially overstate the benefits actually received during the year.

From just this brief review of some of the methodological issues in expenditure incidence studies, it should be apparent that even if the Fund could undertake more studies, they could only suggest tentative conclusions about the redistributive effects of government expenditure patterns under the best of conditions. For these and other reasons, studies of the income redistributional effects of government expenditure have reached contradictory results, with some concluding that government expenditure policies have had little or even negative redistributional effect and others suggesting that their effects have

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1/ Some studies have indicated that education may not be an important determinant of income in developed countries. See Jencks and others (1972).

2/ See Aaron and McGuire (1970), who suggest that these outlays can be related to some presumed utility of money function.

contributed to greater equality. 1/ Interestingly, most studies which report a favorable effect on income redistribution also suggest that the redistributional effect of specific benefit expenditure is somewhat less important, implying that the imputation formulas used to allocate general benefits were very supportive of the conclusions they reached. Several studies have indicated that the presence of any redistributive effects is related to the socioeconomic characteristics of the regime, further equivocating the significance of these results. 2/ The important ancillary issue of the redistributive effects of specific types of functional expenditure rather than overall expenditure programs has generally been restricted to those in developed countries.

Before attempting to provide a brief overview of what effect Fund-supported adjustment programs may have had on income distributions, it is important to recall from the discussion in Section II that these programs may contain some understandings about undertakings in specific sectors, but in the main their operative content concentrates on broad macroeconomic developments. In the case of functional expenditures, general reservations about the usefulness of specific expenditure criteria are reinforced by the lack of meaningful guidelines with which to evaluate expenditure levels. How much health expenditure is too much? At what point does educational expenditure become counter-productive? Defense expenditure is frequently cited as being excessive, but what level is adequate? 3/ These are clearly difficult questions to answer and ones which the Fund should be reluctant to embark on.

A detailed look at the adjustment programs supported by the Fund confirms the view that these programs only make limited reference to specific functional expenditures (see Table 6). Of the 78 programs

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1/ See Organización de los Estados Americanos (1973); and De Wulf (1975).

2/ Meerman (1979) concludes that public expenditures are very supportive of redistributional efforts in Malaysia, but also observes that redistribution from the more affluent Chinese to the majority Malay has been a central tenet of government policy which has been facilitated by the physical separation of the two groups in urban and rural regions, respectively. Tanzi (1974) argues that the lower-income classes in Latin America are predominantly rural individuals who cannot take advantage of government programs, and that without greater selectivity public expenditure in that region "may only continue or even aggravate the present redistribution process."

3/ Tait and Heller (1982) have attempted to approach these issues by using a variety of variables and regression analyses to "explain" different types of functional expenditure and thus determine if countries spend more or less for these purposes than comparable countries. This approach might thus be better characterized as descriptive rather than prescriptive, but it provides some tentative guidelines for comparison.

Table 6. Expenditure Policies Relating to Functional Expenditure in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Restrictions on central government outlays		
General public service	4	5
Defense outlays	5	6
Education	2	3
Housing outlays	1	1
Level of economic service	1	1
Restrictions on general government outlays		
Current expenditure	2	3
Public sector wages and employment	2	3
Official travel	4	5
Materials and supplies	4	5
Purchase of vehicles	3	4
Other	1	1

Source: Appendix I.

surveyed, only 4 contained restrictions on general public services, 5 limited defense outlays, 2 limited educational expenditures, one related to housing, and one related to the level of economic services. Thus, only about 1 in every 6 programs restricted any element of functional expenditure, and only one fourth of these were of a specific nature which can in any direct sense be related to distributional concerns. There also were, however, a number of programs which did establish limits on general government expenditures such as caps on current expenditure (2 programs), public sector wages and employment levels (2), official travel (4), materials and supplies (4), vehicles (3), and other (1). Given the very tenuous relationship between expenditure patterns and income distributions, it is hard to argue that this element of Fund-supported adjustment programs has had an adverse effect on income distributions.

VII. Government Expenditure by Economic Type: Wages, Salaries, Interest, and Investment

The adjustment efforts incorporated in Fund-supported programs often have significant implications for certain types of expenditures which are most easily identified by their economic function. In terms of operational importance, the main economic categories are wages and salaries, other purchases of goods and services, interest payments, subsidies, transfers, capital outlays, and net lending. The important areas of subsidies and transfers to public enterprises are discussed separately in Section VIII. Otherwise, the emphasis on government current expenditure in the 78 programs surveyed was split more or less equally between wages and salaries (in 44 programs) and goods and services (46), while policies to limit capital investment and net lending were also important (45)--see Table 7. The two most significant policy actions were a curtailment of investment outlays (at least in real terms) and restraint in the public sector wage bill.

1. Wages and salaries

Government wage and salary policies often have a major role in the determination of national wage and salary structures. The salaries the government can offer to existing or potential employees are commonly known, and unidentified nonwage incentives are seldom attached to new wage pacts. In some countries, the salaries of public employees are routinely published as an item of public information. More importantly, the public sector often dominates the determination of wages in the nonagricultural sector through its relative size. The government normally determines salaries for the public enterprises as well as for the military and the civil service. In developing countries, where the government at times guarantees employment for school graduates and may even act as an employer of last resort for its citizens, public sector employees comprise an average of 44 percent of nonagricultural employment. In some countries the ratio is over 70 percent. 1/ Clearly, public sector wage determinations in these countries could have a significant demonstration effect on average salary levels.

There are a number of reasons why wage levels could rise to levels which exceed the value of the typical worker's marginal product, but the most important is probably the government's sincere intent to improve the well-being of its citizens through higher general wage levels. Whatever its origins, an excessively high wage structure normally sets the stage for a demand management problem: high wages fuel aggregate consumption, just as an artificially high wage rate encourages an inappropriate substitution of capital for labor in an economy in which labor is relatively abundant. Thus for the reasons

1/ Heller and Tait (1984).

Table 7. Expenditure Policies by Economic Type in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Restraint of central government current expenditure	71	91
Wages and salaries	44	56
Freezing or reduction of numbers of government employees	23	29
Freezing, reduction, of wage increase 1/	31	40
Change in the employment policy	10	13
Limit on salary indexation 1/	14	18
Goods and services	46	59
Improvement in overall expenditure controls	24	31
Cumulative monthly/quarterly restrictions on expenditures	9	12
Reduction on appropriation for specific expenditures	27	35
Capital expenditure and net lending 2/ 3/	45	58
Curtailment of investment	33	42
In real terms	18	23
In nominal terms	13	17
Other	2	2
Limit or delay new investment or new projects	21	27
Improvement of investment program	16	21
Reduction in domestically financed investment	9	12
Expenditure administration	34	44
Improve expenditure control	33	43
Others (shift in budgetary priorities)	3	4

Source: Appendix I.
1/ In one case, a policy in the opposite direction was suggested.
2/ World Bank collaboration specifically mentioned in 21 cases.
3/ In eight cases (not included) the policy mentioned was in the opposite direction.

just described, the aggregate demand problem may be due to a government wage structure that is high and/or overemployment in the public sector, either of which inflates the overall public sector wage bill beyond the economy's ability to sustain the resultant demand. 1/ Under some circumstances, government outlays for wages and salaries have exceeded 50 percent of total expenditures, and thus constitute a major contributor to the supply-demand imbalance.

In general, some combination of the above factors has been evident in many countries seeking Fund-supported adjustment programs, and restraints on wages and salaries were a policy in 56 percent of the programs surveyed in the sample. These efforts to lower the wage bill took a number of different approaches, including wage-specific policies (in 31 cases) that undertook to limit the increase in nominal wages and/or to lower real wages, and less often (in 23 cases) freezes on employment levels. In some cases where wage increases were contained, the impact of the low average rate of increase was moderated for low-income employees by skewing the wage increases to the lower paid, while the limits on new employment frequently allowed only the replacement of retiring workers or the recruitment of new employees with special skills (e.g., computer experts).

The implication of these measures for income distribution patterns is relatively clearcut. Government workers in developing countries are often relatively well-off, so that a decline in their incomes from whatever cause may improve income equality, although this may come at some sacrifice to those who experience wage cuts. The comparison here to all individuals may well be unfair, as government workers generally reside in urban areas where the cost of living is significantly above the comparable level for rural inhabitants and possess skills which may be much better compensated in the private sector. There are many countries in which government workers are substantially underpaid compared to their urban counterparts, and a lowering of their salaries worsens the income distribution in urban areas. The practice of skewing wage increases toward those in the lower salary scales (by not imposing the income cut or the de-indexation on the lowest paid) also plays some small role in equalizing incomes, although the wisdom of this practice may be questioned in terms of allocative efficiency. Indeed, one of the principal problems many governments now encounter is that of a scarcity of competent civil servants, as their policies of using the civil service to absorb surplus labor has led to a compression in public sector salaries, making it difficult to attract skilled employees and aggravating the practice of corruption.

1/ Large rural/urban wage differentials have also been cited as causing migration from rural to urban areas, increasing the demand for public services without necessarily creating a corresponding increase in supply due to the high unemployment among these migrants. See Herrick (1965); and Todaro (1969).

2. Other purchases of goods and services

These outlays comprise such diverse expenditures as those for office supplies, rent, fuel and light, repairs and maintenance, travel, communications, nondurable goods, and all nonwage military purchases. As an eclectic grouping of numerous small noncapital expenditure items they are hard to characterize, but collectively they provide the physical support which allows government employees to perform their duties. Despite their self-evident importance, purchases of other goods and services often bear the brunt of any adjustment effort as they have no obvious constituency and the impact of these cuts on the provision of government goods and services is often delayed. 1/ To provide but one example of how costly these "savings" can be, the immediate effect of not patching road potholes is so small as to be inconsequential, but continuation of this neglect will result in the whole road needing replacement sooner than it would have otherwise.

The many and diverse elements of this expenditure category make it virtually impossible to assess, in a generic sense, how reductions in these outlays will affect the income distribution. The linkages following from these outlays further complicate any meaningful analysis of their income effects. Most direct purchases of goods for government use originate in the urban sector, but most of these in turn create an echo effect in the rural sector which transmits government demand throughout the economy. The distributional effects of expenditure restrictions on "other purchases" will thus clearly depend on their original composition and specific targeting of expenditure cuts, if any. In this regard, it is of interest that 9 of the programs surveyed attempted to improve on overall expenditure control by seeking to restrict budgetary disbursements for these outlays, while 27 programs provided for reductions in the appropriations for specific outlays. Overall expenditure control was mentioned in 24 programs; the distributional interest of this is impossible to assess, but clearly it is desirable in itself since to the extent that the public sector spends more efficiently everyone gains.

3. Interest

The prolonged exposure to high fiscal deficits, which most countries have experienced during the past decade, has profoundly affected the composition of government expenditure patterns for two

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1/ Moreover, the actual amount spent for these purposes is often overstated by the practice of using these appropriations to supplement wages and salaries. In some countries civil servants travel extensively to qualify for relatively generous per diem allowances, while in others government employees sell government goods and services as a regular matter to increase their effective compensation.

reasons of roughly equal importance. First, the need to finance persistently high budget deficits year after year has greatly increased the stock of government debt. Second, the increase in interest rates which has been linked to the growing public sector demands on international capital markets by the developed countries has sharply increased the costs of servicing outstanding external debt. The cumulative effect has made interest payments by far the fastest growing component of public expenditure in most countries. 1/ On average, the growth in debt-servicing charges was a little higher in industrial countries than it was in developing countries, which was perhaps related to the share of external debt which they received on concessional terms and the relative willingness in developing countries to maintain low interest rates on the domestic component of government debt.

Obviously, the existence of high and rapidly rising debt-servicing charges can be at once both a symptom and a cause of poor demand management policies. At first, large government deficits have relatively little impact on budgetary outlays, but after a large pool of outstanding debt is accumulated the high interest payments absorb a significant share of the resources diverted to the public sector. Fund-supported adjustment programs typically do not address the issues of debt-servicing costs directly, but do focus on a number of policies which will act over time to reduce these costs in relation to other expenditures. These programs normally stress improvements in demand management policies, typically by limiting the size of the government deficit. Of the programs surveyed, 65 (or 85 percent) proposed a reduction in the government deficit as a share of GDP (see Appendix I). Forty one (or slightly more than half) imposed limits on bank credit to the central government, with 65 (83 percent) limiting the size or composition of external debt. Fund-supported adjustment programs are also frequently linked to debt-rescheduling exercises which reduce the immediate burden of debt servicing. However, in many circumstances the programs stress the establishment of interest rates which are positive in real terms, and which can actually increase these charges, both in absolute terms and as a share of GDP. Policies to improve resource allocation through such measures as higher interest rates and depreciation of the domestic currency were factors in increasing service charges for domestic and the local currency cost of foreign debt, respectively.

In the context of distributional concerns, the distinction between foreign-held and domestic debt becomes important. In the case of foreign-held debt, the recipients of debt-servicing payments are outside the country and the redistributional issue hinges solely on the payments side, in the sense that current and future generations are burdened by the need to reduce their consumption to free the resources to service the external debt. Of course, a depreciation only increases the local currency value and not the level of real

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1/ J. de Larosière (1984b).

resources which must be transferred abroad, so that the issue very much depends on the source of the public savings which must be realigned. In the case of domestic debt, both the payments and receipts sides are relevant and the issue of direct income transfers is germane. (For a discussion of the wealth effects of debt financing, see Section IX.)

Under these circumstances, it is difficult to even speculate about the effects of this aspect of Fund-supported adjustment programs on the income distribution even in the near term. If the overall revenue system is regressive, then it follows that any increase in external debt-servicing charges (related to a depreciation in the currency) will bear harder on the lower-income classes, worsening the income distribution. A higher debt-servicing burden will also reduce the amount of government income which is available for redistribution, and make it difficult to reduce the budget deficit by lowering other outlays. Normally, domestic nonbank government debt bears a fixed interest rate, so that any increase in domestic interest rates does not translate into any immediate rise in transfers to the debt-holding public, but as this debt is rolled over it will require higher servicing costs and the income distribution will likely be skewed toward greater inequality. In the medium to long term, the constraints on debt under a Fund-supported program are likely to reduce government interest payments, but the more important issue then becomes who will contribute the resources to narrow the fiscal gap.

4. Capital outlays

While the concept of a capital budget to guide and support construction projects that will provide lasting benefits has been accepted in nearly all countries, many developing countries have expanded this conceptual framework into a national program for "development." An especially aggressive development program can impose a substantial resource burden on the budget of the economy.

A difficult budgetary position may be further exacerbated by the recurrent cost requirements necessary to make development projects fully operational. 1/ The conflict between an overall budgetary constraint and the government's desire to pursue its development objectives may degenerate to the point where potential benefits of completed capital projects are dissipated by funding insufficient to run and maintain previously constructed development projects. 2/ This outcome could thus be characterized as a "paradox" of development funding in which the government's efforts to increase development

1/ See Heller (1974); Comité Permanent Inter-États de Butte Contre la Secheresse dans le Sahel (CILSS 1980)); and FAD (1976).
2/ See Wongue (1983).

outlays actually result in dysfunctional investment, much as the "paradox of savings" characterizes a situation in which individual efforts to generate more savings actually lead to smaller aggregate savings.

To cope with these concerns, Fund-supported adjustment programs have undertaken general lines of action in conjunction with the IBRD. Public investment programs have been curtailed in 33 programs (42 percent of the programs in the survey), 18 of which entailed reductions in real terms. The domestic contribution to the capital budget was reduced in 9 programs (12 percent), the investment program was otherwise streamlined in 16 cases. Excluding the double counting of various types of constraints, 35 programs in all (45 percent) contained some restrictions on capital expenditure. Given the characteristics of these projects (which often have long gestation periods), the distributional effects of the employment opportunities created during the building phase, and the mixed results achieved by these projects, it is difficult to determine how restrictions of this nature have affected the income distribution.

5. Conclusion

Freezing both the number employed in the public sector and their remuneration has been a frequent policy in Fund-supported programs; this, combined with limiting wage indexation, has often caused a decline in government workers' pay relative to others. While this causes vocal urban opposition, it may frequently improve income distribution as government employees in developing countries are often relatively well-off. This relative improvement has been enhanced in those countries where the lowest paid have not been subject to the same cuts as the higher paid public employee. Whether these policies are desirable in terms of government efficiency is debatable. Other current payments have such diffused distributional characteristics that little or nothing can be ascribed uniquely to the distributional consequences of expenditure constraints in Fund-supported programs.

VIII. Policies Regarding Subsidies and State Enterprises and Their Relationship to the Pricing System

1. Subsidies and transfers

As described in Section II, the typical country undertaking a Fund-supported program subsidizes selected goods and services and these open-ended demands on government expenditure are a major cause of rising fiscal deficits and stimulate further inflationary finance. Few policies undertaken under Fund-supported programs receive as much critical attention as reductions in budgetary subsidies through increases in the prices of basic goods such as food, transportation, and petroleum. The containment of subsidies is widely viewed by critics of Fund-supported programs as an adjustment policy that is regressive, frequently affecting a large number of the population. In some cases, the budgetary costs of these subsidies are a sizable share of government outlays. Nonetheless, the prices for these goods are often maintained at low levels, in part to symbolize the government's commitment to protect the lower-income classes. The magnitude of the problem is such that in over half the programs surveyed (47 out of 78), subsidy control was a policy measure (see Table 8). In 37 cases the issue was one of capping or reducing the subsidies of one of three major items (food, petroleum, and fertilizers) and in another 10 cases other subsidies were mentioned.

Table 8. Expenditure Policies for Transfers and Subsidies in Fund-Supported Adjustment Programs

	Number of Programs	Percent
Transfers and subsidies	47	60
Capping or reduction in subsidies	37	47
Food	27	35
Petroleum	21	27
Fertilizers	15	19
Reduction in other subsidies	10	13
Curtailment of current transfers to NPEs	21	27
Control of state enterprise operating expenditures	19	25

Source: Appendix I.

In view of the widespread perception that these price increases are Fund inspired and, in particular, are "anti-poor," it is important to understand, first, why it is that the prices of particular goods become primary targets for economic adjustment, and, second, whether or not increases in these prices are, in fact, biased against the poor. A further objective of this section will be to address the more general issue of using administered prices to improve income distribution.

a. Administered prices

Why does economic adjustment require increases in the prices of goods and services that are so directly associated with consumer well-being as those of food, petroleum, and public transportation? The answer, as outlined in the description in Section II of a country drawing on Fund resources, is grounded in political and historical circumstances which have resulted in prices of these goods that are held far below their economic value with serious, and often unrecognized, consequences in both the short and long run. Petroleum, for example, may be considered too strategically important for its use to be left to the decisions of the private sector. Food price policy, on the other hand, may have been inherited from a colonial policy based on wartime shortages and price administration, or may have evolved from marketing boards' policies originally intended to stabilize producer prices and improve food marketing conditions. 1/ Regardless of the origin of the government's price setting role, however, once the government is identified with responsibility for these prices, every increase becomes a major political issue. As a result, the prices of these goods often lag far behind the general rate of price increases in the economy, with the extent of the lag sometimes an index of the strength of the government's mandate.

b. The rural-urban terms of trade: the general problem

Problems created by the politicization of prices became acute with the rapid worsening in the commodity terms of trade associated with the inflation of food and petroleum costs that characterized the last decade. Attempts to protect the public from the effect of these increases by subsidizing consumer prices led to a loss of budgetary control and to deficit-induced inflationary pressures that, in numerous cases, pushed the rate of inflation in excess of 20-30 percent annually. In an environment of fixed exchange rates, this had a devastating effect on the real exchange rate and the urban-rural terms of trade in developing countries. As the purchasing power of receipts from agricultural exports diminished, farmers turned increasingly to

1/ On the Indian subcontinent, for example, government procurement of domestically produced foodgrain, along with a mechanism to restrict interstate trading in foodgrains, started during World War II (Lele, 1971).

the domestic market. Here, government policies such as the maintenance of an overvalued exchange rate held down the price of food, eroding incentives, and threatening the economic base of market-oriented agriculture. 1/

The dynamics of today's subsidy policies and the distributional implications of changes are intrinsically tied up with this deterioration of the rural-urban terms of trade. Subsidies on food and increased food imports were at least initially intended to put the price of basic staples within reach of urban residents. Over time, they encouraged the migration of those in rural areas to urban centers, as those still in agriculture faced diminishing real incomes because of price controls. This movement exacerbated the original imbalance as it simultaneously increased the urban demand for cheap food and reduced the rural sector's agricultural capacity. With emerging awareness of the problem of failing domestic food production and growing dependence on imports, large commercial farmers successfully lobbied for subsidized irrigation water, fertilizer, diesel fuel, and agricultural credit, further eroding the small farmer's ability to obtain conditions which might make him competitive.

Under these circumstances, a policy of improved price flexibility can serve to strengthen the overall adjustment program, transmitting exchange rate movements throughout the economy, restructuring incentives, and improving resource allocation. In recognition of this role, pricing policies have been an important policy in 27 (35 percent) of the programs surveyed.

c. Price policies

(1) Food

One purpose of a devaluation can be to establish appropriate agricultural incentives and incomes, but it can only do so if prices are sufficiently flexible to allow changes in the domestic currency value of foreign exchange to work its way through to the producer. This, in turn, requires increases in prices of both export and domestic food crops, reflecting the increased domestic currency value of both agricultural exports and of food imports. However, often these increases in producer prices for food result in higher levels of government expenditures and unsustainable budgetary deficits unless they can be avoided by increasing domestic food prices. Of the 78 programs surveyed, 27 involved measures to reduce the cost of food subsidies. What are the distributional implications of the consequential price movements?

1/ For an excellent volume devoted to an exploration of many of these issues, see Schultz (1978), especially the contributions by Schultz, Brown, and Able.

To answer this question, it is important to recognize the two sides of the price issue. Food is not only a consumer item, but is also an important source of income, particularly in rural areas. 1/ The poor lose in both respects when food policies are directed at maintaining low food prices. The discussion above which examined the declining rural-urban terms of trade focused on the income issue. However, the cost side is no less important.

Although much rhetoric has been voiced over the need for food subsidies to protect the poor, the fact is that most food subsidies are directed toward the urban sector, whereas the really poor tend to live in rural areas. Indeed, there is overwhelming evidence that severe hunger is a greater problem in the countryside than in the city. As Eberstadt (1981) observes:

> "To be sure, urban hunger is more visible, more dangerous politically, and more immediately influenced by the limited tools available to poor governments. Throughout the poor world, however, it is the villagers who are the more needy. The hunger which western visitors encounter in the big cities of the poor world is shocking enough, but the fact of the matter is that children grow more slowly, and end up smaller and lighter, in the countryside. They also die earlier: in India, for example, a person born into the comparatively easy routine of city life can expect to live about ten years longer than one who must work and eat in the country."

Clearly, the use of administered prices to improve income distribution to the "ultra-poor" is severely limited by the objective conditions of poverty--to benefit from a subsidy, one must have the purchasing power to buy subsidized goods. 2/ This implies that only one type of food subsidy, that on the least expensive calorie source (which is the food of the poor), is likely to bring about the desired distributional effect, and then only if the food is perceived to be

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1/ A recent numerical examination of food subsidies indicates that the loss in agricultural income due to the price-depressing effect of food subsidies for the economy as a whole far exceeds the budgetary costs of the subsidy (Schneider 1985).

2/ In a study of income distribution and poverty in Mexico, Bergsman (1983) notes: "Poverty in Mexico turns out to look pretty much like poverty in virtually every other middle-income country that has much of it. It is mostly in rural areas, and mostly among people who are not only economically, but also socially and usually culturally, different from their more affluent compatriots. It appears in countries that exploited agriculture to finance industrialization by lowering the price of agriculture's products relative to the price of manufactures. It appears in 'depressed areas.' Brazil, Peru, Turkey, and the Philippines all share these characteristics."

inferior by higher income classes. In general, the poor buy foods that differ markedly from those consumed by the rest of the population, and while many of the malnourished are small farmers and their families, the majority are landless or nearly landless agricultural laborers, those in other low-paid, nonfarm rural employment, or the unemployed. Clearly, these groups benefit little, if at all, from income transferred through largely urban-oriented government subsidies on foods which, even at subsidized prices, are likely to be beyond the reach of the "ultra-poor." Tarrant (1982), for example, observes (in Bangladesh):

> "The ration system, as it is at present operated, is not intended to provide cheap food for the really poor. The really poor could not afford to purchase the food, at whatever cost the government chose to provide it."

The emphasis on economic pricing, which is the rationale for the price and exchange rate policies in Fund-supported programs, will inevitably restore more appropriate rural-urban terms of trade, and, in conjunction with the redirection of resources to the rural sector, the income of rural residents will improve. These developments will normally have adverse implications for some, and perhaps many, urban dwellers, as discussed in Appendix III. The loss to the most vulnerable may be reduced or eliminated, through appropriate targeting measures. 1/ The overall effect on the income distribution is almost certain to be positive, however, as the appropriate incentives are transmitted to the productive sectors and the rural poor receive a more appropriate reward for their labors.

(2) Petroleum

The prices in domestic currency of other imported goods must also be increased if the full benefits of devaluation are to be achieved. Petroleum products are the most important of these other goods, and their subsidies were adjusted in 21 (27 percent) of the programs surveyed.

The rationale for eliminating or at least reducing these subsidies is to eliminate inefficient energy use. In the case of petroleum, these pricing incentives not only affect consumers through their direct consumption of petroleum products, but also indirectly through their use as important inputs in production. As long as the use of petroleum is subsidized, firms using artificially cheap petroleum have less incentive to economize use of the scarce resource and a lower cost structure than the underlying market forces would warrant. If these firms were to pay the actual scarcity value of foreign exchange, their

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1/ For a more thorough discussion of targeting issues, see Schneider (1984); and Mateus (1983).

costs would rise, and many of them would encounter difficulties in continuing production. Clearly, the capital and labor employed in these industries are better off, in the near term, than if such a firm were to close due to prohibitively high energy prices. For others not privileged to be employed in the formal sector, however, the subsidy is likely to reduce sharply the opportunity to participate in the benefits of economic growth.

In effect, the energy subsidy creates an impediment to further employment generation. Through its effect on relative prices, the subsidy encourages the flow of resources into energy-intensive, labor-saving technology, (often replacing low-paid unskilled labor, e.g., road building, intensive agriculture) until the growth of industry based on such technology is limited by the cost of the subsidy burden. Either these subsidies are met through a diversion of resources from low energy users to high energy users through taxation, or the necessary financing is met through bank credit, with a consequent worsening of inflation and the balance of payments. In either case, potential economic growth and employment generation, and therefore the well-being of the unemployed and the underemployed, is sacrificed by the short-run commitment to those employed under the existing technology base.

2. State enterprises

a. Distributional concerns

State enterprises in many countries now have an important macroeconomic role and their operations have considerable impact on financial management. 1/ In 56 of the 78 Fund-supported programs, nonfinancial state enterprises were included in the policy package (see Appendix I). They are also often considered to be one of the instruments "to promote redistribution of income and wealth." 2/ Notwithstanding the importance attached to this aspect by policymakers both in governments and enterprises, it has not received much attention in

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1/ For a discussion of these aspects, see Premchand (1983a); and for an empirical survey of the shares of public enterprises in aggregate output and investment, see Short (1983).

2/ See Government of India (1984). It should be noted, however, it may not always be explicitly stated as an initial objective of enterprises but often becomes an important element of their policy (Tait, 1977).

the literature on enterprises. 1/

Although recent experience indicates that most state enterprises owe their establishment more to pragmatic, organizational considerations (such as using foreign aid) than to ideological considerations, it is also true that considerations of social justice may encourage public ownership of strategic industries or "commanding heights of the economy." Wealth is thus owned publicly and not privately which, in itself, can have a profound impact on the distribution of wealth. This purpose has motivated the formation of new enterprises as part of the development program in many developing countries.

It is, however, the day-to-day operations of enterprises that affect income distributions the most, as the prices of goods and services provided by the nonfinancial public enterprises have a direct impact on distributions. Very few of these subsidies are specifically compensated for by governments, normally taking the form of foregone returns on investment and/or additional borrowing; however, the operational losses of enterprises are often financed through ex post facto transfers from the public budget. In practice the enterprises do not, however, usually adopt dual or multiple pricing policies to provide goods and services to targeted income groups. Consequently, subsidized products are made available to all income groups, not just to those below the poverty line. 2/ In addition, nonfinancial public enterprises also pursue vertical redistribution policies. These aspects are illustrated in brief in Table 9.

While the state enterprises may have a clearly defined set of policy goals, the actual progress toward these objectives including

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1/ Distribution has often been considered more as an ethical question and as a social act as distinct from the "scientific" or "objective" issues of resource allocation and market efficiency. See O'Connor (1974). Also, distribution was seen as one of establishing an equality of opportunity and economic growth (or increase in the size of the pie rather than its distribution) was viewed as the main answer. In most areas of development economics, there is substantial ambiguity as to which handicaps are to be removed first in economic growth. In the process, some studies have assumed away the problem. For example, Turvey (1971) who examined the optimizing possibilities of enterprise operations assumed that "the distribution of real income is not the concern of a public enterprise so that it should act as though that distribution were always ideal."

2/ See Premchand (1983a) for a discussion of these experiences. Trebat (1983) provides a detailed account of the experience in Brazil in this regard. Such policies have been pursued in nearly all countries including many industrial economies.

Table 9. Working of State Enterprises and their Distributional Implications

Purpose	Nature of action taken or instrument of distribution	Implications: During normal periods	Implications: In the context of financial constraints
Fairness and social justice through ownership of productive resources.	Establishment of new enterprises.	Increases in public investment financed either by current savings or through borrowing.	Distressed privatization.
Public interest promotion through help to the weaker sections of the community.	Supply of subsidized goods and services provided by enterprises either in a general manner or through dual or multiple pricing practices (internal cross subsidization); primarily applicable to trading, transport, and housing sectors.	Transfers from government budget or adjustment in the surpluses to be paid by enterprises to governments.	Reduced transfers and subsidies from government budget; adjustment of enterprise tariff to cover increased costs.
Vertical distribution	(a) Establishment of special enterprises to cater to the needs in specified sectors.	Subsidized credit, marketing and other facilities.	Reduced subsidies and emphasis on cost recovery.
	(b) Higher wages and increased employee benefits including housing.		Restrictions on wage increases or maintenance of wages at existing rates and reduced benefits.
	(c) Price support systems that can be utilized for increasing or reducing commodity production.	Responsive agricultural production systems with concomitant results on government finances.	Adjustment in price supports in the light of overall fiscal policy; short-term impact on production, procurement and storage of commodities.
	(d) Greater employment	Expansive employment strategies through takeover of sick units, conversion of seasonal to regular employment, and maintaining or even expanding production even in a context of a deteriorating price situation.	Defensive employment strategies for maintenance of highest manpower levels through early retirements, forced holidays, training of manpower for rehabilitation, and more selective takeover of sick units.
Horizontal distribution	(a) Sectoral cross-subsidization	Low public utility prices to reduce input costs of strategic or basic industries.	Upward movement in tariff to prevent further deterioration in utility finances.
	(b) Relative changes in the price support systems	The direction of these changes depends on the policy preferences of the government either to favor the rural sector or to cushion the impact on the urban consumer and on the overall financial status of the government.	

Source: Text, Section VIII.

redistributional concerns is partly contingent on the financial stability of the enterprises. Financial constraints have often forced state enterprises to cut back on investment, to increase their tariffs to cover increased costs, to restrain costs, and to pursue defensive employment strategies; in more critical circumstances, employment has been reduced. These measures are taken by governments and enterprises even in the absence of Fund-supported programs. Indeed, these are measures that are commonly adopted by all enterprises regardless of their ownership. The distinguishing feature of state enterprises is that they are expected to pursue noncommercial objectives in the larger interests of the community. However, these noncommercial objectives may not be feasible under difficult financial circumstances.

Actual experience with the operations of state enterprises in a number of countries reveals that many of these have not effectively served to redistribute income. Often employment opportunities were diminished by the enterprises' choice of more capital-intensive technology in production, and selective wage increases have actually contributed to wage rigidities and the establishment of favored classes. 1/ Moroever, open-ended subsidy policies for these enterprises contributed to a shift of the burden for their countries to the government budget to increased deficit financing. The impact of these unintended consequences cannot, however, be measured precisely, although their directions are clear. 2/

b. Fund-supported programs and state enterprises

Policy measures relating to state enterprises have always been an important component of Fund-supported programs but this emphasis has increased in recent years, reflecting the growth of their financial demands and related issues. Many programs emphasized that state enterprises should attain financial solvency in the sense that they should stop being a drain on the budget and that their capacity to borrow abroad without government permission should be abolished.

1/ See Glade (1983) and Webb (1973) for a discussion of the experience of Argentina and Peru, respectively. Glade suggests that there was a risk of unwittingly creating a "new class." In India, the employees of the nationalized banking sector are generally believed to be a privileged class and their wage increases have sparked off more demands for similar increases in other enteprises.

2/ Even in regard to those areas where establishment of enterprises was expected to lead to better distribution, Kanapathy (1979) suggests that the new ventures in Malaysia might have "crowded" the traditional business areas owned by Bumiputras, the native Malay section of the population normally favored by government policies. Also, see Mallon (1982b) and Sheahan (1976).

"Solvency," in this context, is interpreted as charging prices that will cover operating costs while at the same time making a reasonable contribution to capital maintenance and new investment. Some 22 of the programs surveyed curtailed current transfers to state enterprises, and 6 specified subceilings on credit to state enterprises either for the sector as a whole, or for individual or small groups of enterprises.

Pricing policy provisions were a common feature of programs although in most cases they reflected prior actions; they constituted performance criteria in very few cases. In addition, many Fund-supported programs contained provisions relating to wages and general intentions to reduce overstaffing. Wage policies for those enterprises were generally geared to ensure that the enterprise policies were in accord with national policies to contain cost-push pressures. Moreover, some programs contained one or several of a wide variety of measures that could conveniently be labeled as administrative measures, and included intentions to improve managerial efficiency, autonomy, and governmental control of operating expenditures (in 17 of 78 programs), as well as intentions for divestiture of enterprises to the private sector (in 19 of 78 programs); such measures are usually undertaken in collaboration with the IBRD.

In Fund-supported programs, therefore, the focus on state enterprises has been essentially concerned with selected enterprises, over a short period, and with financial solvency. The impact of the programs on distributional objectives is difficult to quantify and is a matter for surmise even in the best of circumstances. Furthermore, due weight has to be given to counterfactual aspects. It is possible that the enterprises covered in the programs were not the ones chosen by the authorities for distributional goals (and if they were, they could be compensated for by the operations of other enterprises that have been assigned a distributional role), and that distributional goals could still be attained in the medium or long term. Although Fund-supported programs emphasize price revisions, their adverse impact on the distribution patterns was not likely to be significant unless the rate of subsidy, rather than the absolute amount of subsidy, was reduced. Although no details are available in this respect, it would appear that most price revisions were intended to catch up with cost increases that have already taken place or to validate prices which the populace already paid in the parallel markets but, at the same time, this transfers incomes from the unofficial, untaxed sectors to individuals and companies liable to taxation (both direct and indirect) thus, probably, improving equity.

3. Conclusions

The principal conclusions to be drawn from this review of subsidy and public enterprise issues are the following:

a. The price policies followed under Fund-supported adjustment programs are typically oriented toward correcting distortions in the rural-urban terms of trade that are a major cause of both rural and urban poverty and unemployment.

b. Both the allocational and the macroeconomic effect of energy subsidies may have employment-reducing effects that are likely to hurt the poor the most (unskilled labor replaced by machines).

c. Unless subsidy programs are very carefully targeted, most of the benefits will "leak" to those who are relatively well-off. Thus many subsidy programs actually promote rather than redress income inequality, at least insofar as the lowest income groups are concerned.

d. Open-ended subsidies to state enterprises from the budget lead to unintended and unmeasured consequences but if unofficial incomes and sales can be transferred to official, taxed markets equity should be improved.

These individual points support the conclusion that the pricing policies typically encouraged under Fund-supported programs do not worsen the income distributions in developing countries, contrary to popular belief. They can act to improve income distributions, mainly because the rural poor do not participate effectively in the subsidy programs and, in certain cases where producer prices are restrained, the poor in effect bear the burden of providing the subsidy. With respect to the public enterprises, Fund-supported programs try to ensure that operating costs are covered and that a contribution is made to maintain and expand the enterprises' capital. The pricing policies to achieve this may sometimes appear regressive but frequently the redistributive effect of state enterprises is ill-defined to begin with, often invalidated by shortages which lead to the development of parallel markets, and vitiated by deficit budget financing.

IX. Debt Financing and Distribution

Fund-supported programs nearly always (in 65 out of 78 programs surveyed) look for a reduction of the budget deficit as a percentage of GDP, which in turn is usually associated with limits on the raising of new external public debt (in 65 out of 78 programs) (see Table 10). As these constraints clearly influence government revenue and expenditure policies, they obviously can have significant distributional consequences, but the effect is indirect rather than direct, making the distributional impact difficult to identify. This is a complex subject and is touched on only briefly to round off the discussion of fiscal policy (in regard to changes in the size and ownership of the debt).

Table 10. External Debt Policies Employed in Fund-Supported Adjustment Programs

	Number of Programs	Percent
External debt policies	71	91
Control of level and maturity of external debt:	65	83
Public or publicly guaranteed	65	83
Private sector debt	14	18
Other debt management policies	42	54
Debt relief/rescheduling	23	29
Other	41	53

Source: Appendix I.

The distribution of income and wealth is affected both at the time the borrowing takes place and through time. If the government is to finance its deficit by domestic nonbank borrowing, it must induce wealth holders voluntarily to accept government-backed assets instead of private sector assets. The government obtains control over resources, and the effect of this on the distribution of wealth depends on what happens to prices in the different asset markets. The sale of assets in the private sector to finance purchases of government stocks may

depress these asset prices, and the government has the choice of using its newly acquired resources to buy other assets (forcing up their price) or to purchase current services. No simple effect on distribution or allocation is identifiable. A popular thesis is that the private sector can be "crowded out" when the government competes for funds in the market. The implication is that saving remains unchanged and that funds are switched from private to public sector investment. Whether or not this is desirable in distributional terms depends, in the long run, on whether the returns from public sector deficit spending are higher than those which would have occurred from the use of the same funds in the private sector. If they are lower, there is a real loss of output for future generations and this does impose a real burden on the society even if the debt is financed domestically. 1/

Clearly, it would be impossible to evaluate all these alternatives in Fund-supported programs. However, in many instances it is possible to conclude that much public sector spending in the recent past has, as described above, caused more problems than it has solved. A further uncertainty is that bond purchases are often not completely voluntary; public and private sector agencies have nonmarket incentives to buy government bonds. This may have adverse consequences for those who actually own the funds which are automatically invested in government securities; for example, the eventual recipients of social insurance may be severely penalized through their agency's purchase of government long-dated bonds at negative real interest rates. In this case, the distributional aspects of state borrowing are likely to be regressive and measures in Fund-supported programs that move public sector borrowing toward genuine bond markets at positive real rates of interest are probably improving the long-run distributional characteristics of the economy.

There is a further dimension to this argument. When the government issues bonds instead of raising taxes, not only does it obtain command over real resources but it also creates an asset in the private sector.

1/ However, the issue is not simple. It may be assumed that the government knows what it is doing and that it reflects accurately the welfare function of the community at large. If the government decides to borrow and build hospitals rather than, say, a steel mill, this may represent a social choice even if in the long run this leads to a lower measured national output. If society decides that health and welfare are more important than the growth of national output, the lost output is not necessarily part of the burden of the debt. Moreover, private investors often avoid productive investments in favor of stores of value such as gold, lowering the growth potential of the economy.

Bondholders may consider these bonds to be an increase in their wealth, and in response to the wealth effect raise their consumption at the expense of savings--once more affecting the future rate of output growth. There are at least three difficulties in this. First, although the range of assets may be expanding, the increasing number of bonds sold may cause a depression of the values of other assets, so that the total value of wealth may not increase. Second, somewhere else in the system there are taxpayers who are worse off who must pay the interest on the debt and if the effect is symmetrical these (worse off) taxpayers would consume less and save more, offsetting the decisions of the bondholder. Finally, taxpayers may capitalize the future obligations that public debt issues embody and hence not view bonds as an increase in net wealth; therefore, there will be no difference between taxation and borrowing. Even if people behave rationally the effect is not certain for, as discussed earlier, it depends on the willingness of governments to run permanent deficits on average.

Compared to the alternative of taxation, it is clear the distribution effects of debt financing are likely to be very different. Indeed, as taxation is required to finance both the interest payments and any eventual redemption of the debt, there are distributional implications through time as well as at a point of time.

Any tax effects the efficiency of resource allocation within the economy. Even the smallest and most efficiently administered excise tax distorts the marginal conditions necessary for efficient resource allocation; the tax introduces a wedge in the price system so that producers face a different set of relative prices from that faced by consumers. Similarly, high marginal rates of income tax can affect the supply of labor. Also, all taxes have a frictional cost in their administration. Thus, if taxes have to be levied to finance the interest payable on previous borrowing, there must be some increase in the cost to society through misallocation and inefficiency. This is sometimes referred to as a deadweight loss. It should be emphasized, however, that if the choice is to meet the increase in expenditures by taxes rather than debt financing, the costs related to financing discussed above do not apply; thus the actual deadweight loss to society due to the tax should be compared to the alternative of debt financing.

Some advocates of low interest rates have argued that positive interest rates serve no useful purpose when the economy is operating below potential and the rate of return on idle resources is effectively zero. They thus view borrowing at a positive interest rate as a gratuitous subsidy to the bondholders who receive interest at the expense of the taxpayers who must pay the interest, and advocate printing currency or interest-free borrowing from the central bank to finance budgetary deficits incurred to promote full employment.

However, the situation in most countries entering a Fund-supported program is that they have exhausted these possibilities and their deficit financing has proved inflationary. While it is true that such inflations often erode financial wealth and hence redistribute from bondholders to others, in most of these countries the wealthy commonly have their assets in real estate, commodities, and assets held abroad. In such circumstances, the bondholders tend to be government or quasi-government agencies that hold assets on behalf of the general population and the loss of purchasing power incurred by these bonds is a penalty borne by the population at large. In general, Fund-supported programs that try to ensure a more realistic return on government bonds will, in the long run, favor all sections of the population on whose behalf such assets are held. However, this is likely to favor the urban population compared to the rural, and within the urban population the effect may be regressive.

The problems of intertemporal resource use is most serious in the case of foreign borrowing, for in this case a country can obtain additional resources for current use through debt financing, but it must also return these resources, plus interest, in the future. Such borrowing must, therefore, be undertaken with extreme caution. Again, the cost-benefit principle applies. Individual projects which yield a stream of earnings that exceeds the costs of debt service and repayment of principal should be undertaken. In the aggregate, however, developing countries are faced with the problem that an effective development program may require a more or less steady transfer of resources from industrial countries. Unfortunately, such a steady flow may be impossible to achieve through portfolio investment.

The distributional consequences of this are so diffuse as to defy assessment. It may be maintained, however, that the policy recommendations in adjustment programs to limit public sector borrowing, to reduce external borrowing, to broaden the ownership of public debt, and to finance domestic borrowings at positive real rates of interest are likely to improve the allocation of capital, increase the long-term productive potential of the economy, secure better funding for social security, and reduce future needs for taxation. This environment is likely to be more favorable for distributional concerns than a system which is constrained by low levels of capital investment, an unvested social security program, and the need to increase taxation to finance domestic and foreign interest payments. Nevertheless, such financial policies are likely to favor urban households and those with substantial savings. So this aspect of a Fund-supported program, although having allocational effects which will benefit all society, is likely to involve regressive redistribution, which in turn, suggests that a necessary concomitant should be effective income taxation including withholding taxes.

X. Lessons from the Review

At the start, attention was drawn to the fact that Fund-supported programs do involve changes in the relative prices in both goods and factor markets. These are bound to affect the distribution of income and wealth between individuals, households, factors of production, and socioeconomic groups. The question is not whether the programs should affect redistribution but whether some other policies could achieve the same impetus to growth (within the context of restoring balance of payments viability) and at the same time result in some "more desirable" distributional pattern. The paper has also shown the difficulty of separating the impact of general falls in income of a population as distinct from impacts on particular groups.

The issues have been discussed in many ways in this review. Although one of the lessons is that it is nearly impossible or at least hazardous to enunciate clear-cut conclusions regarding distributional issues, it may help focus the discussion to provide a somewhat simplistic list of measures which would promote more equitable income distributions in the context of Fund-supported adjustment programs. It must be emphasized that all these statements should be considered in the full context of the discussion in the body of the study.

1. No single counterfactual argument is valid for any country or valid at different times; nevertheless the alternative to a Fund-supported program is an important measure of the redistributive impact of programs.

2. In the external sector a more equitable distribution is the consequence of:

a. Exchange rate action, particularly if an overvalued exchange rate inhibits the establishment of producer prices which provide adequate incentives to an agricultural sector dominated by small farmers;

b. Elimination of exchange rate restrictions and other exchange practices that constrain imports and exports.

3. In the monetary sector a more equitable income distribution can be facilitated by expanding access to credit markets. Other policies which support this objective include those which limit insider loans and those which promote the ability of each sector to compete for credit, such as fixing farm loan interest rates at free market levels instead of fixing them at such unrealistically low levels that little credit is available.

4. Direct tax measures, and in particular corporate and personal income tax measures, are unlikely to have much effect on the distribution of income and wealth in the context of Fund-supported adjustment

programs. This is primarily because changes in these taxes require complex changes in legislation; they work, usually, with substantial lags in collection. However, whereas in a one year stand-by program direct tax measures have little relevance, over the longer run they are a crucial tool which can significantly affect distribution. Changes in direct taxation which are supportive of a more equitable income distribution include:

a. The abolition of schedular income categories and movement toward the global taxation of income;

b. The expansion of tax registration to include all professional incomes and large farm incomes;

c. The establishment of a property cadaster and the taxation of immovable property;

d. The longer-term commitment to changes in tax policy than that contained in a one year stand-by program. In essence, such fiscal policy cannot be a "quick fix."

5. Indirect taxes, and in particular taxes on goods and services, may affect distribution in undesirable ways but are used frequently because of the urgent demands for revenue to meet the fiscal deficit. It is possible to design more desirable sales taxes than the crude excises often employed such as those on alcohol and tobacco, but again broad-based taxes on sales of goods and services cannot be introduced overnight. Typically, they require two to three years' organization and need the support of an enthusiastic and cooperative administration. Should more explicit emphasis be put on distributional issues the supportive indirect tax measures would include:

a. The establishment of a truly general broad-based tax on goods and services;

b. Higher differential rates of tax on goods and services consumed by higher-income households, especially cars, household "white goods," petroleum, electricity, telecommunications, hotels, restaurants, and air travel;

c. Import duties that replace quantitative restrictions (licensing and quotas) on imports;

d. The reduction of export duties that infringe primarily on small farmers;

e. It is important again to maintain a longer-term perspective than the one year stand-by program. It is better to have a tax reform that can be maintained than one which begins to decay as soon as the Fund-supported program ends;

6. Unquestionably a major, if not the main, problem of fiscal policy is that of poor expenditure control. If the Fund were to attempt to specify the specific functional expenditures with a view to improving internal income distributions, the following might be considered:

a. Focusing educational outlays on basic skills and vocational training;

b. Focusing health outlays on the provision of basic health services and away from the doctor-hospital environment;

c. Limiting defense expenditure;

d. Limiting grandiose public works and "prestige" projects;

e. Advocating much stricter budgetary controls by the Ministry of Finance over spending ministries.

The views of the IBRD would be an important consideration in the first four of these items.

7. The distributional characteristics of changes in the economic categories of expenditure are important in both the short and long run. More work is needed on how to de-link wages and salaries from full indexation to resist turning the public service into a guaranteed income system, and to limit overall subsidy levels by targeting subsidies more accurately.

8. Although the distributional consequences of the budget demands of state enterprises are diffuse, they are important. To identify the distributional effects of such enterprises, at the very least these agencies should be fully accountable to the authorities, and maintain up-to-date accounts which are submitted for review on a timely basis. Again these recommendations can have a significant impact in the short run but need to be pursued and maintained over a much longer time than usually available in Fund-supported programs.

An overall suggestion which seems to emerge from this review is that most fiscal policy with desirable redistributive effects is difficult to enact within the context of a one year stand-by program. This is not to say that fundamental fiscal reform is impossible within a Fund-supported program but that it needs sustained effort over a number of years, perhaps lasting well beyond the formal program. In turn, this suggests that much FAD technical assistance which does have a longer-term perspective is a vital component of the adjustment effort.

In conclusion, as mentioned at the beginning, available evidence provides little basis for arguing that Fund-supported adjustment

programs significantly worsen income distributions as compared to any practical alternative. Why then have adjustment programs raised such criticisms? Two main reasons are suggested from this review: (1) compared to the gradual erosion of living standards or the unsustained consumption pattern of a country before the program, the adjustment is often sharp and quick; and (2) the adjustment also often has a great effect on particular groups and especially on groups likely to be vocal and cohesive in their opposition (e.g., urban workers, civil servants, the military, owners of protected businesses). Distributional concerns probably require the brunt of adjustment to be borne by such groups (and perhaps as swiftly as possible), and there is clearly a genuine grievance. The Fund should recognize and anticipate the source of such complaint and be prepared to meet it trying to identify those who really are "the poor" and remembering they are not necessarily (or even most likely) to be those protesting.

A Review of Policies in Fund Progams 1980-84

1. Selection of the sample

The Fund approved 105 stand-by programs and 23 extended facilities from January 1980 to December 1983, covering 67 countries. Eighteen countries had programs in two of those years, 9 countries had programs in three years, and 5 countries had programs in all four years. The sample for this study was primarily derived from this population with 70 of these programs representing 65 countries being selected for further study. In addition, to make the sample as current as possible, 8 more recent programs approved early in 1984 were added to the study, bringing the total sample to 78 programs covering 66 countries. Fifteen of these were programs under Extended Facilities, and 63 were stand-by programs. Table 11 provides a list of Fund programs during 1980-83 by country and years, and designates which of these programs were selected for the sample by underlining the appropriate entries. The additional 9 programs for 1984 are identified by footnote 2.

2. Classification of policy actions

The policy actions in the 78 programs in this sample are detailed below (pp. 72-81) and presents policy actions classified by major area distributed by rows, and countries distributed by columns. The study makes no attempt to quantify the magnitude of adjustment envisaged or to determine if the measures were in fact implemented, but merely reports the measures as identified in the Use of Fund Resources (UFR) documents.

Several conventions were employed to simplify the presentation while retaining as much information as possible. A policy action undertaken by the authorities as identified in the column of policy measures is marked by an "X" in the appropriate country column. To save space, those cases where the direction of the policy undertaken was opposite to that identified in the policy measure column, such as an expansion of capital investment rather than a curtailment, are identified by a double "XX." As employed here, the term "prior actions" includes all policy measures adopted in the 12 months prior to adoption of the programs (as described in the background section of the UFR paper) and not just measures undertaken as part of the program. If the UFR paper identifies World Bank collaboration on measures relating to capital expenditure, this assistance is identified by using the letter "W" as the relevant element in the table matrix. Countries with external arrears during the program period are denoted with an "A" in the section covering debt.

Table 11. Chronological List of Stand-by and Extended Arrangements Approved in 1980-1983 and Sample Coverage (underlined)

	1980	1981	1982	1983
Argentina				SBA
Bangladesh 1/	EFF		EFF	SBA
Barbados			SBA	
Bolivia	SBA			
Brazil				EFF
Burma		SBA		
Central African Republic	SBA*	SBA		SBA
Chile				SBA
China		SBA*		
Costa Rica	SBA	EFF	SBA	
Cyprus	SBA*			
Dominica		EFF		
Dominican Republic				EFF
Ecuador				SBA
El Salvador	SBA*		SBA	
Ethiopia		SBA		
Equatorial Guinea	SBA			
Gabon	EFF			
Gambia 2/			SBA	
Ghana				SBA
Guatemala		SBA*		SBA
Guinea-Bissau 2/				
Guinea			SBA	
Guyana	EFF			
Grenada		SBA		EFF
Haiti			SBA	SBA
Honduras			SBA	
Hungary			SBA	
India 1/		EFF		
Ivory Coast 2/		EFF		
Jamaica 2/		EFF		
Kenya	SBA		SBA	SBA
Korea 2/	SBA	SBA		SBA
Laos	SBA			
Liberia 2/	SBA	SBA	SBA	SBA

Table 11. (continued) Chronological List of Stand-by and Extended Arrangements Approved in 1980-1983 and Sample Coverage (underlined)

	1980	1981	1982	1983
Madagascar	SBA	SBA	SBA	SBA
Malawi 2/	SBA		SBA	EFF
Mali			SBA	SBA
Mauritania	SBA	SBA		
Mauritius	SBA	SBA		SBA
Mexico			EFF	
Morocco 1/	EFF	EFF	SBA	SBA
Niger				SBA
Panama	SBA		SBA	SBA
Pakistan 1/	EFF	EFF		
Peru			EFF	
Philippines	SBA			SBA
Portugal				SBA
Romania		SBA		
Senegal	EFF	SBA	SBA	SBA
Solomon Islands		SBA		SBA
Somalia	SBA	SBA	SBA	
Sudan			SBA	SBA
South Africa			SBA	
Sierra Leone 1/		EFF		
Sri Lanka 1/(1979 EFF)				SBA
Tanzania	SBA			
Thailand		SBA	SBA	
Togo		SBA		SBA
Turkey	SBA			SBA
Uganda	SBA	SBA	SBA	SBA
Uruguay	SBA*	SBA		SBA
Western Samoa				SBA
Yugoslavia	SBA	SBA		
Zaire		EFF		SBA
Zambia 1/, 2/		EFF		SBA
Zimbabwe 2/		SBA*		SBA

1/ Covers second or third year of the extended Fund facility.
2/ More recent program also covered (1984/85).
* First credit tranche.

	Argentina	Bangladesh	Barbados	Bolivia	Brazil	Burma	Central Afr. Rep.	Chile	China	Costa Rica	Cyprus	Dominica	Ecuador	El Salvador	Equatorial Guinea	Ethiopia	Gabon	The Gambia (a)	The Gambia (b)	Ghana	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	India	Ivory Coast (a)	Ivory Coast (b)	Jamaica	Kenya (a)	Kenya (b)	Korea (a)	Korea (b)	Korea (c)	Laos	Liberia (a)	Liberia (b)
I. Monetary and Financial Policies																																								
1. Limit on credit expansion ceilings on	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
a. Net domestic assets or total bank credit	X	X	X	X	X	X	X	X		X			X	X		X	X	X	X	X	X	X	X	X		X	X	X	X			X	X	X	X	X	X	X	X	X
b. Bank credit to central government							X	X			X	X				X	X	X	X	X			X	X				X	X				X	X						
c. Bank credit to public sector and specified NPEs		X		X		X		X		X			X	X	X						X	X		X			X			X	X	X			X	X	X		X	X
d. Separate ceiling on bank credit to parastatals			X		X				X										X																					X
2. Reduction in the rate of growth of liquidity	X		X	X	X				X				X					X				X							X											
3. Interest rate reform	X		X	X	X			X				X	X	X	X	X						X					X	X												
4. Adequate share of credit to private sector	X	X																				X							X					X		X				X
5. Measures to mobilize domestic savings		X		X			X	X	X	X				X		X	X	X							X		X	X	X	X	X	X	X	X	X			X		
a. Interest rate increases		X	X	X	X	X				X				X						X				X	X			X				X	X	X	X						
b. Reform of the financial system						X		X	X						X		X	X									X	X		X	X			X				X		
6. Target on net foreign reserves			X	X	X					X			X	X				X				X	X																	
7. Others (selective credit allocation)			X					X	X			X	X																		X		X					X		
II. Public Sector Policies																																								
1. Restraint of central government current expenditures	X	X	X		X		X	X		X	X	X	X	X		X	X		X			X	X	X			X			X	X	X		X		X	X	X	X	X
a. Wages and salaries	X	X	X	X	X		X	X			X	X	X	X						X			X	X			X			X	X	X		X			X	X	X	X
(1) Freezing or reduction of government employee numbers							X					X		X					X							X	X					X		X				X	X	X
(2) Freezing, reduction, or postponement of wage increases			X		X		X	X			X	X	X									X	X		X					X	X			X			X	X	X	X
(3) Changes in the employment policy	X						X	X				X												X						X	X									
(4) Limit on salary indexation		X			X		X			XX		X					X						X	X	X															
b. Goods and services		X			X		X		X	X		X	X	X		X	X	X	X		X				X		X					X		X					X	X
(1) Improvement in overall expenditure controls		X			X		X		X	X			X				X	X							X	X							X					X	
(2) Cumulative monthly/quarterly ceilings on expenditures													X			X			X		X																			
(3) Reduction in appropriation for specific expenditures							X		X			X		X			X	X	X				X							X		X								X

	Liberia	Madagascar	Malawi (a)	Malawi (b)	Mali	Mauritania	Mauritius	Mexico	Morocco	Niger	Panama	Pakistan	Peru	Philippines (a)	Philippines (b)	Portugal	Romania	Senegal	Sierra Leone	Solomon Islands	Somalia	South Africa	Sri Lanka	Sudan	Tanzania	Thailand (a)	Thailand (b)	Togo	Turkey	Uganda	Uruguay	Western Samoa	Yugoslavia	Zaire	Zambia (a)	Zambia (b)	Zambia (c)	Zimbabwe
I. Monetary and Financial Policies																																							
1. Limit on credit expansion ceilings on	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
a. Net domestic assets or total bank credit	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X		X	X	X
b. Bank credit to central government	X	X	X	X	X	X	X		X	X		X		X				X	X	X	X	X		X	X	X	X	X		X			X	X	X	X		X
c. Bank credit to public sector and specified NPEs	X							X			X		X		X	X							X						X			X					X	
d. Separate ceiling on bank credit to parastatals	X																																						
2. Reduction in the rate of growth of liquidity				X	X											X			X	X		X	X		X				X				X	X					
3. Interest rate reform				X										X		X					X			X	X				X		X								
4. Adequate share of credit to private sector		X	X		X		X			X				X													X			X		X		X	X				
5. Measures to mobilize domestic savings		X	X		X	X		X	X	X			X	X	X	X			X	X	X	X	X				X		X	X		X						
a. Interest rate increases						X		X	X	X			X		X	X			X	X	X	X					X		X	X		X		X	X	X		
b. Reform of the financial system						X				X			X			X						X	X						X									
6. Target on net foreign reserves													X	X		X	X			X														X				
7. Others (selective credit allocation)		X			X	X			X										X				X											X				
II. Public Sector Policies																																							
1. Restraint of central government current expenditures	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X		X	X		X		X	X	X		X
a. Wages and salaries	X			X	X	X		X	X	X			X		X	X	X	X	X	X		X			X		X		X					X	X	X		
(1) Freezing or reduction of government employee numbers	X			X		X		X		X				X	X			X	X	X														X	X	X		
(2) Freezing, reduction, or postponement of wage increases	X		X	X	X				X	X			XX			X	X	X		X		X			X		X							X		X		
(3) Changes in the employment policy										X						X																				X		
(4) Limit on salary indexation							X						X		X					X										X					X			
b. Goods and services	X	X	X		X	X		X	X	X	X	X			X		X	X	X		X	X	X	X						X	X			X	X	X		X
(1) Improvement in overall expenditure controls	X	X			X			X		X	X				X		X		X	X			X	X														
(2) Cumulative monthly/quarterly ceilings on expenditures						X												X			X													X				
(3) Reduction in appropriation for specific expenditures			X		X	X			X	X		X			X		X	X				X	X											X	X			X

APPENDIX I

	Argentina	Bangladesh	Barbados	Bolivia	Brazil	Burma,	Central Afr. Rep.	Chile	China	Costa Rica	Cyprus	Dominica	Ecuador	El Salvador	Equatorial Guinea	Ethiopia	Gabon	The Gambia (a)	The Gambia (b)	Ghana	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	India	Ivory Coast (a)	Ivory Coast (b)	Jamaica	Kenya (a)	Kenya (b)	Korea (a)	Korea (b)	Korea (c)	Laos	Liberia (a)	Liberia (b)
c. Transfers and subsidies																																								
(1) Capping or reduction in subsidies		X			X					X		X	X	X		X	X	X	X	X				X	X			X	X	X		X			X	X			X	
- food		X			X					X			X	X		X	X	X	X						X			X		X		X			X	X			X	
- petroleum		X			X					X			X	X		X	X	X							X			X	X	X		X			X	X				
- fertilizers		X			X								X			X		X		X				X								X			X				X	
(2) Reduction in other subsidies		X														X		X	X						X										X	X				
(3) Curtailment of current transfers to NPEs												X				X												X		X										
(4) Control of state enterprises' operating expenditures		X	X		X		X					X						X			X		X	X					X			X								
d. Capital expenditure and net lending				X	X		X					X															X													
(1) Curtailment of investment		X	X	X	X			X	X			X		X	X	X	X		X	X				X	X		XX	X	XX	X	X	X	XX	X		X	X			WX
(a) Real terms					WX			X	X						XX				WX	X	WX		X	WX				X		WX	X	X		WX		X				
(b) Nominal terms					X			X														X	X					X		X				X		X				X
(2) Limit or delay on new investment or new projects																									X						X	X		X		X				X
(3) Improvement of investment program		X	X	WX	X									X									X			X				X					X			X		X
(4) Reduction in domestically financed investment					X			X			WX					WX	WX											WX	X						WX	WX	X			
e. Expenditure administration											X											X		X																
(1) Improve expenditure control mechanism					X		X											X		X							X		X										X	
(2) Others (shift in budgetary priorities)					X		X		X	X		X			X			X	X		X			X			X		X				X							X
2. Tax system								X																																
a. Income taxes																													X											
(1) Move from schedular to global income tax		X	X		X		X			X	X	X	X			X				X			X	X			X	X			X			X	X			X		
(2) Reduction of personal income tax		X			X																																			
(3) Increase or surcharge in personal income tax																			X																X					
(4) Income tax reform or extension												X																												
(5) Increase in payroll tax or social security contribution							X				X				X								X					X										X		
(6) Arrears		X		X					X	X														X				X					X					X		

	Liberia	Madagascar	Malawi (a)	Malawi (b)	Mali	Mauritania	Mauritius	Mexico	Morocco	Niger	Panama	Pakistan	Peru	Philippines (a)	Philippines (b)	Portugal	Romania	Senegal	Sierra Leone	Solomon Islands	Somalia	South Africa	Sri Lanka	Sudan	Tanzania	Thailand (a)	Thailand (b)	Togo	Turkey	Uganda	Uruguay	Western Samoa	Yugoslavia	Zaire	Zambia (a)	Zambia (b)	Zambia (c)	Zimbabwe
c. Transfers and subsidies		X		X	X			X	X		X	X	X		X	X	X	X	X				X	X					X					X	X	X	X	X
(1) Capping or reduction in subsidies		X		X	X			X	X			X	X		X	X	X	X	X				X	X											X	X	X	X
- food		X			X			X				X	X			X		X					X	X											X	X	X	X
- petroleum				X	X				X				X			X		X	X				X	X											X	X		
- fertilizers				X				X				X			X								X												X	X	X	
(2) Reduction in other subsidies					X			X	X		X						X							X														
(3) Curtailment of current transfers to NPEs	X	X						X							X	X							X	X					X					WX				X
(4) Control of state enterprises' operating expenditures								X		X	X		X				X	X							X				X						X	X		
d. Capital expenditure and net lending		X	X		WX			X		X					X	X	X		X		X		X					WX						X				
(1) Curtailment of investment		X	X					X		X		XX	WX		WX	WX	X	X	X	XX			WX		XX									X	X	X	WX	
(a) Real terms			X					X		X					X								X											X		X	X	X
(b) Nominal terms															X			X			X													X		X	X	X
(2) Limit or delay on new investment or new projects			X							X		X			X		X						X		X			X						X			X	
(3) Improvement of investment program					X							X				X												X		X				X				
(4) Reduction in domestically financed investment										X					X						X				X						X			X				
e. Expenditure administration																																						
(1) Improve expenditure control mechanism	X			X				X		X			X		X	X	X	X	X				X			X		X		X	X			X	X	X	X	
(2) Others (shift in budgetary priorities)																		X																				
2. Tax system																																						
a. Income taxes																																						
(1) Move from schedular to global income tax									X						XX	X																						
(2) Reduction of personal income tax																																		X				
(3) Increase or surcharge in personal income tax								X								X							X	X		X												X
(4) Income tax reform or extension					X		X				X	X													X			X										X
(5) Increase in payroll tax or social security contribution																																						
(6) Arrears																		X																				

	Argentina	Bangladesh	Barbados	Bolivia	Brazil	Burma	Central Afr. Rep.	Chile	China	Costa Rica	Cyprus	Dominica	Ecuador	El Salvador	Equatorial Guinea	Ethiopia	Gabon	The Gambia (a)	The Gambia (b)	Ghana	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	India	Ivory Coast (a)	Ivory Coast (b)	Jamaica	Kenya (a)	Kenya (b)	Korea (a)	Korea (b)	Korea (c)	Laos	Liberia (a)	Liberia (b)
b. Corporate tax																																								
(1) Income tax surcharge										X											X					X	X					X								
(2) Collection of tax arrears																			X					X																X
(3) Shorten lag for corporate tax payment					X															X																				
(4) Modification or reduction of income or profit tax	X																											X				X		X		X				
c. Tax on property																																								
(1) Introduce or raise land taxes		X	X																																					
(2) Introduce or raise urban property tax												X								X				X																
(3) Other property taxes									X																							X								
d. Domestic taxes on goods and services																																								
(1) Raise excise rates (beer, cigarettes, and others)	X	X		X			X			X		X	X		X			X		X	X			X	X		X		X			X	X	X						
(2) Increase tax on petroleum products			X				X				X	X	X					X			X	X			X	X				X	X	X			XX				X	
(3) Raise or modify sales tax					X					X		X														X	X						X	X						
(4) Temporary selected tax reduction																																								
(5) Raise taxes on other domestic goods and services				X			X				X										X	X					X					X							X	X
e. Import duties																																								
(1) General or selected increase in customs duties		X										X			X			X			X				X		X				X	X	X						X	
(2) Increase in petroleum import taxes																			X																	X				
(3) Reduction or elimination of selected import duties																																		X						X
(4) Tariff reform (exemptions)				X	X							X	X					X									X				X	X					X			
(5) Import duty surcharge													X														X													
f. Export duties																															X									
(1) Increase in rates	X						X			X		X			X								X																	
(2) Extension of coverage															X				X														X							
(3) Export compensation scheme																					X												X							
(4) Others (reform/reduction)													X													X														

	Liberia	Madagascar	Malawi (a)	Malawi (b)	Mali	Mauritania	Mauritius	Mexico	Morocco	Niger	Panama	Pakistan	Peru	Philippines (a)	Philippines (b)	Portugal	Romania	Senegal	Sierra Leone	Solomon Islands	Somalia	South Africa	Sri Lanka	Sudan	Tanzania	Thailand (a)	Thailand (b)	Togo	Turkey	Uganda	Uruguay	Western Samoa	Yugoslavia	Zaire	Zambia (a)	Zambia (b)	Zambia (c)	Zimbabwe
b. Corporate tax																																						
(1) Income tax surcharge						X		X															X					X										X
(2) Collection of tax arrears		X						X																										X				
(3) Shorten lag for corporate tax payment										X					X																				X	X		
(4) Modification or reduction of income or profit tax												X	X			X			X								X	X										
c. Tax on property																																						
(1) Introduce or raise land taxes																												X						X				
(2) Introduce or raise urban property tax																												X						X				
(3) Other property taxes																																						
d. Domestic taxes on goods and services																																						
(1) Raise excise rates (beer, cigarettes, and others)		X	X	X	X	X		X		X	X			X	X	X		X		X				X	X	X	X			X		X		X	X	X	X	X
(2) Increase tax on petroleum products					X	X				X		X		X	X	X	X	X		X				X							X			X		X		
(3) Raise or modify sales tax				X				X	X	X		X	X	X				X				X		X	X				X					X		X		X
(4) Temporary selected tax reduction								X																														
(5) Raise taxes on other domestic goods and services		X			X					X											X																	
e. Import duties																																						
(1) General or selected increase in customs duties		X	X			X			X									X		X	X					X	X				X			X		X	X	X
(2) Increase in petroleum import taxes		X		X				X	X	X									X		X																	X
(3) Reduction or elimination of selected import duties						X																X			X	X		X			X			X			X	
(4) Tariff reform (exemptions)					X			X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X			X			X			X	
(5) Import duty surcharge													X		X								X	X														
f. Export duties																																						
(1) Increase in rates											X		XX																	X				X		X		
(2) Extension of coverage																																		X		X		
(3) Export compensation scheme									X			X	X											X														
(4) Others (reform/reduction)																X	X								X													

	Argentina	Bangladesh	Barbados	Bolivia	Brazil	Burma	Central Afr. Rep.	Chile	China	Costa Rica	Cyprus	Dominica	Ecuador	El Salvador	Equatorial Guinea	Ethiopia	Gabon	The Gambia (a)	The Gambia (b)	Ghana	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	India	Ivory Coast (a)	Ivory Coast (b)	Jamaica	Kenya (a)	Kenya (b)	Korea (a)	Korea (b)	Korea (c)	Laos	Liberia (a)	Liberia (b)
g. Other taxes and nontaxes																																								
(1) Tariffs, fees, charges, etc.	X		X				X	X		X		X	X		X			X			X			X	X	X			X	X	X	X			X					
(2) Others			X																					X							X	X								
h. Improve or reform tax administration	X	X		X	X	X	X		X	X	X		X	X				X	X		X	X		X	X		X			X		X			X	X		X		
3. Nonfinancial public enterprises																																								
a. Improvement in NPEs performance	X	X			X		X	X	X	X		X	X					X	X		X			X	X	X	X			X	X				X	X		X	X	X
(1) Improves price structure	X	X			X		X	X		X		X	X					X	X		X			X	X	X	X			X	X				X	X		X	X	
(2) Partial or total privatization							X		X	X														X						X	X	X							X	X
b. Improve overall management and control	X			X	X		X		X			X			X		X	X						X	X	X								X			X		X	X
4. Overall budget																																								
a. Reduction of deficit as a percent of GDP	X	X	X		X	X	X	X		X		X	X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X
b. Reduction in domestic arrears								X				X																		X	X									X
III. External Debt Policies																																								
1. Control of level and maturity of external debt	X		X	X	X	X	X	X		X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
a. Public or publicly guaranteed debt	X		X	X	X	X	X	X		X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
b. Private sector debt													X																							X	X			
2. Other debt management policies	X			X			X		X	X	X		X	X		X	X	X	X	X	X		X	X	X	X	X	X			X	X					X		X	X
a. Debt relief/rescheduling							X			X			X						X						X						X	X							X	X
b. Others (arrears, reserve, preferential rate, etc.)	a			ax			ax			ax	x		a	a		x	a	a	a	a			ax	a	nx	a	ax	x			a	a					x		a	a
IV. Exchange and Trade Policies																																								
1. Liberalization and reform of exchange rate	X	X		X						X			X	X	X			X	X	X					X			X				X		X	X	X	X			
a. Frequently adjusted rates	X	X		X	X					X			X	X	X					X				X	X			X				X		X	X	X	X	X		
b. Gradual merging or unification of exchange rate	X									X			X						X				X									X								
c. Others																																								
2. Liberalization and reform of trade system	X				X					X			X	X	X			X			X					X			X			X	X	X			X	X		
a. Rationalization of import system	X	X			X	X			X	X			X	X	X	X				X							X	X	X				X	X	X		X	X		
b. Export promotion measures																																								
3. Standard clauses and others	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	Liberia	Madagascar	Malawi (a)	Malawi (b)	Mali	Mauritania	Mauritius	Mexico	Morocco	Niger	Panama	Pakistan	Peru	Philippines (a)	Philippines (b)	Portugal	Romania	Senegal	Sierra Leone	Solomon Islands	Somalia	South Africa	Sri Lanka	Sudan	Tanzania	Thailand (a)	Thailand (b)	Togo	Turkey	Uganda	Uruguay	Western Samoa	Yugoslavia	Zaire	Zambia (a)	Zambia (b)	Zambia (c)	Zimbabwe
g. Other taxes and nontaxes																																						
(1) Tariffs, fees, charges, etc.			X		X			X	X	X	X	X	X		X	X	X			X			X	X			X							X			X	
(2) Others				X																																		
h. Improve or reform tax administration	X				X			X	X	X		X		X	X	X		X					X	X		X	X	X	X	X	X			X	X	X		
3. Nonfinancial public enterprises																																						
a. Improvement in NPEs performance		X	X	X	X			X	X	X	X	X	X		X	X	X	X					X	X	X	X	X	X	X	X				X	X	X	X	X
(1) Improves price structure		X	X	X	X			X	X	X	X	X	X										X	X	X	X	X	X	X	X					X	X	X	X
(2) Partial or total privatization				X	X			X	X			X	X					X					X	X										X				
b. Improve overall management and control					X			X	X	X		X			X			X					X		X		X		X			X		X		X		
4. Overall budget																																						
a. Reduction of deficit as a percent of GDP	X	X		X	X			X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
b. Reduction in domestic arrears																																						
III. External Debt Policies																																						
1. Control of level and maturity of external debt	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X				X	X	X	X	X	X
a. Public or publicly guaranteed debt	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X				X	X	X	X	X	X
b. Private sector debt			X					X		X		X			X	X	X						X					X	X								X	
2. Other debt management policies	X	X		X	X	X		X		X							X	X					X	X	X			X	X			X		X	X	X	X	
a. Debt relief/rescheduling	X			X	X	X		X		X							X	X	X					X				X	X			X		X		X	X	
b. Others (arrears, reserve, preferential rate, etc.)	a	a			a	a		a		a							X	a	a					a	a			a	a			a		a	a	a	a	
IV. Exchange and Trade Policies																																						
1. Liberalization and reform of exchange rate				X				X	X			X	X		X	X	X	X	X				X	X						X	X	X	X	X		X	X	X
a. Frequently adjusted rates				X				X	X			X	X		X	X	X	X				X	X	X						X	X	X	X	X		X	X	X
b. Gradual merging or unification of exchange rate								X									X		X			X		X							X			X				
c. Others																									X						X							
2. Liberalization and reform of trade system			X		X			X	X			X	X	X	X	X	X	X	X				X	X		X	X		X		X		X	X				
a. Rationalization of import system						X		X	X			X	X	X	X	X	X						X	X		X	X		X		X		X	X				
b. Export promotion measures								X	X			X	X	X	X	X	X		X	X									X				X		X	X		
3. Standard clauses and others	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X

	Argentina	Bangladesh	Barbados	Bolivia	Brazil	Burma	Central Afr. Rep.	Chile	China	Costa Rica	Cyprus	Dominica	Ecuador	El Salvador	Equatorial Guinea	Ethiopia	Gabon	The Gambia (a)	The Gambia (b)	Ghana	Grenada	Guatemala	Guinea	Guinea-Bissau	Guyana	Haiti	Honduras	Hungary	India	Ivory Coast (a)	Ivory Coast (b)	Jamaica	Kenya (a)	Kenya (b)	Korea (a)	Korea (b)	Korea (c)	Laos	Liberia (a)	Liberia (b)
V. Wages and Prices																																								
1. Partial or general wage restraint policies			X		X			X					X	XXX					X		X						X	X		X	X	X			X	X	X		X	
2. Wage guidelines or wage reform policies	X	X		X	X			X		X		X				X	X	X			X				X					X			X	X	X	X	X			X
3. Flexible pricing system	X	X			X		X					X		X	X								X		X	X														
4. Reduction in price/cost distortions				X															X															X			X	X		
5. Review or increase sector prices (agriculture, industry, etc.)					X	X	X						X		X	X		X							X								X		X					
6. Increase energy prices	X	X		X	X										X	X		X	X					X					X		X		X					X	X	
7. Review price controls system					X				XX	X				X	X		X	X		X				X	X										X					
VI. Other Structural Adjustment Measures																																								
1. Development and restructuring of a subsector	X				X	X	X	X	X	X	X	X			X	X	X	X	X	X	X		X	X	X			X	X	X		X	X		X		X			
2. Improvement in overall management							X									X																	X					X		
3. Shift of resources from public to private		X			X		X									X	X								X			X								X	X	X		
4. Investment planning and execution procedures	X	X					X		X			X			X	X	X	X							X	X			X							X	X	X		
5. Others																												X										X		
VII. Others																																								
1. Objection to a policy measure							X	X																					XX									X		

Note:

"x" means measure adopted in the program

"xx" means measure adopted but in the opposite direction

"wx" means that there was collaboration with the World Bank on that policy measure

"a" means the country was in arrears.

	Liberia	Madagascar	Malawi (a)	Malawi (b)	Mali	Mauritania	Mauritius	Mexico	Morocco	Niger	Panama	Pakistan	Peru	Philippines (a)	Philippines (b)	Portugal	Romania	Senegal	Sierra Leone	Solomon Islands	Somalia	South Africa	Sri Lanka	Sudan	Tanzania	Thailand (a)	Thailand (b)	Togo	Turkey	Uganda	Uruguay	Western Samoa	Yugoslavia	Zaire	Zambia (a)	Zambia (b)	Zambia (c)	Zimbabwe
V. Wages and Prices																																							
1. Partial or general wage restraint policies					X		X	X	X						X	X	X			X					X	X	X				X			X		X	X	X
2. Wage guidelines or wage reform policies	X	X	X	X				X		X			X		X	X		X								X	X			X			X	X	X			X
3. Flexible pricing system		X	X	X	X			X	X	X		X	X		X	X	X	X					X							X	X		X	X	X			
4. Reduction in price/cost distortions		X		X	X			X	X	X		X	X			X	X	X					X	X					X		X	X		X				
5. Review or increase sector prices (agriculture, industry, etc.)		X	X		X		X	X		X		X	X								X		X		X					X				X				
6. Increase energy prices				X	X			X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		X				X				X		X	X	
7. Review price controls system								X	X								X		X						X						X	X		X		X		
VI. Other Structural Adjustment Measures																																							
1. Development and restructuring of a subsector				X	X	X			X	X		X	X	X	X		X	X	X	X	X		X	X	X	X		X	X	X		X	X	X	X		X	
2. Improvement in overall management					X	X																										X							
3. Shift of resources from public to private				X	X			X		X			X										X	X						X					X			
4. Investment planning and execution procedures					X					X	X	X	X				X							X	X			X					X	X	X		X	
5. Others																																	X						
VII. Others																																							
1. Objection to a policy measure																																							

Note:

"x" means measure adopted in the program

"xx" means measure adopted but in the opposite direction

"wx" means that there was collaboration with the World Bank on that policy measure

"a" means the country was in arrears.

Conceptual Problems in the Study of Income Redistribution

The problem

It is useful initially to examine the issues that would have to be addressed in a first-best assessment of the effects of a Fund adjustment program on the distribution of income in a country. First, and most important, one needs to define what is the relevant "state of the world" with which the distributional outcome under the Fund program is to be compared. Is it the situation before the program, as it would have been in the absence of the program, or in the light of an alternative policy regime? However defined, the evolution of both the level of income and its distribution in response to this alternative set of events is the only relevant basis for comparison with the distributional situation that emerges under the Fund program. One cannot examine simply the effects of a Fund program in isolation from such a comparison. Implicit in such a comparison is the idea that the set of policies which constitutes the Fund program can be defined in contrast to those policies which would prevail in the relevant counterfactual situation. One would also need to isolate the effects of the policy regime negotiated by the country with the Fund in contrast to the effects of other factors or policies that occurred independent of the Fund program.

Second, one would need to explore not only the short-term effects but those that emerged over the medium term. Given the adverse circumstances under which countries generally feel compelled to initiate negotiations with the Fund (see Section II), it is likely that economic adjustment will have negative effects on real incomes in the short run. It is the distributional situation over a realistic time path of adjustment that should be the relevant focus of examination.

Third, Fund programs seek to achieve adjustment in a country's external accounts, but with the expectation that the policies pursued will have a favorable impact, over the medium term, on the level of output and the rate of growth. In assessing the distributional consequences of a program, one cannot ignore the effects of the program on these other objectives.

Fourth, the assessment should provide some measure of the effects of the program on the "well-being" of different economic groups. This goes beyond the already complex question of assessing shifts in the distribution of family cash income to analyses of the effects on the distribution of publicly provided services, on the level of nonmonetary income, on the distribution of expenditure, on the balance between urban and rural households, and as between sectors.

Finally, the analysis should be empirical; ideally, one would like to quantify the effects of actual Fund programs in recent years.

There are both conceptual and statistical obstacles to satisfactorily addressing these issues. At a statistical level, the problem has been stated succinctly (and perhaps optimistically) in a recent survey paper of the World Bank: 1/

> "With but a few exceptions among developing countries, we simply do not have sufficiently accurate measures of levels of living, either for several nations at a point in time or for a given nation over time, to monitor the consequences of past or projected future development strategies."

The data needed

The statistical barriers become obvious when one considers the data requirements for such an analysis. Heuristically, one would want to trace the effects of the various income and relative price effects associated with specific policies (price increases, tax increases, etc.) and need, at least, the data to evaluate the relative importance of such changes for different income groups. At an absolute minimum, one would need a detailed income and expenditure survey for urban and rural households for the country in question, referring to a time reasonably close to the point at which a Fund program was negotiated. Such a survey would need to include sufficient data to provide a picture of the preprogram distribution of income, both monetary and nonmonetary. To evaluate the effects of the particular policy instruments in a Fund program, such a survey would also need to contain disaggregated data on the pattern of consumption expenditure and the sources of income (including government subsidies) by income group.

Even such a data base would have enormous gaps. In order to appraise the effects of any cutbacks in government expenditure, one would need data on the consumption of public services by income group and the distribution of government and public sector enterprise employees by income group. Such a comprehensive data base is unlikely to be found in any country. Even the household income and expenditure surveys that are periodically undertaken in developing countries are likely to be far less than adequate for the analytical task at hand. Such surveys are generally done by the national statistical office of a country with specific objectives in mind, such as the compilation of a consumer price index or of specific components of the national accounts; common problems in such surveys are the underrepresentative nature of the sample surveys used, the frequent underreporting of income (particularly property income and nonmonetary income derived from the subsistence sector), excessive aggregation in the consumption categories included in the survey, and skewed underreporting in low-income budgets. No data are likely to be contained on public service

1/ See Grootaert and DeTray (publication forthcoming, 1985).

consumption or public employment by income group. 1/ As noted by the Bank,

> "[The] narrow focus [of such surveys] turned out to severely limit their usefulness as a basis for the analysis of levels of living and attempts to use the data for that purpose quickly reached a point of diminishing returns." 2/

A fortiori, it is even more unlikely that comparable statistical survey data would also be available at several time points during and after the period of adjustment under a Fund program. For only a few developing countries are comparable income distribution data available at more than one point in time; even where there have been multiple surveys of this kind, it is rare that the statistical survey procedures used are sufficiently similar so as to allow comparisons. 3/ Even if such information were available, one would be confronted by the difficult issue of how much of any observed change should be imputed to the effects of the Fund adjustment program relative to the effects of other factors affecting the economic situation since the time of the last survey. Finally, even if one could make such an imputation and observe that the Fund program had negative effects on the income distribution, the relevant issue would then be how these results differed from those that would have emerged in the absence of a Fund program. The counterfactual differences in alternative is, of course, not an observable phenomenon but is one of the key obstacles, conceptually, to an appraisal of the effects of Fund programs on the income distribution.

1. The counterfactual problem

The difficulties in defining this counterfactual situation are obvious. One might attempt to extrapolate from the existing situation in a country and its record of policies to define what is likely to have happened to the economy in the absence of the Fund program. This involves some speculation on the likely availability of external financing, the alternative set of policies that were likely to be pursued, etc. Critics might argue, however, that the relevant counterfactual alternative would not be the adverse situation which

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1/ See Grootaert and DeTray (publication forthcoming, 1985); Deaton (1980); Jain (1975); Kakwani (1980); Altimir (1982), Altimir and Sourrouille (1980); Fields (1980).

2/ See Grootaert and DeTray (publication forthcoming, 1985).

3/ A study by Anand compared two surveys on the income distribution of Malaysia, taken in 1957 and 1970. These suggested that the Gini coefficient of the income distribution increased from 0.37 to 0.51, suggesting considerably greater equality in the latter period. Anand's study suggests that even such a large difference gives no indication at all about what actually happened to inequality in Malaysia since the difference in results could be entirely due to differences in income concept and survey coverage.

triggered the necessity of negotiating with the Fund but rather an alternative set of policies to that which the Fund would typically suggest. However, given that the country would have adopted better policies had they existed and been practical before coming to the Fund, it is difficult to elaborate on any such policy in the absence of the evident political will to take such decisions.

Other conceptual issues arise in this type of analysis. When a country negotiates a program with the Fund, it typically agrees to implement a set of policies that may extend to many areas of public policy, including fiscal, monetary, and external policy measures (see Appendix I for a list of the full array of measures), etc. Some of these measures may be performance criteria for a Fund program, others may be policy measures which the government pledges to introduce, but for which nonimplementation may not block the disbursements of funds under the program. Some of these measures may have been proposed and strongly supported by the Fund, others may have been proposed by the authorities, and yet others may represent a compromise. It should be emphasized that there is no program that is wholly a "Fund" program, in the sense that the basket of policies are what the Fund staff would have proposed based solely on economic criteria. Sovereign nations frequently opt for a combination of policies which would not be recommended on grounds of economic efficiency and social criteria. Providing that the balance of payments adjustment is achievable, the Fund agrees to the mix of policies chosen by the country even though it may not be the ideal on grounds of distribution and equity.

It is the combined distributional effect of these measures over time that must be the subject of analysis. For instance, the effects of a devaluation in the absence of supporting fiscal and monetary measures to contain aggregate demand are likely to be very different from those that would emerge simply from the effects of a devaluation standing alone. In effect, one cannot simply sum up the distributional effects of the individual measures, ceterus paribus, and assume that the total effect of the measures will equal that sum. Similarly, the short-run effects are likely to be very different from the medium to long-run effects. Many of the policy changes relate to changing relative prices based on the assumption that economic agents respond to such changes, over time, in an important way. The short-run elasticities of response are typically less than the long-run elasticities, and it is the outcome over the medium term that will provide the best measure of the degree of economic adjustment that has occurred in an economy. 1/

1/ For a discussion of these issues, see De Wulf (1975, 1980, 1981); Musgrave and Musgrave (1976); Aaron and McGuire (1970); Break (1974); Goode (1984).

These two factors suggest the importance of a general equilibrium approach to the modeling of the income distribution effects of Fund programs. Sadly, the analytical apparatus available to economists for a sufficiently disaggregated general equilibrum model to test the incidence effects of programs is still in its infancy. While such models do exist, they tend to be highly aggregative, provide only limited information on the income distribution (usually focusing on the effects on factor shares), and are very time consuming to develop. 1/

2. Incidence analysis

Most studies of the income distributional effects of public policy fall within the category of "incidence analyses" of taxation and expenditure. They are either analyses of the effects of particular measures 2/ or, if appraising the overall incidence of the tax system 3/ or the net budgetary effects of the tax and expenditure system 4/, rest on the analytical assumption that one is appraising the distributional effect of a set of measures relative to the effects of a proportional income tax increase or decrease (to be able to ignore the macroeconomic

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1/ See Dervis, de Melo, and Robinson (1982); Shoven (1983); Ballentine and Thirsk (1979); Fullerton, Shoven, and Whalley (1983); Keller (1980); Shoven and Whalley (1972); Whalley (1982).

2/ Many Fiscal Affairs Department confidential reports contain incidence studies but examples of published studies of the incidence of particular taxes can be found in:

Property Taxes: Aaron (1975); Bird (1963); Linn (1976); McLure (1979).

Agricultural Taxation: Gandhi (1966).

Sales Tax: Gandhi (1977, 1979); India (1969).

Payroll Tax: Brittain (1972).

Excise Tax: Catsambas (1980); Cnossen (1977); India (1969).

Income Tax: Heller (1981); Pechman and Okner (1974).

Wealth Taxes: Tait, Faria, Heller (1980); Harberger (1962).

3/ Examples of study of the overall incidence of tax systems can be found in:

Korea: Heller (1981).

Panama: McLure (1974a).

West Malaysia: McLure (1972).

Colombia: McLure (1971).

Brazil: Sahota (1971).

United States: Pechman and Okner (1974).

Portugal: Tanzi and De Wulf (1977).

Peru: Webb (1972).

4/ Examples of studies of the net incidence of the budget can be found in:

Canada: Gillespie (1966); W. Malaysia: Snodgrass (1974); Latin America: Tanzi (1974).

effects of a particular revenue or expenditure measure). They are partial analyses with crude assumptions made on the effective elasticity of response of consumers or factors of production to the effects of a tax or price change. No general equilibrium effects are considered. The focus is on fiscal measures and does not readily take account of the other types of policy measures typically included in a Fund program.

Expenditure incidence estimates are particularly fraught with conceptual difficulties, with analysts uncertain whether to examine the incidence of the expenditure (e.g., salaries paid to teachers), the monetary value of the service provided by the expenditure (e.g., the cost of the education imputed to the student), the benefit derived from the service (e.g., the benefit derived by the student from the education), or the overall incidence effects from the expenditure (taking account of any general equilibrium effects on relative prices and income) as it affects the distribution of income. How does one treat the incidence of government investment expenditure? The flow of benefits from such expenditure derive more from the present stock of government capital than from the flow of present investment expenditure. 1/

De Wulf (1980) has noted that incidence analyses are useful when the focus is on smaller expenditure or tax components or on changes in the tax or expenditure system that do not imply wholesale elimination of major programs or revenue sources; in such cases, it can be correctly assumed that the general economic framework will not be affected by assuming away a given expenditure [or tax] program. In the case of many of the microeconomic fiscal measures introduced as part of a Fund program (changes in particular expenditure programs or rates of taxation), such measures are sufficiently at the margin that one is perhaps not distorting reality drastically by accepting the methodological assumptions required to validate traditional incidence analyses. While the data problems alluded to above are likely to preclude specific incidence analyses in the countries recently involved in Fund programs, there exists a large body of incidence literature on which one can rely for making reasonably good inferences on the likely distributional consequences of particular policy measures.

The difficulties in inference become greater when a Fund program involves a large number of significant fiscal measures and, more important, and as is generally the case, the adoption of significant macroeconomic and external policy measures. The number of detailed empirical studies tracing the distributional consequences of such policies is more limited and it is more difficult to separate out the consequences associated with particular policies or the effects that

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1/ For examples of specific expenditure incidence studies, see Gillespie (1965); Hansen (1972); Heller (1975); Jallade (1974); McLure (1974a); Meerman (1978, 1979, 1972); Selowsky (1979).

were specific to the countries that were the subject of such studies. Analytically, one is perforce required to decompose particular macroeconomic measures into their microeconomic consequences. For example, to the extent that a devaluation leads to increases in the price of importables, one could attempt to analyze its distributional effects in the same way one would assess the effects of changes in excise or sales taxes. In the case of many macroeconomic measures, such a decomposition is not easy, but there is basically little in the way of an analytical alternative.

Some Empirical Evidence on Price and Subsidy Policy

Empirical information concerning the direct effect of price and subsidy policy on income distribution is scarce and of questionable quality. In addition, existing studies do not cover a sufficient range of countries to provide an adequate basis for generalization. The conclusions of the few studies available, however, indicate that for large, general subsidy programs, the hardship imposed in the short run by eliminating subsidies to the poor cannot be ignored. They also indicate, however, that such programs are inefficient, ineffective mechanisms for redistributing incomes.

In one member country spending approximately 2 percent of GDP on consumer subsidies, for example, a Fund technical assistance study based largely on household survey data found that even a relatively open-ended subsidy scheme with no mechanisms to selectively exclude the poor nevertheless resulted in relatively perverse distributional effects. As such open-ended food subsidy schemes are typical of those attracting Fund attention, precisely because of the budgetary exposure they engender, the major results are worth reviewing here. In urban areas, it was found that less than 10 percent of the benefits of food subsidies accrued to the poorest 20 percent of the population, while 46 percent of the subsidy went to the richest 27 percent of the urban dwellers. Looking more directly at nutritional status, and taking the figure of 1,800 calories per day as representing the limit of serious undernutrition, it emerges that in the rural areas only 15 percent of the budgetary cost of subsidies is transferred to those under this limit, and in the urban areas the corresponding figure is 25 percent. Despite this poor targeting, however, data indicate that food subsidies provide an income transfer equivalent to up to 6 percent of per capita household expenditure for the poorest urban dwellers.

A recent study in another member country, which spends approximately 7 percent of GDP on food subsidies, finds a substantially less skewed distribution of benefits, no doubt due to the broader coverage (and higher cost) of the system. 1/ The amount of income transferred equalled 17 percent of the income of the poorest rural expenditure quartile, and 16 percent of the income of the poorest urban expenditure quartile. The amount of income transferred for the richest rural and urban quartiles was 4 and 3 percent, respectively. The distribution of subsidy benefits in absolute terms appears to be much less regressive than in the country previously mentioned, with per capita subsidy transfers being relatively equal in each quartile.

In a third member country for which data is available (Tarrant, 1982), food subsidies are allocated through ration shops that distribute foodgrains at below free market prices. Rural people,

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1/ This study, reported by Alderman and Von Braun, is based on a survey of nearly 2,400 rural and urban households.

which make up some 90 percent of the population, receive less than 20 percent of the available food ration, and even this proportion is reported to be reduced in the event of shortages. In excess of 60 percent of the recipients are government employees, and the privilege of a ration card is reportedly used to hold down government wages and salaries.

Another member country decreased the budgetary cost of food subsidies from 6 percent to 3 percent of GDP, while at the same time increasing the per capita transfer to the poorest classes by more than 30 percent through the introduction of a food coupon system that targeted food subsidies to the lower-income classes (Mateus, 1983).

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