

FISCAL ISSUES IN IMF-SUPPORTED ADJUSTMENT PROGRAMS *

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ملخص

القضايا المالية فى برامج التكيف التي يدعمها صندوق النقد الدولي

تهدف هذه الورقة إلى مراجعة أهم القضايا المالية التي تتضمنها برامج التثبيت والتصحيح الهيكلي التي يشرف عليها صندوق النقد الدولي .

تتطرق الورقة أولاً إلى الآثار الاقتصادية لمختلف طرق تمويل العجز في ميزانيات الدول النامية . ثم تتناول الورقة على التوالي القضايا المرتبطة بالإيرادات والنفقات الحكومية . فبالنسبة للإيرادات ، تبرز الورقة أهمية الضرائب غير المباشرة في اجمالي الإيرادات الحكومية في الدول النامية وأسباب هذه الظاهرة كما تناقش مختلف الاجراءات التي تهدف إلى تحسين هيكل الضرائب وزيادة حجمها .

أما فيما يخص النفقات الحكومية فتركز الورقة على العناصر الرئيسية لهذه النفقات وسبل الخفض من حجمها والرفع من مردودها .

وتتطرق الورقة كذلك إلى الظروف الاقتصادية السائدة خلال تطبيق سياسة مالية في إطار برنامج تصحيح هيكلي وذلك من حيث قيمة العملة المحلية ومعدل التضخم .

وتشير الورقة في الخاتمة إلى أهمية التناسق بين اجراءات السياسة المالية والسياسات الأخرى المطبقة في إطار برنامج تصحيح ، وذلك من أجل ضمان نجاح البرنامج بأكمله .

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I. Introduction :

There is a conceptual distinction between macroeconomic stabilization and structural adjustment in developing countries. The former addresses issues of a short-term nature that necessitate immediate action such as unsustainable balance-of-payments deficits, high rates of inflation and excessive budget deficits. The latter focuses on issues that constitute obstacles to growth and include the various distortions in the incentives for production, price controls, inefficient tax systems and excessive subsidies.

However, given the links and interdependence between macroeconomic variables across time and space, any attempt to separate the two sets of measures at the implementation stage may result in conflicting developments and, thereby, jeopardize the outcome of the program. In fiscal policy, for instance, temporary measures to reduce the budget deficit without an accompanying sound tax reform will only lead to recurrent fiscal crises and will eventually affect the credibility of the program as a whole. Therefore, stabilization and structural adjustment measures become part of one package ultimately intended to restore macroeconomic equilibrium in a developing country .

Considering the share of the government sector in aggregate demand and the increasing link between fiscal developments and external sector developments in developing countries, measures to reduce the size of the fiscal deficit are therefore given priority at the implementation stage of any stabilization program.

The purpose of this paper is to review the main fiscal issues included in IMF- supported stabilization and structural adjustment programs . Given the types of issues to be covered and considering the economic characteristics of the Arab countries which recently implemented or are currently

implementing stabilization and structural adjustment programs, it can be argued that all such issues are of primary importance to Arab countries . Even the primary - commodity exporter characteristic of a number of these countries does not require a specific emphasis, knowing that a large number of developing countries can be characterized in this way . Nevertheless, reference will be made to Arab countries where appropriate, that is, in the context of specific issues covered in the paper. Furthermore, considering the broad range of fiscal issues included in an adjustment program (see Appendix 1) , this review is selective in the sense that it focuses on the ones believed to be most critical in the present context.⁽¹⁾ Another component of public sector policies , privatization, is increasingly viewed as a distinct policy area and as such is not covered among the fiscal issues .

The remainder of this paper is organized as follows . Section II briefly examines the macroeconomic effects of government budget- deficit financing in developing countries and , thus, underlines the emphasis placed on a reduction of these deficits. Since different measures of the fiscal deficit are used in the literature, the section first provides a review of these measures. Section III reviews the different types of taxes which constitute the bulk of government revenues and analyzes the types of reform under each category within an adjustment program. Section IV focuses on the expenditure side of fiscal policy and analyzes its main components. In section V, a number of macroeconomic issues of particular importance to fiscal policy in developing countries are reviewed and analyzed. Section VI concludes .

II. Macroeconomic Effects of public Deficit Financing

The exact definition of a public deficit varies across countries depending on how inclusive revenues and expenditures are. Fisher and Easterly (1990) ,for instance, provide some examples of such methodological differences.⁽²⁾ On the revenue side, they note that some countries include foreign aid as

part of government revenues while others consider it as a means to finance the budget deficit. With respect to the overall budget, they observe that the level of inclusion of the government is not uniform across countries; in some cases only the activities of the central government are considered, while in others the activities of local governments as well as state - owned enterprises are reflected in the budget.

Another significant methodological issue regarding the definition of a budget deficit arises in the context of a country facing both a high level of debt and high inflation. A study by Tanzi, Blejer and Teijeiro (1988) takes on this issue and analyzes the various implications of inflation on the definition of the fiscal deficit.⁽³⁾ The authors note that for a highly indebted country experiencing high inflation, the reduction in the real value of debt due to inflation impacts upon the size of the fiscal imbalance. In effect, they argue that in this case part of the interest payments represents compensation for the erosion of the principal and therefore constitutes amortization of the debt. Consequently, they state that the conventional measure of the budget deficit "may magnify the size of the fiscal adjustment that a country needs" (p.13) . As an alternative, the authors consider the use of the operation fiscal deficit which "is defined as the conventional deficit minus the part of the debt service that compensates debt holders for actual inflation. Or, alternatively, it is equal to the primary deficit plus the real component of interest payments" (p.12). However, they believe that it may be hard to rely on this measure of the deficit due to the technical difficulties encountered in the precise estimation of the compensation-for-inflation part of the debt service.

In any case, regardless of the particular definition of the fiscal deficit, the main goal of a stabilization program with respect to the public sector deficit is a reduction of its magnitude to moderate and sustainable levels considering the types of financing available and the macroeconomic consequences of each type. Therefore, in order to put into perspective the importance given by the IMF to budget deficit reduction, it is useful to review the different

types of deficit financing and their impact on macroeconomic variables in developing countries .

The available literature on budget deficit financing is mostly concentrated on the traditional sources of financing used in industrialized countries, that is, bond financing and money creation. Only recently has more attention been paid to foreign borrowing, which has been extensively used in developing countries . Thus, there are three major ways for a government to finance its budget deficit: domestic borrowing, foreign borrowing, or money creation .

1- Domestic borrowing

It is generally agreed that, due to the lack of well-developed capital markets in most developing countries, it is difficult for a government to rely on this particular source of financing. Tanzi (1991) , for example, states that the size of the capital market sets a limit on the size of the fiscal deficit that could be financed through this channel .⁽⁴⁾ Even in countries where bond financing is a viable option, their prices must be low (interest rates must be high) so that they become attractive to buyers. Taken in isolation from other stabilization policies, this approach may run against the wishes of the authorities that want to maintain interest rates artificially low. Moreover, heavy domestic borrowing by the public sector may crowd out private investment. However, it should be noted that the issue of the effect of government borrowing on interest rates is by no means settled in the literature. Three schools of thought compete in this respect: Neoclassical, Keynesian and Ricardian. ⁽⁵⁾ Barro (1989) provides some empirical evidence in support of the Ricardian view which predicts that budget deficits have no effect on real interest rates. ⁽⁶⁾ Adrangi and Easton (1993) mention a number of studies that find evidence for deficits raising interest rates as well as some that do not find any such evidence. ⁽⁷⁾

2. Foreign borrowing

Heavy foreign borrowing to finance a public deficit may have a number of undesirable consequences. Thus, increased foreign borrowing can cause an appreciation of the real exchange rate. In turn, this will lead to a worsening of the current account balance. Furthermore, the increased interest on the debt puts an additional burden on the government budget and calls for more borrowing. Another potential negative impact of unsustainable fiscal deficits is that the expectation by domestic savers of a significant devaluation of the currency, as well as an increase in taxes, will trigger capital flight. However, in countries with strict capital controls, such an outcome will be minimized.

3. Money creation

There is a rich body of literature on the process and effects of printing money to finance a budget deficit. The main consequence is an increase in the rate of inflation with all its subsequent repercussions on production, income distribution and international trade and payments.⁽⁸⁾ A significant number of studies have also reviewed the experience of developing countries with inflation in the context of stabilization programs.⁽⁹⁾ However, for the purpose of this study, inflation is covered only from two specific angles. First, the process through which money creation leads to inflation is presented below. Second, the impact of inflation on tax revenues is analyzed at a later stage.

The following analysis draws heavily from Fisher and Easterly. When money is printed at a rate higher than that needed to meet the demand for it at the current price level, the public finds itself with excess cash balances. Any attempt by the public to lower its excess cash holdings will push the price level higher until the equilibrium is reached again. In the process of printing money, the government derives an amount of revenue (seignorage). The level of seignorage will depend on the demand for base money and the

real growth in the economy, as well as the elasticity of the demand for real cash balances with respect to inflation and income. For instance, given a unitary income elasticity of demand for base money and a currency to GNP ratio equal to 13%, for each percentage point increase in GNP the government can generate 13% of GNP in seignorage simply by printing just enough money to match the increased demand for real balances. The monetary base would increase by 1%, and this money printing process would thus be noninflationary.

Given a stable demand for highpowered money, any increase beyond that rate would lead to inflation, but the government would still be able to generate revenue from seignorage in this situation. However, as the rate of inflation increases, the demand for high powered money declines causing the government's revenue from seignorage to reach a maximum and eventually decrease as the rate of inflation increases further. Therefore, any attempt by a government to finance a budget deficit through money creation will only lead to inflation and its subsequent repercussions on the economy (although the government generates a fiscal benefit from inflation in terms of a reduction in the real value of its domestic debt when inflation is unanticipated).

III. Revenue Policies

Fiscal policy for stabilization can be implemented through changes in tax revenues or in government expenditures or in both. This section focuses on the revenue side of fiscal policy while the next one tackles the expenditure side.

Taxes can be broadly classified as follows :

- Direct taxes

* personal income tax .

* corporation income tax .

* property tax.

- Indirect taxes

* Domestic taxes .

+ selective taxes on goods.

+ general taxes on goods.

+ selected taxes on services.

* Taxes on international trade.

+ import duties.

+ export duties.

Over the last two decades, a number of studies have undertaken a detailed examination of the tax structure in developing countries.

One such study by Tanzi (1987) analyzes the quantitative characteristics of tax systems in eighty-six developing countries.⁽¹⁰⁾ The main findings of the study can be summarized in the following points

- Personal income taxes account for 1.9% of GDP and for 10.3% of total tax revenue.
- Corporation income taxes account for 3.1% of GDP and for 16.5% of total tax revenue.
- Wealth and property taxes account for 0.4% of GDP and for 2.5% of total tax revenue.
- Domestic taxes on goods and services account for 4.8% of GDP and for 28% of total tax revenue.
- Foreign trade taxes account for about 5% of GDP and for 30.6% of total tax revenue. Of those, import duties represent 4.2% of GDP and 25% of total tax revenue.

Thus, Tanzi's study leads to a number of important results regarding the

structure of taxation in developing countries. In effect, it shows that direct taxes represent only about 30% of total tax revenues while indirect taxes constitute almost 60% of the total (social security and other taxes amount to the remaining 10%). Another striking feature of developing countries is their heavy reliance on trade taxes, and particularly import duties.

Overall, Tanzi's findings are not unique in this respect, and most empirical studies about the structure of taxation in developing countries point in the same direction. Bird (1987), for instance, in a review of indirect taxation in developing countries covers a number of empirical studies on the subject, and all the evidence he presents indicates that indirect taxation constitutes the bulk of tax revenues in these countries, with import duties being the single largest source.⁽¹¹⁾

Therefore, unlike in industrial countries where direct taxes account for over two-thirds of the total tax revenues, heavy dependence on indirect taxes is a common characteristic of developing countries.

With respect to Arab countries, the level of total tax revenues as a percent of total government revenues depends heavily on whether or not the country is an oil exporter. In a study of tax systems in Arab countries, Khriouch (1989) observes that tax revenues represent between 50 and 55% of total government revenues in non-oil countries whereas they represent only between 1 and 5% in oil-exporting countries.⁽¹²⁾ However, since the mid-1980s and into the early 1990s, most Arab countries experienced fiscal deficits that can be ascribed to domestic policies, regional developments and the international economic environment (such as the sharp decline in world oil prices beginning in 1986).⁽¹³⁾

The persistence of fiscal deficits along with a number of other macroeconomic distortions led a number of Arab countries to proceed with stabilization and structural adjustment policies, with fiscal reforms a major component of such policies. In an assessment of the tax system in a number of

Arab countries before they embarked upon these reforms, El-Erian and Tareq (1993) estimate that it "has been characterized by a myriad of taxes and rates, differentiated in scope by the type of income and sector of activity, with various levies and fees superimposed thereon, as well as ad hoc concession and exemption schemes" (p.37).⁽¹⁴⁾ Regarding the tax reforms being implemented, the authors believe that a main concern of policymakers is to alter the structure of taxation in such a way as to reduce the country's dependence on international trade taxes.

A number of factors may explain the difference between industrial and developing countries as to the structure of taxation, these may be structural, institutional, social and economic for the most part. Among the main specific factors are the level of economic development, degree of urbanization, degree of monetization of the economy, degree of openness, share of agriculture in GDP, quality of tax administration and degree of corruption among tax collectors. Regarding structural factors, Morrison (1982) investigates empirically whether "certain structural factors make some developing countries more deficitprone than others" (p. 467).⁽¹⁵⁾ His results indicate in particular that countries in the lower end of economic development and those with a bigger involvement of government in the economy tend to have larger budget deficits. Furthermore, a number of studies have undertaken an empirical investigation of the relationship between fiscal dependence on trade taxes and economic development⁽¹⁶⁾. Their main conclusion is that a government's dependence on trade taxes (particularly import taxes) declines as the level of economic development rises.

Raising tax revenues and reducing government expenditures constitute the two main components of any IMF-supported adjustment program with respect to fiscal policy. On the revenue side, focus of this section, the difference of horizon for a full implementation of revenue-raising measures is kept in perspective. In other words, both the fiscal authorities of a developing country about to implement a structural adjustment program and the

IMF recognize that some measures can be implemented immediately while others require a longer period to be operational. This is one main distinction between immediate tax policy measures and a fundamental tax reform. In the following review and analysis of specific tax measures drawn in part from a study by the Fiscal Affairs Department of the IMF (Occasional Paper 46, 1986), these are considered according to the tax structure and without distinction of their time horizon.

1. Direct taxes

a- Personal income taxes: Since they account for only about 10% of total tax revenues in developing countries, this indicates both a narrow tax base as well as an inadequate rate structure. Buitter (1990) notes that the narrow tax base that characterizes developing countries is not a recent phenomenon, and that widening the tax base is a long-standing recommendation⁽¹⁷⁾. Widening the tax base through identification and registration of new taxpayers and simplifying the rate structure constitute the necessary first steps to improve the share of personal income taxes in total tax revenues. In particular, a move from schedular taxation, which distinguishes between income from different sources for taxation purposes, to global taxation where pooled income is taxed, would significantly contribute to an improvement in tax administration.

b- Corporate income tax: The main measure regarding this type of tax consists in shortening the time lag for payments; in other words, moving assessments and collections into a current year basis⁽¹⁸⁾

c- Property tax : The main changes applied to property tax include introduction or increase in land taxes along with improvements in the valuation of property.

A common measure that applies to all types of direct taxes is a reform of tax administration in order to reduce tax evasion, ensure compliance and enforcement, and improve collection (reduce exemptions and collect arrears).

2: Indirect taxes.

a- Domestic taxes.

- Selective taxes on goods : These excise taxes may be levied or raised on petroleum products and on consumption of specific goods such as alcohol and tobacco. In the first case, the demand is income elastic while in the second it is income inelastic. Thus, a tax on petroleum products tends to be progressive in incidence whereas taxes on alcohol and tobacco tend to be regressive.

- General taxes on goods : These commodity taxes on consumption are mainly of three types : sales tax, turnover tax and value-added tax (VAT). A sales tax is a tax on final goods imposed at the retail level to ensure that all consumed goods are taxed. Retail sales taxes are not generally used in developing countries mainly because of the existence of significant informal distribution networks. A turnover tax is a multi-stage tax, that is, applied at every stage of the production-distribution chain. It is relatively easy to administer in the sense that no distinction needs to be made between the different kinds of transactions. However, it is a cascading tax since tax liabilities accumulate as each additional transaction generates a new tax, therefore causing increases in the prices of outputs that use taxed inputs.

The VAT is a tax on all transactions in the production-distribution chain up to and including the retail stage. The way it is applied is that each intermediated purchaser in the chain is able to credit taxes paid on purchases against taxes due on sales. Thus, it means that all inputs are tax free and only the final purchaser (consumer) will bear the burden of this tax.

Although it is generally believed that all three types of consumption taxes covered above are regressive in nature, mainly because consumption constitutes a larger proportion of income of lower-income groups, the VAT has gained popularity in developing countries in recent years compared to the other two types of taxes.

In a detailed analysis of the VAT, Tait (1989) recognizes that a broad-based VAT is likely to be regressive, but he argues that such regressivity can be greatly reduced by not taxing basic necessities.⁽¹⁹⁾ Furthermore, like most other taxes, VAT can be evaded through a number of ways such as traders liable to VAT but not registering or exaggerating refund claims or understating sales. Regarding the refund issue, Due (1990) states that the government may have to delay refund payments in order to audit claims and avoid that fraudulent ones get through⁽²⁰⁾. However, he adds that these delays may cause a loss of confidence on the part of the business community in the ability of the government to manage the VAT efficiently. Nevertheless, Tait believes that if the VAT is properly administered and includes only a few rates, it is much more effective than other taxes in raising revenue and also promoting neutrality and uniformity of the tax burden.

- Selected taxes on services: Additional services may also be taxed or their tax rates may be increased. Some typical examples of such services include electricity and telecommunications. Income elasticity of this type of consumer services is relatively high, and therefore their taxation contributes to an improvement in the progressivity of tax burdens.

b- Taxes on international trade

Since they represent over 30% of total tax revenues in developing countries, any changes in their base and rate structure will undoubtedly have a significant impact on the overall revenue size. The foreign trade tax measures included in IMF-Supported adjustment programs generally take the form of increases in some custom duties and, more importantly, a replacement of quantitative restrictions on imports with tariffs in order to transfer the quota rent to the government.⁽²¹⁾

Attempts at reforming the tax system in Arab countries are not a recent phenomenon. Indeed, a number of countries have introduced specific tax measures, particularly in the late 1970s and throughout the 1980s. For in-

stance, as reported in Horton (1990) in his study of economic reforms in Morocco, the government undertook a series of tax policy measures between 1973 and 1986 aimed in part at improving the structure of indirect taxes, particularly on imports.⁽²²⁾ Morocco also introduced the VAT in 1986 and Tunisia in 1988.⁽²³⁾ More recently, Algeria began a reform of its tax system and introduced the VAT in 1992. In Egypt, the government is also preparing for the introduction of the VAT.

Therefore, like most developing countries, Arab countries are also moving in the direction of improving their tax systems in terms of broadening the tax base and simplifying the tax structure both for revenue and equity purposes.

Iv. Expenditure policies

The rapid growth of the public sector in most developing countries (due to historical, ideological and economic factors among others) has led a number of them into fiscal crises in recent years because of insufficient domestic revenues to match public spending and sharp reductions in available foreign funds. From this perspective, the focus of IMF - supported adjustment programs has been on reducing government expenditures and improving their allocation. Referring to a recent world Bank review of the changes in the levels and composition of public spending in countries that received adjustment loans, Pradhan and Swaroop (1993) report that "misallocation of public expenditures remains a problem" (p.28).⁽²⁴⁾

The main categories of government expenditures are: wages and salaries, goods and services, subsidies, capital spending and interest payments.⁽²⁵⁾

The following brief review and analysis of public-sector expenditures in the context of structural adjustment draws mainly from studies by the IMF (Occasional paper 46) and The World Bank.⁽²⁶⁾

1- Wages and salaries

A number of reasons can make public-sector wages exceed the value of

an employee's marginal product (political, social,...), but this type of policy causes a high wage structure to initiate an aggregate demand pressure; the same can be said of a policy of overemployment. Countries that engage in structural adjustment typically suffer from excess demand, and thus one important way to reduce this phenomenon is to implement adequate measures regarding government sector wages and employee numbers. In practical terms, the measures include freezing or even reducing both government employee numbers and wages. In a period of significant inflation and if a total wage freeze is not politically feasible, a partial salary indexation (instead of a full indexation) would still cause real wages to decrease.

2- Goods and Services

This category includes all the noncapital expenditure items of the government such as rent, fuel, maintenance, travel, nondurable goods and military purchases. The measures in this respect consist of reducing specific expenditures as well as improving the control process .

3- Subsidies

This category constitutes the largest portion of government expenditures in developing countries. So it comes as no surprise that IMF-supported adjustment programs include a reduction of subsidies. However, given the primarily social nature of government policy regarding this type of expenditure (protection of lower income groups), implementation of adjustment measures often proves to be difficult and is subject to strong opposition from different quarters within the country.

The World Bank Report 1988 classifies subsidies into two main types : the first includes export or credit subsidies and is designed to help the private sector compete in international markets; the second includes food, energy or housing subsidies as well as subsidies to state - owned enterprises.

The main arguments supporting an overall reduction in subsidies can be summarized as follows:

- Removal of distortions in relative prices can only strengthen the overall structural adjustment program, thus allowing accompanying exchange rate changes to be reflected throughout the economy and contributing to an improvement in resource allocation.

- Since the intended objective of subsidies is mainly to protect the lower-income part of the population (along with helping to sustain non-profitable state enterprises or supporting export oriented private firms), a careful targeting of these groups will not only ensure that they fully benefit from government help but also that other groups will not derive any benefit.

4- Capital Spending and Interest payments

Because developing countries have had to finance persistently high budget deficits through borrowing (domestic and foreign), the size of government debt grew significantly causing interest payments to increase markedly. Although IMF-supported fiscal measures do not explicitly address the issue of debt-servicing cost, they do implicitly refer to it since their main objective is to limit the size of the budget deficit, not to mention debt-rescheduling which is frequently part of a structural adjustment program and which helps to reduce the immediate cost of debt servicing.

Regarding capital expenditures, since the government is faced with limited resources and cannot afford to finance excessive and sometimes unnecessary investments, it must therefore reduce the size of new investments and delay new projects whenever possible. To accomplish that, the government must first set investment priorities and then evaluate the quality of these investments (technical and financial feasibility).

V. Fiscal Policy and Macroeconomic Conditions

A carefully designed fiscal policy package included in an IMF-supported structural adjustment program does not, by itself, guarantee a full success at the implementation stage; in other words, it does not ensure the targeted reduction in the fiscal deficit over the program period. In effect, a number of factors may come into play and jeopardize the adjustment process on the fiscal side. These factors may be of different types (institutional, political, economic, ...) and their impact may be of different degrees. However, the object

of this section is to concentrate only on factors of an economic nature or, more precisely, on some macroeconomic conditions that may exist during the implementation of a fiscal policy package and thus affect the outcome of the policy

1. Exchange rate overvaluation

As previously established, developing countries are characterized by their heavy dependence on international trade taxes. With respect to import taxes, their rates are mainly ad valorem and their base is the domestic value of the imported goods measured at the official exchange rate. Thus, if the real exchange rate becomes overvalued, *ceretis paribus*, the real value of imports falls and consequently the real value of import duties decreases. An overvalued real exchange rate can also affect trade tax revenues indirectly through a number of channels. One such channel is that an overvalued real exchange rate reduces the incentive to export. As exports fall, foreign exchange falls and this results in a reduction in the volume of imports. Consequently, revenue from import taxes falls. Another channel through which an overvalued exchange rate may cause a reduction in import tax revenues is when the government imposes restrictions on the movement of goods and capital or tightens the existing ones in response to the overvaluation. Restrictions cause informal channels to develop and expand, and thus lead to a reduction in the level of official transactions and thereby in the tax base. The result is that needed import duties will be foregone.

Therefore, any attempt to embark upon a fiscal adjustment will not bring about the results sought if no concurrent or prior adjustment of the real exchange rate that would reflect the underlying macroeconomic fundamentals takes place.

2. Inflation

The large body of literature on inflation and the emphasis placed on reducing the level of inflation in stabilization programs indicate how its im-

fact is significant on various aspects of the economy. However, for the purpose at hand, particular attention is paid to the impact of inflation on fiscal policy and, more specifically, on tax revenues in developing countries .

A number of authors have taken on the issue of the impact of inflation on tax revenues.⁽²⁷⁾ In developing countries, the structure of the economy and the quality of tax administration are such that collection lags exist for tax payments, meaning that the tax is due at one time and paid sometime later. In this case, when the rate of inflation is insignificant (almost zero), the real value of tax revenues is unaffected-although the opportunity cost of the lag may be significant depending on the value of the interest rate. However, under inflationary conditions, the government experiences a loss of real tax revenue; the value of this loss depends upon the rate of inflation, the size of the lag and the initial level of taxation (at the previous inflation rate) .

Inflation also affects revenues from taxes that apply specific rates. since these rates are usually not fully adjusted to inflation at any point in time, the government incurs a loss when prices are increasing.

Therefore, like real exchange rate adjustment , inflation stabilization is indeed a necessary measure to undertake for the sake of the structural adjustment program in general, and for that of fiscal policy in particular.

3. Primary-commodity export cycles

A number of developing countries, among which several Arab countries, are highly dependent on exports of one or two primary commodities for their foreign exchange earnings. The government may directly own the industry or it may derive its revenues from export taxes. In any case, revenue from these commodity exports generally represents a large share of the government budget revenue. The experience of the 1970s and 1980s has shown that large swings in these commodity prices may occur due to changes in world market conditions.

The impact of this type of external shocks on different aspects of developing country economies is widely covered in the literature. With respect to the fiscal impact of this price instability, most studies have shown that the government tends to overreact to an export boom, that is, it significantly increases the size of its expenditures assuming that the boom will be permanent. In this situation, expenditures exceed revenues and the end result is large and expanding budget deficits and, eventually, a large external debt. However, as world market conditions change and export revenues decrease, the country finds itself in a critical situation.⁽²⁸⁾

Even while implementing an adjustment program, a developing country may still be tempted to increase spending if suddenly world market conditions became favorable again. However, after their recent experience, developing countries should use a different approach in managing commodity export cycles. The World Development Report 1988 summarizes this approach as follows: "A prudent strategy, therefore, is for the public sector to save a large portion of its commodity revenue" (p.74).

Following the fluctuations in world oil prices that began to affect the fiscal position of the Gulf Cooperation Council member countries since the early 1980s, Al-Saadoun (1987) recommends a progressive income tax system in these countries for the main purpose of raising government revenues and, thus, partially alleviating the effects of downward changes in oil prices.⁽²⁹⁾ He further argues that such a tax system would help channel investments to desired sectors as well as rationalize consumption.

VI. conclusion

Reducing the size of the fiscal deficit to manageable proportions is the primary objective of fiscal adjustment in a developing country. This requires both an increase in public revenues and a reduction in public spending.⁽³⁰⁾

With respect to the increase in public revenues, the set of measures to be

implemented can be classified in four main items:

- Increasing tax rates and simplifying rate structure
- Widening the tax base
- Replacing quantitative restrictions on imports with tariffs
- Improving tax administration

With respect to the reduction in public expenditures, the set of measures basically includes the following :

- Overall reduction in expenditures
- Better allocation of spending
- Stricter control of expenditures

However, the implementation of a fiscal package is not as straightforward as its design might indicate. A number of obstacles and constraints stand in the way of a smooth execution of the program.

Probably the biggest obstacle facing a fiscal program is the conditions under which it is implemented. Indeed, the economy is typically going through a crisis; production is well below capacity, unemployment is high, inflation is significant and financial resources are very limited. Raising tax rates and broadening the tax base in such a situation constitutes a real challenge. Moreover, reducing subsidies can be politically risky and could generate an unpredictable social opposition . Therefore, the timing of a fiscal program is a determining factor as to the extent of its measures. In order to avoid such an obstacle, the government ought to quickly react to early signals and get fiscal reform under way before the domestic economic conditions become unfavorable.

Furthermore, with respect to tax administration, any improvement or even reform requires time and resources (human and financial), and therefore the longer this process takes the more tax revenues will be affected.

Fiscal measures are usually implemented in conjunction with other measures, and are thus part of an overall economic package. For that reason, the fiscal authorities of a developing country must not lose sight of the potential mutual impact between fiscal measures and other policy measures. For instance, trade liberalization may affect the level of trade taxes and increased tax rates in an export sector may in turn affect the size of investment in that sector. Thus, a careful synchronization of the different sets of measures will not only give more credibility to the overall program but also increase its chances for success.

Another important area of concern in the design and implementation of fiscal measures, and specifically revenue measures, is their potential impact on income distribution. Since most developing countries are historically characterized by a wide gap in income distribution between the well-off and the poor, tax measures included in a fiscal adjustment package ought to be carefully evaluated based on this criterion in order not to widen this gap further. On the contrary, steps must be taken to narrow this gap, and thus generate a more favorable social climate for the implementation of sometimes harsh but necessary measures.

Finally, fiscal adjustment should not take place at the expense of economic growth. In other words, the types of revenues and expenditures should constantly be evaluated as to their potential impact on growth.⁽³¹⁾ Indeed, growth remains a major objective of economic policy in developing countries, and a sound fiscal policy can only help them reach that objective.

APPENDIX 1
Characteristics of Specific Fund-Supported
Adjustment Programs*

PUBLIC SECTOR POLICIES

1. Restraint of central government current expenditures

a. Wages and salaries

- (1) Freezing or reduction of government employee numbers.
- (2) Freezing, reduction, or postponement of wage increases
- (3) Changes in the employment policy
- (4) Limit on salary indexation

b. Goods and services

- (1) Improvement in overall expenditure controls
- (2) Cumulative monthly/quarterly ceilings on expenditures
- (3) Reduction in appropriation for specific expenditures

c. Transfers and subsidies

- (1) Capping or reduction in subsidies
 - (a) food
 - (b) petroleum
 - (c) Fertilizers
- (2) Reduction in other subsidies
- (3) Curtailment of current transfers to Nonfinancial Public Enterprises (NPEs)

* IMF , Occasional Paper No. 46, 1986 .

(4) Control of state enterprises operating expenditures

d. Capital expenditure and net lending

(1) Curtailment of investment

(a) Real terms

(b) Nominal terms

(2) Limit or delay on new investment or new projects

(3) Improvement of investment program

(4) Reduction in domestically financed investment

e. Expenditure administration

(1) Improvement expenditure control mechanism

(2) Others (shift in budgetary priorities)

2. Tax System

a. Income taxes

(1) Move from schedular to global income tax

(2) Reduction of personal income tax

(3) Increase or surcharge in personal income tax

(4) Income tax reform or extension

(5) Increase in payroll tax or social security contribution

(6) Arrears

b. Corporate tax

(1) Income tax surcharge

(2) Collection of tax arrears

(3) Shorten lag for corporate tax payment

(4) Modification or reduction of income or profits tax

c. Tax on property

- (1) Introduce or raise land taxes
- (2) Introduce or raise urban property taxes
- (3) Other property taxes

d. Domestic taxes on goods and services

- (1) Raise excise rates
- (2) Increase tax on petroleum products
- (3) Raise or modify sales tax
- (4) Temporary selected tax reduction
- (5) Raise taxes on other domestic goods and services

e. Import duties

- (1) General or selected increase in custom duties
- (2) Increase in petroleum import taxes
- (3) Reduction or elimination of selected import duties
- (4) Tariff reform (exemptions)
- (5) Import duty surcharge

f. Export duties

- (1) Increase in rates
- (2) Extension of coverage
- (3) Export compensation scheme
- (4) Others (reform/ reduction)

g. Other taxes and nontaxes

- (1) Tariffs, fees, charges, etc.

(2) Others

h. Improve or reform tax administration

3. Nonfinancial public enterprises

a. Improvement in NPEs performance

(1) Improve price structure

(2) Partial or total privatization

b. Improve overall management and control

4. Overall budget

a. Reduction of deficit as a percent of GDP

b. Reduction in domestic arrears

APPENDIX 2
Arab Countries
Government Budget Surplus or Deficit
1991 - 1992 *

Country	In Millions of US Dollars		As a Percentage of GDP	
	1991	1992	1991	1992
Algeria	1878	- 582	4.38	- 1.28
Bahrain	- 60	- 128	- 1.41	- 2.85
Egypt	- 2708	- 2762	- 7.91	- 6.61
Iraq	-----	-----	-----	-----
Jordan	- 99	379	- 2.43	7.28
Kuwait	- 25384	- 18238	- 230.58	- 84.01
Lebanon	- 765	- 404	- 20.81	- 11.91
Libya	- 2323	- 1993	- 7.32	- 6.05
Mauritania	- 43	- 85	- 3.79	- 7.38
Moroco	- 864	- 622	- 3.12	- 2.16
Oman	- 21	- 856	- 0.21	- 7.45
Qatar	170	- 358	2.47	- 5.15
Saudia Arabia	- 30888	- 10536	- 26.78	- 8.71
Somalia	-----	-----	-----	-----
Sudan	- 434	- 1157	- 3.55	- 10.30
Syria	- 76	- 139	- 0.60	- 1.10
Tunisia	- 526	- 433	- 3.98	- 3.06
United Arab Emirates	- 2371	-2059	- 7.01	-5.94
Yemen	- 573	- 1027	- 6.88	- 10.00

* **Source** : Unified Arab Economic Report, Arab Fund for Economic and Social Development, Arab Monetary Fund, and Organization of Arab Petroleum Exporting Countries, 1993.

APPENDIX 3
Allocation of Central Government Spending
by Economic Category, 1980
(In Percent)*

Spending	Industrial Countries	Middle- Income Countries	Low- Income Countries
Capital Spending	6	23	16
Wages	13	23	16
Other Goods and Services	14	13	17
Interest	7	7	12
Subsidies and Transfers	60	34	39

Source: World Development Report 1988, The World Bank.

Footnotes & References

- (1) International Monetary Fund, "Fund-Supported Programs, Fiscal Policy, and Income Distribution," Occasional Paper No. 46 (Washington: International Monetary Fund, 1986).
- (2) Fisher, Stanley, and William Easterly, "The Economics Of The Government Budget Constraint," The World Bank Research Observer, Vol.5, No.2 (July 1990), pp.127-142.
- (3) Tanzi, Vito, Mario I. Blejer, and Mario O. Teijeiro, "The Effects of Inflation on the Measurement of Fiscal Deficits," in International Monetary Fund, "Measurement of fiscal Impact: Methodological Issues," Occasional Paper No.59, ed. by Mario I. Blejer and Ke-Young Chu, (Washington: International Monetary Fund, 1988).
- (4) Tanzi, Vito, Public Finance in Developing Countries (Hants: Edward Elgar, 1991).
- (5) For a comprehensive treatment of these approaches, see Bernheim, Douglas B., "A Neoclassical Perspective on Budget Deficits," Journal of Economic Perspectives, Vol. 3, No. 2 (Spring 1989), pp. 55-72.
- (6) Barro, Robert J., "The Ricardian Approach to Budget Deficits," Journal of Economic Perspectives, Vol. 3, No. 2 (Spring 1989) , pp. 37-54.
- (7) Adrangi, Bahram, and Todd Easton, "Government Borrowing, Interest Rates, And The Crowding Out Effect In An Open Economy, " Studies In Economic Analysis, Vol. 15, No. 1 (Fall 1993), pp.3-28.
- (8) For a concise treatment of the consequences of inflation, see Goode, Richard, Government Finance in Developing Countries (Washington: The Brookings Institution, 1984).
- (9) See, for instance, Kiguel, Miguel A., and Nissan Liviatan , "Inflationary Rigidities and Orthodox Stabilization Policies: Lessons from Latin America ," The World Bank Economic Review , Vol. 2, No.3 (September 1988), pp.273-298; and Beckerman, Paul, The Economics Of High Inflation (Houndmills: Macmillan, 1992).
- (10) Tanzi, Vito, " Quantitative Characteristics of Tax System of Developing Countries," in The Theory of Taxation for Developing Countries, ed. by David Newbery and Nicholas Stern, (New York: Oxford University Press, 1987).
- (11) Bird, Richard M., " A New Look at Indirect Taxation in Developing Countries," World Development, Vol. 15, No. 9 (1987), pp. 1151-1161.
- (12) Khriouch, Hosni Ali, "Reality of tax Systems In Arab Countries And Rules For Harmonization, " Journal Of Arab Economic Unity, No. 7 (1989), pp.51-74.

- (13) For the size of the budget deficits in Arab countries in 1991 and 1992 (in nominal terms as well as a share of GDP), see Appendix 2
- (14) El-Erian, Mohamed A., and Shamsuddin Tareq, "Economic Reform in the Arab Countries: A Review of Structural Issues," in *Economic development of the Arab countries: Selected issues*, ed. by Said El-Naggar (Washington: International Monetary Fund, 1993).
- (15) Morrison, Thomas K., "Structural Determinants of Government Budget Deficits in Developing Countries," *World Development*, Vol. 10, No. 6 (1982), pp. 467-473.
- (16) See, for instance, Greenaway, David, "A Statistical Analysis Of Fiscal Dependence On Trade Taxes And Economic Development," *Public Finance*, Vol. 39, No. 1 (1984), pp. 70-89; and Greenaway, David, and David Sapsford, "Further Econometric Analysis Of The Relationship Between Fiscal Dependence On Trade Taxes And Economic Development," *Public Finance*, Vol. 42, No. 2 (1987), pp. 309-319.
- (17) Buiter, Willem, *Principles of Budgetary and Financial Policy* (Hertfordshire: Harvester Wheatsheaf, 1990).
- (18) For a discussion of the impact of lags in payments on the measurement of the fiscal deficit, see Diamond, Jack, and Christian Schiller, "Government Arrears in Fiscal Adjustment Programs," in *Measurement of Fiscal Impact: Methodological Issues*, Occasional Paper No. 59, ed. by Mario I. Blejer and Ke Young Chu, (Washington: International Monetary Fund, 1988).
- (19) Tait, Alan A., "Misconceptions About the Value-Added Tax," *Finance & Development* (March 1989), pp. 25-27.
- (20) Due, John F., "Some Unresolved issues In Design and Implementation Of Value Added Taxes," *National Tax Journal*, Vol. 43, No. 4 (1990), pp. 383-394.
- (21) For a comprehensive analysis of the links between trade policy reform and government revenue, including an empirical investigation of a small group of developing countries, see Greenaway, David, and Chris Milner, "Fiscal Dependence on Trade Taxes and Trade Policy Reform," *The Journal of Development Studies*, Vol. 27, No. 3 (1991), pp. 95-132.
- (22) Horton, Brendan, "Morocco: Analysis and Reform of Economic Policy," *Economic Development Institute of The World Bank, Analytical Case Studies, Number 4* (Washington: The World Bank, 1990).
- (23) For an overview of the economic reforms in Morocco and Tunisia, see Zallio, Franco, "Economic Reforms in Morocco and Tunisia," *The International Spectator*, Vol. 29, No. 1 (1994), pp. 127-139.

- (24) Pradhan, Sanjay, and Vinaya Swaroop, "Public Spending and Adjustment," *Finance & Development* (September 1993), pp. 28-31.
- (25) For the allocation of central government spending by economic category, see Appendix 3.
- (26) *World Development Report 1988* (Oxford: Oxford University Press for the world Bank, 1988).
- (27) See, for instance, Tanzi, Vito, "Inflation, Lags in Collection, and the Real Value of Tax Revenue," *IMS Staff Papers, International Monetary Fund* (Washington), Vol. 24, No. 1 (March 1977), pp. 154-167; and Aghevli, Bijan B., and Mohsin S. Khan, "Government Deficits and the Inflationary Process in Developing Countries," *Staff Papers, International Monetary Fund* (Washington), Vol. 25, No. 3 (September 1978), pp. 383-416.
- (28) Morocco, for instance, embarked upon a large public investment program in the 1970s following a sharp increase in the international price of phosphates (a major source of export earnings). However, when phosphate world prices started to collapse, the government decided to maintain the investment program (for a few years) through increased foreign borrowing.
- (29) Al-Saadoun, Jassem K., "Public Finance in the Gulf Cooperation Council Countries: A First Look at its Reality, Possibilities and Results," *Attaawun*, No. 7 (July 1987), pp. 75-106.
- (30) For a discussion of fiscal deficits in a number of Arab countries during the 1980s and specific measures recommended to reduce these deficits, see the proceedings of a seminar on government fiscal deficit organized by the Arab Planning Institute - Kuwait from November 26 through 28, 1989.
- (31) For a discussion of the relationship between fiscal variables and the level of output, see Khan, Mohsin S., and Malcolm D. Knight, "Stabilization programs in Developing Countries: A Formal Framework," *Staff Papers, International Monetary Fund* (Washington), Vol. 28, No. 1 (March 1981), pp. 1-53.