

IMF Working Paper

© 1998 International Monetary Fund

This is a *Working Paper* and the author(s) would welcome any comments on the present text. Citations should refer to a *Working Paper of the International Monetary Fund*. The views expressed are those of the author(s) and do not necessarily represent those of the Fund.

WP/98/49

INTERNATIONAL MONETARY FUND

Fiscal Affairs Department

Trade Liberalization and Tax Reform in the Southern Mediterranean Region¹

Prepared by George T. Abed

April 1998

Abstract

The European Union's Association Agreements with several countries in the Southern Mediterranean Region (SMR) aim to promote deeper economic integration between the SMR and the EU by establishing a free trade area in twelve years. Because a large share of the SMR countries' total imports comes from the EU, the removal of import tariffs could reduce budgetary revenue by the equivalent of 1 percent to 4 percent of individual countries' GDP. This paper proposes tax and tariff reforms that would help generate the needed compensatory revenue and, more important in the long run, reduce the distortionary effects of the tax and tariff systems and underpin higher rates of sustainable growth.

JEL Classification Numbers: F13, F15, H21, H87

Keywords: Trade Liberalization, Tariff Reform, Tax Reform

Author's E-Mail Address: gabed@imf.org

¹This paper is based on the author's presentation given at the "Middle East Economic Forum" held in Marrakesh during the period May 15-17, 1997. I wish to thank A.M. Abdelrahman, Adrienne Cheasty, Liam Ebrill, Julio Escolano, Reint Gropp, Janet Stotsky, and staff of the Middle Eastern Department for helpful comments and suggestions and A. WoldeMariam for valuable research assistance.

Contents

	Page
Summary	3
I. Introduction	4
II. Revenue Impact of the Agreements	6
III. Tax and Tariff Reforms in the SMR	10
IV. Revenue Shares in SMR Countries	16
V. Concluding Observations	25
 Text Tables	
1. Southern Mediterranean Region Countries: Tariff Revenue from Trade with the EU . . .	7
2. Southern Mediterranean Region Countries: Status of Tax and Tariff Reforms, 1996 . .	12
3. Effective Tariffs by World Regions—1975–95	17
4. Effective Tariffs in Selected Countries of the Middle East and the Southern Mediterranean Region—1975–95	18
5. Taxes on International Trade in Selected Countries of the Middle East and the Southern Mediterranean Region, 1975–95	20
6. Taxes on International Trade in Selected Countries of the Middle East and the Southern Mediterranean Region, 1975–95	21
7. Revenue Structure in World Regions, 1994–95	22
8. Southern Mediterranean Region Countries: Central Government Revenue Structure, 1994–96	24
 Appendix Tables	
9. Tunisia: Revenue Losses from Reductions in Import Duties on EU Trade	27
10. Tunisia: Revenue Losses from Reductions in Import Duties and the Elimination of Compensatory Duties on EU Trade	27
11. Morocco: Revenue Losses from Reductions in Import Duties—No Trade Diversion .	28
12. Morocco: Revenue Losses from Reductions in Import Duties—Total Trade Diversion	28
13. Lebanon: Customs Revenue Losses Implied by Tariff Dismantlement, 1996	29
14. Taxes on International Trade in World Regions, 1975–95—As Percent of GDP	30
15. Taxes on International Trade in World Regions, 1975–95—As Percent of Tax Revenue	31
References	32

SUMMARY

The European Union's (EU) Association Agreements with countries in the Southern Mediterranean Region (SMR) aim to establish, by the end of a 12-year transition period, a free trade area for most products and thereby lay the foundation for deeper economic integration between the SMR and the EU. Although the dynamic effects of closer integration are likely to become increasingly important over the long run, the more immediate fiscal costs—revenue losses due to tariff reductions—are of concern to several SMR countries. Losses from tariff cuts are particularly relevant for countries whose imports from the EU account for a large share of total imports—for example, imports from the EU amount to about 60–70 percent of the total in the North African countries.

In the absence of offsetting measures, estimates of the revenue losses range from about 9 percent to as high as 35 percent of total tax receipts—equivalent to a range of 1 percent to 4 percent of GDP. Lebanon, Algeria, and, to a lesser extent, Morocco and Tunisia would be among the most adversely affected.

In the face of such prospects, SMR countries should accelerate and deepen the reform of their domestic tax systems in order to efficiently mobilize the compensatory revenue, reduce the distortionary effects of taxes in general, and hence improve economic efficiency and achieve higher rates of sustainable growth. These reforms should strengthen and broaden the taxation of consumption (for example, by introducing or reforming the VATs), rationalize and simplify the taxation of business profits and personal incomes, limit the excises to a few products and ensure proper adjustments for inflation, limit or eliminate special tax incentives, and modernize tax and customs administrations.

This paper reviews comparative data on tax revenue shares over time and suggests that countries that implemented such tax reforms generally succeeded in gradually reducing their reliance on the taxation of international trade.

I. INTRODUCTION

1. Association Agreements have been signed with the EU by Israel, Morocco, and Tunisia; initialed by Jordan; and are under discussion with Algeria, Egypt, and Lebanon. The agreements seek to establish, by the end of a 12-year transition period, a free trade area for most products. Detailed discussions of the broader Euro-Med Initiative under which the agreements have been negotiated have been presented by others (see, e.g., Havrylyshyn (1997); Nsouli and others (1996); and Nabli (1996)). This paper adopts a narrower focus: it examines the impact of tariff reductions on budgetary revenue in the SMR countries and assesses these countries' progress in implementing domestic tax reforms. These reforms are intended to help these countries compensate for the loss of tariff revenue and, more generally, to adjust to a more competitive environment of closer integration with the EU.

2. The principal economic provisions of the agreements include the elimination of any remaining restrictions on the EU's free access to the SMR countries' industrial products; the gradual elimination (over a 12-year period) of all tariffs on all imports from the EU; the immediate removal of all quantitative restrictions; and the harmonization of policies and regulations concerning competition, intellectual property, and industrial standards. The agreements also grant marginally wider access (than that indicated by the 1976 agreements) to the SMR countries' agricultural exports, and provide for a review of agricultural access no later than the year 2000. During the first four years under the agreements, tariffs on lightly taxed imports (e.g. raw materials and capital goods) would be reduced or eliminated, followed by a gradual lifting of tariffs on other imports, the phasing to take into account the extent to which such imports compete with domestic production. The signatory countries are also to receive financial assistance in the form of structural adjustment grants (from the EU) and loans (from the European Investment Bank).

3. Given the large share of the SMR countries' trade with the EU and the relatively high initial effective tariff rates (see below), the complete elimination of all tariffs (and other charges with equivalent effect) on all EU imports will represent a radical change in the trade regimes of these countries. The economic effects would probably be greater if the SMR countries were to pursue similar liberalization with non-EU countries in order to avoid the adverse effects of trade diversion.

4. Some SMR countries have pointed out some less desirable features of the agreements, such as the "hub-and-spoke" problem;² limited EU access for the SMR's agricultural exports;

²This refers to the tendency for trade and investment flows from third countries to become even more concentrated in the EU as a way of accessing individual markets in the SMR; this is partly because of weak economic links among the SMR states themselves but also because the EU has pursued separate agreements with each of the SMR countries.

and the restricted application of the rules of origin.³ Nevertheless, the long-run, dynamic effects of this type of trade liberalization are widely recognized as important and generally positive, although any *quantitative* estimates of such benefits remains highly tentative. Given comparable experience elsewhere,⁴ the SMR economies are likely to reap efficiency gains as they respond to the more Darwinian environment of global competition, from improved prospects for “deeper integration” with the EU (e.g., harmonization of standards and market regulations, possible liberalization of financial and other services), and from improved opportunities for the transfer and development of new skills and technology. Under certain conditions, foreign direct investment in the SMR could also increase significantly; however, as is well known in such cases, the ability of a liberalizing, developing country to benefit from closer integration with a larger, more industrialized region depends on the developing country’s own policy response. Specifically, benefits tend to be greater when liberalization in the developing country is accompanied, or preferably preceded, by policies aimed at stabilizing the macroeconomic environment, improving the flexibility of labor markets, and enhancing the adaptability of economic institutions.

5. For the SMR countries, *economic and financial costs* in the short to medium term could be significant, the magnitude of the costs being a function of (a) the degree of liberalization already achieved by SMR states (essentially rendering the adjustment less painful the greater the progress achieved in reducing levels of protection); (b) the countries’ macroeconomic performance as measured by such key indicators as the fiscal stance, the balance of payments, and the proximity of the exchange rate to its long-run equilibrium value; and (c) the international competitiveness of domestic industries. Specifically, the *immediate revenue impact* will depend, inter alia, on the weight of import tariff receipts in total budgetary revenue and on the response of import demand to tariff reductions, whereas the *capacity of a particular SMR country to respond* to any revenue loss depends on the degree to which the structure and administration of the domestic tax system have been reformed, as well as the capacity of customs administration to process and tax larger volumes of imports under a more liberal regime.

6. As important as the longer-term, dynamic benefits are, the primary focus of this paper is on the more immediate fiscal implications of the agreements. Specifically, this paper examines the *impact of the association agreements on SMR countries budgetary revenues* and assesses these countries’ capacity to reform their domestic tax systems to compensate for the loss of

³SMR countries have expressed concern that the narrow application of the rules of origin does not encourage regional integration nor does it take into account certain “special trade relations” in the region. For example, Lebanon, which, despite having very close trade relations with Syria, may not, according to the EU, claim as “local content” any inputs imported from Syria; however, for members of the Arab Maghreb Union (Algeria, Libya, Morocco, and Tunisia), intra-Union trade of inputs may be so claimed.

⁴See Nabli (1996) for a comprehensive survey of trade liberalization experiences.

tariff receipts.⁵ The EU, for its part, is providing financial assistance to SMR countries, partly to compensate for the loss of revenue but also to help these countries adjust to a more competitive environment (the latter objective is being pursued in collaboration with the World Bank and other international organizations).

7. It should be emphasized that in focusing on the agreements' impact on budgetary revenue and on the search for compensatory measures, one should not lose sight of the more interesting, and potentially more important, long-run issues of economic policy. Given the current worldwide tendency toward trade liberalization and globalization, the focus must surely be on the opportunities the agreements provide SMR countries to reform their tax systems (and other key aspects of their economies) so as to benefit more fully from trade liberalization and economic integration. In this broader context, a reformed tax system would not only help generate the budgetary revenue needed to meet the exigencies of tariff reductions, but also, by reducing distortions in production and exchange, it could serve to improve resource allocation and potentially contribute to the achievement of higher rates of sustainable growth over the long term.

II. REVENUE IMPACT OF THE AGREEMENTS

8. The revenue impact of the elimination of tariffs on SMR countries' trade with the EU depends on (a) the initial share of import taxes in total tax revenue, (b) the import demand response to tariff reductions, (c) the share of imports from the EU in total imports, and (d) the strength of elasticities of substitution between imports from the EU and from third countries (as an indication of the potential for trade diversion) as well as between all imports and import-competing goods and services produced domestically (as an indicator of the potential for erosion of the domestic tax base). To help gauge at least the initial magnitude of the problem faced by these countries, the ratios given in Table 1 may be instructive.

9. As a first order approximation and taking into account the shares of tariff receipts from EU imports in total tax receipts,⁶ the revenue impact, measured in relation to total tax

⁵It is worth noting that trade liberalization does not necessarily imply revenue loss. For example, starting from a highly restrictive trade regime, certain trade liberalization measures (e.g., the tariffication of quantitative restriction and reductions in excessively high tariff rates, which may have encouraged evasion) could initially lead to *higher* tariff receipts. However, most SMR countries are liberalizing from moderate protection levels and tariff reductions therefore imply the loss of revenue for most countries in the region.

⁶Excises and VAT on imports, where applicable, are also collected at customs, the latter being normally assessed on a tax base that *includes* tariffs. To the extent that tariffs are eliminated, VAT assessments and collections at customs would also be expected to decline.

**Table 1. Southern Mediterranean Region Countries:
Tariff Revenue from Trade with the EU**
(Averages 1994–96)

	Import Duties		EU Share in Total Imports	Import Duties from EU Trade	
	In percent of total tax revenue	In percent of GDP	In percent	In percent of total tax revenue	In percent of GDP
	Algeria	29.96	3.45	64.12	19.21	2.21
Egypt	19.74	3.37	39.84	7.87	1.34
Israel	1.26	0.40	52.40	0.66	0.21
Jordan	34.63	5.77	35.02	12.13	2.02
Lebanon	59.28	6.83	48.59	28.80	3.32
Libya	--	--	67.27	--	--
Morocco	17.55	4.30	58.78	10.32	2.53
Syria	21.81	2.43	33.11	7.22	0.80
Tunisia	22.18	4.45	71.49	15.86	3.18

Source: Country authorities; IMF staff estimates; and IMF, Direction of Trade Statistics.

revenue, is likely to be the most adverse for Lebanon and Algeria. The potential revenue losses would be smaller for Tunisia, Jordan, and Morocco.⁷ A country's heavy dependence on trade tax revenue from EU imports may be due either to a relatively higher share of EU imports (e.g., Tunisia, Algeria, and Morocco) or to higher tariff rates in general even when the EU share in imports is not exceptionally high (e.g., Egypt and Jordan). Israel (and, to some extent, the West Bank and Gaza Strip (WBGs)), which has already adjusted to its free trade association with the EU and which had been liberalizing its trade regime for many years prior to signing the agreement, has not had to face a particularly difficult task in compensating for the revenue loss, especially in light of its highly developed and efficient domestic tax system, which helps generate budgetary revenue equivalent to about 38 percent of GDP.

10. However, going beyond this simple view, one can distinguish several direct and indirect revenue effects.⁸ The most obvious, and initially the largest, is the loss of revenue from tariff reductions on EU imports. A second effect arises from the substitution, by consumers in the

⁷When measured in relation to GDP, the revenue losses would be highest for Lebanon and Tunisia, the latter mainly because of its relatively high ratios of tax revenue-to-GDP and EU imports to total imports.

⁸See Devarajan and others (1997), for a fuller analysis of the main direct and indirect revenue effects. For a more comprehensive treatment of the revenue impact of trade liberalization, see Ebrill, Stotsky, and Gropp (forthcoming).

SMR countries, of EU imports (made cheaper by tariff removal) for non-EU imports, thereby reducing tariff revenue collected on the latter. Indirect effects are more difficult to assess, as they are related to the possible switch by consumers in the SMR countries from domestic nontradables to imports (or to import-competing domestic products). This would reduce the tax base associated with the former, whereas the possible relative decline in the prices of domestically produced tradables as a result of competition from lower-priced imports could induce a shift toward export markets (thereby possibly affecting both direct and indirect tax bases). The restructuring of domestic industries and the resulting unemployment during the transition could have an adverse impact on direct and indirect taxes as profits, wage incomes, and turnover are reduced. However, this effect may be offset to some degree by the decline in the prices of imported raw materials and capital goods, nearly fully liberalized in the earlier phase of the 12-year period, which could lower production costs and hence stimulate domestic output. A negative revenue impact could also be directly felt if this restructuring were to affect the public and quasi-public enterprise sector causing a decline in profit transfers to the budget while raising the possibility of higher budgetary outlays. Over the medium to long term, these budgetary costs would, of course, be expected to be more than offset by the positive effects of higher investment and growth. As indicated earlier, such benefits will materialize only if the liberalizing country succeeds in achieving the needed macroeconomic and structural reforms.

11. Some attempts have been made to estimate the size of the direct and indirect effects. A study by Rutherford and others (1993) for Morocco used a computable general equilibrium model to estimate the longer-term growth and welfare gains from trade liberalization. The model calculated potential revenue losses at the equivalent of 3.3 percent of long-run equilibrium GDP.⁹ Devarajan and others (1997) dealt more explicitly with some of the key direct and indirect revenue effects and, by assuming certain values for the relevant parameters, calculated the revenue losses for six of the SMR countries (Algeria, Egypt, Jordan, Lebanon, Morocco, and Tunisia). The direct effects as a percentage decline in total budgetary revenue ranged from 8.6 percent for Egypt to 31.4 percent for Lebanon. In terms of ratios to GDP (not calculated by Devarajan), the corresponding ratios would be 1.5 percent for the former and 3.6 percent for the latter (not surprisingly, these estimates are quite similar to those given in Table 1). The indirect effects depended essentially on the assumed values for the elasticities of substitution between imports from the EU and those from third countries (i.e., the extent of trade diversion). On the assumption of an elasticity of substitution of 2 for both cases, the indirect effects ranged from negligible for Morocco to an additional loss of 4.5 percent of total revenue for Algeria.

12. A simpler and more direct approach was developed in IMF staff studies on Morocco and Tunisia. This approach relied on more disaggregated data on trade and tariff revenue and took into account the phasing of the different tariff reductions over the 12-year transition period. Appendix Tables 9 and 10 show the results for Tunisia. These assume a static relationship

⁹Rutherford did not measure the revenue loss directly but took it to be equivalent to the additional VAT collections that would be needed to restore revenue neutrality.

between imports and GDP,¹⁰ and no trade diversion. The revenue losses derive from simply applying the reduced tariff rates to the remaining categories of taxed imports from the EU in each of the 12 years. According to this calculation, revenue losses are estimated to rise gradually from about 0.3 percent of GDP in the first year to about 2.6 percent of GDP by the end of the twelfth year of the transition period. This estimate is higher than the 1.82 percent of GDP estimated by Rutherford and others (1993). The difference may be attributed to the positive dynamic effects of increased trade incorporated in the CGE model of Rutherford that help mitigate the adverse revenue effects. In the case of Morocco, two alternative assumptions of no diversion and total diversion of imports from third countries were made (Appendix Tables 11 and 12). On the assumption of no trade diversion, revenue losses would rise from 0.3 percent of GDP in the first year to 1.8 percent of GDP in the twelfth year whereas, if total diversion were assumed, the comparable ratios would be 0.4 percent of GDP and 2.4 percent of GDP, respectively.

13. To put these estimates in perspective, it is worth noting that both Morocco and Tunisia are relatively "high tax effort" countries, collecting tax revenue equivalent to about 25 percent of GDP and 20 percent of GDP, respectively. Both countries have for some time been liberalizing their trade regimes and strengthening their domestic tax systems. As a result, trade taxes account for about one-fifth of total tax receipts. An increase in domestic tax revenue to compensate for the elimination of tariffs on imports from the EU in Morocco and Tunisia would, therefore, require an improvement in the productivity of their domestic tax systems of about 12–15 percent over the 12-year transition period.

14. For Lebanon, preliminary analyses reveal more serious revenue losses. Although Lebanon's imports from the EU constitute only 49 percent of its total imports, the country's heavy reliance on trade taxes as a source of revenue (about 59.3 percent of tax revenue is derived from import tariffs) together with its relatively less developed domestic tax system (Lebanon's tax ratio was only 11.4 percent in 1995) reduces its capacity to compensate for the loss of trade tax receipts in comparison with either Morocco or Tunisia.¹¹ Available estimates of the loss of trade tax receipts from the association agreement range up to 4.2 percent of GDP in the final year of the transition period (Appendix Table 13). This implies that, to maintain the same ratio of tax revenue to GDP, Lebanon would have to increase revenue collection from its domestic tax system by nearly 60 percent, and by more if the tax ratio is to rise to levels that would be required to meet essential public expenditures. Given

¹⁰This assumption may not be as unrealistic as it first appears. Since 1976, trade between Tunisia and the EU countries has been progressively liberalized and the ratio of imports from these countries to total imports has remained in the range of 65–75 percent through 1995, with an average of 70.3 percent. A similar trend has also been observed for Morocco and to a somewhat lesser extent for Algeria.

¹¹Other features of Lebanon's economy and the terms of its agreement under discussion with the EU also make the gains from a closer trade association with the EU appear relatively less attractive. See Martin (1996).

Lebanon's undeveloped tax system and weak administrative capacity, the task would be quite difficult to accomplish.

15. In summary, the revenue impact of eliminating tariffs on EU imports, even when taking into account likely trade diversion, is projected to be in the range of 1 percent to 4 percent of the terminal year GDP, with losses for most SMR countries being less than 3 percent of GDP, if no offsetting improvements in collection are made elsewhere in the tax system.

III. TAX AND TARIFF REFORMS IN THE SMR

16. Since the mid-1980s, most SMR countries have undertaken tariff and tax reforms with the primary goal of addressing fiscal imbalances, often in the context of macroeconomic and structural adjustment programs. Progress, however, has been slow and uneven. To place these reforms in perspective, it may be instructive to recall the key features of what constitutes "good practices" in a reformed tax system in developing countries. These features may be summarized as follows:

- Increased reliance on a *broad-based consumption tax*, such as a VAT, preferably with a single rate and minimal exemptions, and a threshold to exclude the smaller enterprises. Excise taxes should be levied at ad valorem rates, or, if specific, adjusted for inflation in order to protect real revenue, and should be restricted to a limited set of products, principally petroleum products, alcohol, tobacco, and some luxury items (e.g., private automobiles). The VAT and excises, where applicable, would be applied equally to imports as well as domestic products.
- *Import tariffs* should have a moderate to low average rate and, most importantly, a limited dispersion of rates—perhaps three nonzero rates ranging up to 20 percent. *Export duties* are to be avoided.
- A *personal income tax* should be characterized by (a) limited personal exemptions and deductions; (b) a moderate top marginal rate and few brackets; (c) an overall exemption limit that would exclude persons with modest incomes from paying taxes; and (d) extensive use of final withholding at source. A corporate income tax should be levied at one moderate rate, preferably the same rate as the top marginal rate under the personal income tax. Provisions, such as depreciation allowances, should be uniform across sectors and recourse to tax incentive schemes minimal.
- *Nontax revenue* to the extent it reflects the extraction of surpluses from parastatals or profits from central banks, should decline with the development of the economy and, especially, with the devolution of the state's role in productive activities.¹²

¹²Non-tax revenue can still be an important component of a reformed tax system. For example, the user fees that would result from the appropriate commercialization of the supply
(continued...)

- *Tax administration* reforms should be designed to enhance the accuracy and fairness of assessment, increase the efficiency of collection, reorganize the tax and customs administrations along functional lines, and improve taxpayer registration procedures as well as collection enforcement and audit. Computerization is generally required for more effective management of taxpayer data bases, while pay incentive programs and greater autonomy for the tax authority, supported by the development of specialized skills among tax officials, are intended to promote honesty and efficiency in tax administration.

17. Among the SMR countries, considerable progress has been achieved, notably in Egypt, Jordan, Morocco, and Tunisia. Nevertheless, tax and tariff systems in most SMR countries remain complex, inefficient, and difficult to administer. Three of the SMR countries (Lebanon, Libya, and Syria) do not have a broad-based consumption tax whereas the VATs in the other countries do not fully conform to "good practices" because of numerous exemptions and multiplicity of rates (Table 2). In general, business profits taxes have been reformed and rates are reasonable, although a few countries apply more than one rate. Five of the nine countries have maximum personal income tax rates in excess of 40 percent and in all but one (Tunisia), these rates differ from the business profits tax rates. Special tax incentives are common. The impact of domestic tax reforms can be observed in those countries that, in line with long-term trends and good international practice, have shifted more of their revenue generation to broad-based consumption taxes. This has been achieved through the introduction of a VAT in Morocco (1986), Tunisia (1988), Algeria (1992), and the WBGs (1994), and generalized sales taxes (GST) in Egypt (1991) and Jordan (1994). Because of the slow pace of tariff reforms, these countries have not significantly reduced their reliance on trade taxes. However, the introduction of a VAT has triggered more comprehensive reform of domestic indirect taxes in general, thereby further improving revenue performance. Many excises have been transformed to ad valorem rates in the reforming countries, but several others remain specific and are inadequately adjusted for inflation.

18. Income tax systems have been simplified and most SMR countries apply one or two rates to business profits but several rates to personal income. Personal income tax rates remain high and in most of the SMR countries, large differences exist between statutory rates and effective rates due to weak tax administration and widespread exemptions. Even some of the reforming countries maintain special investment incentives that exempt businesses from the corporate income tax and from customs duties but also from the VAT (Algeria and Tunisia), while in some cases reducing or eliminating personal income taxes for employees (Egypt) or taxes on interest income from corporate bonds (Jordan). In addition, a number of the SMR countries have established free economic zones (Egypt, Jordan, Morocco, Syria, and Tunisia) and

¹²(...continued)

of government services in areas such as health and education would count as non-tax revenue. Moreover, profits realized by parastatals in a perfectly competitive market environment could also be considered a durable source of revenue, although such cases are likely to be rare. Of course, in countries rich in energy resources such as Algeria and Libya, non-tax revenue is likely to remain significant for some time.

Table 2. Southern Mediterranean Region Countries: Status of Tax and Tariff Reforms, 1997

	Algeria	Egypt	Jordan	Lebanon	Libya	Morocco	Syria	Tunisia	WBGs 1/
1. Broad-based consumption tax: • Rates (in percent)	VAT 7,13,21	GST 10	GST 10	--	--	VAT 7,10,14,20	--	VAT 6,17,29	VAT 17
2. Excises • Ad valorem/specific • Coverage	Mixed Broad	Mixed Narrow	Mostly specific Broad 2/	Mixed Narrow	Mixed Broad	Mixed Narrow	Mostly specific Narrow	Mostly ad valorem Narrow	Mostly ad valorem Narrow
3. Tariffs • Quantitative restrictions • Maximum rate • Number of rates • Surcharges • Effective tariff	None 50% 6 0%-6% 16.98%	Very few 50% 8 3%-2% 16.72%	3 Commodities 40% 5 Numerous 12.31%	Yes (on specified commodities, import bans) 100% 12 None 16.72%	Yes (specified imports) 100% n.a. Numerous n.a.	Yes (specific agricultural products and few others) 45% 7 15% fiscal levy + 0.25% para-fiscal 14.9%	Yes (numerous and complex) 200% n.a. Numerous 9.93%	Yes (8% of domestic products) 43% 26 2% + other 19.62%	Yes (agricultural commodities) 100% 85 2% port fee 1.5% other n.a.
4. Business profits tax • Maximum rate • Number of rates	38% 2	40.55% 3	35% 3	10% 1	20%-60% Numerous	39.5% 2	11%-66% Numerous	35% 1	37.5% 1
5. Personal income tax • Maximum rate • Number of rates	50% 6	32% 2	30% 6	10% 1	90% 8	44% 5	17.25% 5	35% 6	48% 5
6. Special tax incentives	Limited	Numerous	Numerous	Numerous	Numerous	Limited 3/	Numerous	Limited	Limited
7. Total revenue/GDP 4/ 5/ • Tax revenue • Other revenue	31.02 11.52 19.49	24.88 17.05 7.83	30.24 16.65 13.59	16.26 11.52 4.74	24.75 7.32 17.43	24.52 24.52 --	25.92 11.12 14.17	25.48 20.06 5.42	17.24 14.87 2.37

Sources: IMF, *Government Finance Statistics* (various years); IMF, *World Economic Outlook* (May 1997); Alonso-Gamo et al. (1997a); country documents; and IMF staff estimates.

1/ The tariff structure for the WBGs is, for the most part, that of Israel; customs duties on import shipments are collected by Israeli customs.

2/ Included in GST.

3/ Incorporated in an Investment Charter and applicable to all investments.

4/ See Table 8.

5/ Averages 1994-96.

provided other exemptions and tax relief which could lead to tax evasion and abuse. In Morocco, however, a major step toward reforming tax incentives was taken recently with the promulgation of an Investment Charter to replace the various investment codes. Finally, several of the SMR countries rely heavily on non-tax revenue, which, in most cases, reflects the collection of rents from the exploitation of a natural resource (Algeria, Egypt, Libya, and Syria) or from extensive public sector ownership of enterprises (Egypt, Jordan, and Syria). As these countries liberalize their trade regimes and, more generally, their economies—and therefore privatize public sector enterprises, economic rents in the form of nontax revenue are likely to come under pressure, thus increasing the urgency of domestic tax reforms.

19. As indicated earlier, tariffs have been undergoing simplification and rationalization in most countries of the region. In Morocco, the number of rates was reduced from 47 in 1980 to 6 nonzero rates in 1996 and the dispersion was narrowed by reducing the maximum rate to 45 percent. However, an additional fiscal levy of 15 percent still applies to most imports while numerous commodities remain subject to notional pricing which renders tariff rates on some commodities as high as 300 percent.¹³ The effective tariff rate, about 14.9 percent in 1995, was about average for the SMR but relatively high for the Middle Eastern region as a whole. More important, numerous exemptions are granted, leading to loss of revenue and creating opportunities for evasion and fraud. Reform of the customs administration is currently under way; systems and procedures have been simplified, selective and targeted controls have been introduced, and changes in organization and personnel have been effected. As a result, at the port of Casablanca, for example, customs officials no longer perform examinations on all shipments, and the *average* period of stay of goods in the port has thereby been reduced from 16 days to 3 (it is 1–2 days in most industrial countries).

20. Tunisia, starting from even higher protection rates, has also been implementing reforms since 1988. However, the system contains inefficiencies, including quantitative restrictions on about 8 percent of the value of imports. The number of rates has been reduced to 26 and the maximum rate to 43 percent; but both remain relatively high, as does the effective tariff rate—about 19.6 percent (1995). Although customs administration has been undergoing significant structural reform in recent years, the prevalence of exemptions continues to lead to revenue losses, due to evasion and fraud; revenue losses due to exemptions were estimated at about 25 percent of total customs receipts in 1994.¹⁴

¹³These are expected to be phased out beginning in June 1998, when Morocco applies the terms of the World Trade Organization.

¹⁴It should be noted that some exemptions are legal and represent common practice (e.g. diplomatic franchise, imports by non-governmental organizations); some are either unnecessary or economically inefficient, even when legal (e.g. targeted investment incentives), and in these cases, revenue losses can be reversed by amending existing legislation. However, some revenue losses due to exemptions represent abuse of privilege or outright fraud.

21. In Jordan, tariff reforms have reduced the number of rates to 5, but multiple rates for luxury goods as well as several surcharges, special taxes, and fees still apply. Although the maximum tariff rate is set at 40 percent, in effect, duties range from 0 to 320 percent. Exemptions are widely applied, including generous incentives granted under the Investment Law and other discretionary exemptions. Petroleum imports are not subject to import duties, but to price markups of 10 to 15 percent—implying an implicit tax of equal magnitude as domestic distribution is controlled by a public authority. The tariff system remains poorly coordinated with the domestic tax system, particularly the GST.

22. In Lebanon, the tariff system has been undergoing reform since the end of the civil war (1992). In 1995, the tariff structure was simplified by consolidating the numerous supplementary charges into the standard tariff rates, reducing the number of rates to 12, and eliminating all quantitative restrictions. Rates, however, remain high—a maximum of 100 percent and an effective tariff rate of 16.7 percent. Algeria's tariff reforms, implemented in recent years in the context of a IMF-supported adjustment program, started from a high level of protection and included reducing the maximum rate to 50 percent, consolidating the number of rates to six, and removing all quantitative restrictions.

23. Tax administration reform has progressed even more slowly than tax policy reform. However, the introduction of a VAT in the late 1980s in Algeria, Morocco, and Tunisia, and the GST more recently in Egypt and Jordan have provided important incentives for modernizing tax administration. Progress is now being made; for example, in these countries, tax administrations are being reorganized along functional lines, computerization is being introduced (at the level of subnational units in Algeria, Egypt, Morocco, and the WBGS), and taxpayer registration (including the use of unique tax identification numbers) is expanding steadily. However, even in countries with relatively more developed tax systems and improved tax administrations, performance can be strengthened. Assessment and collection of business profits taxes poses a particular challenge. In Tunisia, a relatively high tax effort country, less than half the businesses declare a taxable profit in any one year. Audits are cumbersome, infrequent, and are carried out long after the end of the financial year. Administrative systems for the VAT in both Morocco and Tunisia are relatively well developed in comparison with those in effect in other countries of the region. Recent IMF staff analyses of VAT administrations in Morocco and Tunisia indicated an efficiency ratio for domestic VAT collection of about 65 percent. This ratio, which is comparable to that of Portugal, can be raised but only gradually; any improvement will have to follow an enhancement of institutional capacity, modernization of systems and procedures, and skill development of tax personnel. Nevertheless, over the medium-term, the ratio can be raised, especially if the above administrative improvements are reinforced by a simplification of the VAT structure itself (consolidation of rates, elimination of exemptions, and broadening of the base). For example, a 10 percentage point improvement in the efficiency of the VAT would generate nearly 1 percent of GDP in revenue in both Morocco and Tunisia.

24. In short, the key *tax and tariff policy* reforms needed to help the SMR countries address the challenges of the association agreement are:

- The introduction of broad-based, modern VATs in the remaining countries of the region (Lebanon, Libya, and Syria) and the reform of existing VATs through consolidation of rates (Algeria, Morocco, and Tunisia), removal of exemptions, and generally broadening the tax base (Egypt and Jordan).
- The reform of excises through the introduction of ad valorem rates or proper adjustment for inflation to help ensure revenue buoyancy and through increases in the taxation of petroleum products in countries where these are sold far below comparable international levels.
- The simplification of the business profits tax through the adoption of a single rate in the neighborhood of 35 percent and the elimination of special tax exemptions.
- Adjusting the top marginal rates for personal income tax to a level comparable to the business profits tax rate (through reductions in Algeria, Libya, Morocco, and WBGs, and increases in Lebanon from 10 percent and Syria from 17.25 percent) and limiting the number of deductions and exemptions.
- To help smooth the transition to the more liberal trade regime envisaged under the association agreements, tariff reforms should proceed in the direction of further reducing maximum rates and the number of rates to no more than three non-zero rates while simplifying the structure and limiting exemptions. These reforms would preferably need to be generalized to non-EU countries to minimize the risks of trade diversion. Customs administration reforms already under way in Morocco and Tunisia need to be completed and similar reforms implemented in the other states of the region.

25. The reform of *tax administration* in the region would be most effective if preceded by a simplification and rationalization of the tax systems as indicated above. Specific tax administration reforms that merit particular attention are:

- Restructuring existing organizations along modern, functional lines and giving special emphasis to the most productive taxes and to the largest taxpayers;
- Simplifying and modernizing systems and procedures and the introduction of efficient management practices;
- Expanding computerization, based on simplified and rationalized procedures, to facilitate the rapid processing of declarations, and the more effective use of the taxpayer databases to strengthen audit and enforcement;
- Reorienting the audit strategy toward the VAT, focusing on short, well-designed, and targeted interventions;
- In the francophone countries of North Africa, ending the separation of assessment and collection, which has led to inefficiencies, evasion, and the buildup of tax arrears; and

- Attracting and developing quality staff resources by providing intensive in-house and external training, better pay incentives, and greater autonomy for tax officials.

IV. REVENUE SHARES IN THE SMR COUNTRIES

26. Although the features of a liberal trade regime can be readily distinguished from those of a more restrictive one, it is difficult to devise an unambiguous measure of the degree of trade liberalization in an economy.¹⁵ Given the focus of this paper, a useful measure may be the *effective tariff rate*, which is relatively easy to compute and may be traced over extended periods. By relating changes in effective tariffs to changes in the share of import tariff receipts in total tax revenue over time, one can explore the possible impact of changes in the trade regime on trade tax shares. Taking a global view of trends in effective tariff rates, most countries appear to have achieved some liberalization of their trade regimes in recent decades.¹⁶ Table 3 shows that OECD countries liberalized the fastest, with the average effective tariff declining from 5.84 percent in 1975 to 1.82 percent in 1995. Non-OECD countries on average reduced their effective tariff rate from 15.74 to 13.47 or by 15 percent over the 20-year period.

27. SMR countries also underwent steady trade liberalization by this measure, with the (unweighted) average effective tariff declining from 21.03 percent in 1975 to 13.23 percent in 1990 (Table 4). However, since then there appears to have been a reversal, as the average effective rate rose to 15.31 percent in the latest year for which data are available. This increase is due largely to a reversal of the downward trend in Algeria, Egypt, and Jordan. In Algeria, the increase reflects the impact of the tariffication of quantitative restrictions, a sharp currency devaluation and improvements in customs administration. Another factor may have been a shift in the composition of imports toward those more heavily taxed products in recent years. Improvements in customs administration may explain some of the increases in the cases of Egypt and Jordan, but in the absence of any major exchange rate movement and no evident shift in the structure of imports, the increase in effective tariff in these two cases must be due to reclassification of imports and additional levies in the form of surcharges and other fees.

28. Although over extended periods tariff reform tends to reduce a country's reliance on trade tax receipts, in the short run, the impact of trade liberalization on budgetary revenue

¹⁵In a recent IMF staff study, a 10-point index of trade liberalization was computed for 27 developing countries combining the effects of import tariffs and nontariff barriers (NTBs). Five classifications of import tariffs and three classifications of NTBs were used to construct the index, with the most open import tariff and NTB regimes assigned a "1", the most restrictive a "10" (see IMF (1998), Annex I).

¹⁶See Ebrill, Stotsky, and Gropp (forthcoming) for further analysis of this point.

Table 3. Effective Tariffs by World Regions—1975-95

(In percent)

	1975	1980	1985	1990	Last Available Year
All countries	12.70	11.28	12.17	11.18	10.14
OECD countries 1/	5.84	3.95	3.28	2.80	1.82
Non-OECD countries	15.74	14.26	15.85	14.60	13.47
Non-OECD African countries	19.62	17.66	19.11	18.76	16.98
Non-OECD Asian countries	14.05	12.04	15.58	16.48	13.44
Non-OECD Middle Eastern countries	16.47	14.33	14.07	10.70	11.39
Non-OECD Western Hemisphere countries	12.37	12.31	13.66	11.27	10.91

Sources: IMF, Government Finance Statistics (various years); and IMF, World Economic Outlook (May 1997).

1/ Excluding the Czech Republic, Hungary, Luxembourg, and Poland.

may be ambiguous. Indeed, starting from a highly restrictive trade regime, tariff reforms could lead to an *increase* in budget receipts from customs duties. For example, the tariffication of quantitative restrictions, by transferring rents previously collected by traders to the budget, could increase budget revenue. Similarly, reductions in excessively high tariff rates and exemptions could limit the incentive (or the opportunity) for evasion and raise import tax receipts. Simplification of tariff structures could facilitate customs administration and improve collections. When tariff reform is carried out in conjunction with an exchange rate devaluation, as is often the case, the domestic currency value of imports rises and, for a given tariff structure, customs receipts may increase after the devaluation. Over the long run, however, and once the highly restrictive features of a trade regime are eliminated, further reductions in tariff rates toward those prevailing in industrial countries invariably lead to reductions in the shares of trade taxes in total tax receipts. For those SMR countries which have signed (or will sign) free trade association agreements with the EU, such an outcome is inevitable.

29. On a global scale, revenue components as a share of GDP for the major world regions clearly indicate a steady decline in reliance on trade taxes in the past two decades, with the world average decreasing from 4.2 percent of GDP in 1975 to 3.2 percent of GDP in the mid-1990s (Appendix Table 14). As expected, OECD countries reduced their reliance on trade taxes to negligible proportions as they completed the liberalization of their trade regimes and built up their domestic tax capacity through tax reform. For all non-OECD countries

Table 4. Effective Tariffs in Selected Countries of the Middle East and the Southern Mediterranean Region, 1975-95

(In percent)

	1975	1980	1985	1990	Last Available Year 1/
Selected Non-OECD Middle Eastern Countries					
Bahrain	2.26	2.24	3.53	2.61	3.61
Iran	9.49	20.93	11.23	6.49	12.28
Israel	...	4.43	4.96	1.58	0.63
Oman	0.12	1.32	3.68	3.36	3.07
Pakistan	19.54	24.61	25.53	31.65	28.73
Unweighted average	7.85	10.71	9.79	9.14	9.66
Southern Mediterranean Region Countries 2/					
Algeria 3/	9.34	8.08	10.81	12.79	16.98
Egypt	43.24	25.84	28.57	9.58	16.72
Jordan	11.94	16.47	14.05	9.51	12.31
Lebanon	...	...	...	...	16.72
Morocco 3/	25.38	26.32	15.37	19.08	14.92
Syria	16.40	11.56	...	8.43	9.93
Tunisia	19.84	20.91	29.97	19.98	19.62
Unweighted average	21.03	18.20	19.75	13.23	15.31

Sources: IMF, *Government Finance Statistics* (various years); and IMF, *World Economic Outlook* (May 1997).

1/ Last available year is 1995 for most countries, but when this information is not available the last available year is used.

2/ Libya and West Bank and Gaza Strip are excluded for lack of data.

3/ Data provided by the country authorities; and IMF staff estimates.

combined, the ratio of trade taxes to GDP declined from 5.3 percent in 1975 to 4.3 percent for the latest year available. It is worth noting that this drop was due entirely to the virtual elimination of export taxes, as the ratio of import duties to GDP, although it varied over the period, was nearly unchanged in the mid-1990s from its value in 1975.

30. For purposes of this paper, a more relevant measure is the share of *import duties in total tax receipts* and, in this regard, the data in Appendix Table 15 provide useful indications. For non-OECD countries, the data show some decline in the share of import duties in total tax receipts in contrast to no change when the share of import duties is related to GDP (implying that nontrade taxes rose faster than GDP over the period). Among the developing regions, two (the African and Asian groups) reduced their relative reliance on import duties between 1975 and the mid-1990s whereas the other two (the Middle Eastern and Western Hemisphere groups) did not. All regions drastically reduced their reliance on export tax receipts over the 20-year period. When the trends in the shares of trade taxes for each of the regions during this period are gauged against the corresponding trends in effective tariff rates, differences arise, indicating that tariff reductions even in the long run do not imply a one-to-one relationship with declines in import tariff receipts. The disparity is due to a number of factors including the response of import demand (more broadly the balance of tradables and nontradables) to tariff reductions, changes in the structure of the economy over long periods of time, the impact of macroeconomic policies that may have accompanied tariff liberalization, and possibly other factors.¹⁷

31. The SMR countries, which, as indicated, have undergone steady trade liberalization, have also reduced their reliance on trade taxes in relation to GDP and as a share of total tax receipts, although a rising trend seems to have set in since 1990 (Table 5). In those countries for which long-term data are available, the ratio of trade taxes to GDP declined steadily from 6.30 percent in 1975 to 4.53 percent in 1990 before rising to 5.45 percent in the mid-1990s. At this ratio, reliance on trade taxes remains relatively high – much higher than other Middle Eastern countries and only slightly below non-OECD African countries. A similar relationship emerges from a comparison of the shares of trade taxes in total tax revenue (Table 6). Thus, although the SMR countries have liberalized their trade regimes in recent years, the progress remains modest and, more strikingly, may have been reversed in a few cases since 1990.

32. A closer look at the revenue structure of SMR countries in a global context confirms a relatively high reliance on trade taxes but it also indicates strong revenue performance in the area of consumption taxes. The SMR region's revenue from this source is equivalent to 6.98 percent of GDP in the most recent years for which data are available (1994–96)—higher than any other non-OECD region (Table 7). This relatively good performance is due principally to the introduction of a VAT in six of the nine SMR countries, which replaced complex systems of consumption taxes, but also to the relatively high rates of excises. By contrast, the productivity of direct taxation, at 3.75 percent of GDP, is the lowest among the world's

¹⁷ For more discussion of this and related points, see Ebrill, Stotsky, and Gropp (forthcoming).

Table 5. Taxes on International Trade in Selected Countries of the Middle East and the Southern Mediterranean Region, 1975-95

(As Percent of GDP)

	1975	1980	1985	1990	Last Available Year 1/
Selected Non-OECD Middle Eastern Countries					
Bahrain	2.61	2.18	3.00	2.42	2.79
Iran	2.62	2.52	2.26	2.43	2.39
Israel	...	1.88	2.61	0.64	0.19
Oman	0.23	0.53	1.19	0.80	0.95
Pakistan	5.11	5.60	5.01	5.92	4.88
Unweighted average	2.64	2.54	2.82	2.44	2.24
Southern Mediterranean Region Countries 2/					
Algeria 3/	3.30	1.83	1.73	2.11	3.37
Egypt	10.97	8.12	5.57	3.16	3.76
Jordan	7.52	8.79	7.01	7.01	7.23
Morocco 3/	4.20	4.83	3.74	4.69	5.00
Syria	4.69	3.82	...	1.62	3.05
Tunisia 4/	7.14	7.79	9.49	8.61	8.39
Unweighted average	6.30	5.86	5.51	4.53	5.13

Source: IMF, Government Finance Statistics (various years).

1/ Last available year is 1995 for most countries, but when this information is not available the last available year is used.

2/ Libya and West Bank and Gaza Strip are excluded for lack of data.

3/ Data provided by the country authorities; and IMF staff estimates.

4/ Includes VAT on imports.

Table 6. Taxes on International Trade in Selected Countries of the Middle East and the Southern Mediterranean Region, 1975-95

(As Percent of Tax Revenue)

	1975	1980	1985	1990	Last Available Year 1/
Selected Non-OECD Middle Eastern Countries					
Bahrain	18.08	49.70	40.82	30.31	28.27
Iran	29.22	36.70	24.76	33.58	29.11
Israel	14.29	4.75	6.53	2.21	0.62
Oman	1.71	4.86	9.93	7.75	11.49
Pakistan	46.71	41.94	40.66	44.44	31.83
Unweighted Average	22.00	27.59	24.54	23.66	20.26
Southern Mediterranean Region Countries 2/					
Algeria 3/	8.06	4.96	4.58	14.34	29.05
Egypt	39.44	26.40	25.10	18.89	16.63
Jordan	52.22	61.38	44.67	37.62	34.45
Morocco 3/	20.01	23.75	18.99	20.59	19.80
Syria	40.82	36.26	...	9.67	15.85
Tunisia 4/	31.37	32.30	38.32	35.87	33.47
Unweighted Average	31.99	30.84	26.33	22.83	24.88

Source: IMF, Government Finance Statistics (various years).

1/ Last available year is 1995 for most countries, but when this information is not available the last available year is used.

2/ Libya and West Bank and Gaza Strip are excluded for lack of data.

3/ Data provided by the country authorities; and IMF staff estimates.

4/ Includes VAT on imports.

Table 7. Revenue Structure in World Regions, 1994-95

				Taxes on Income, Profits, and Capital Gains			Domestic Taxes on Goods and Services			International Trade Taxes			
	Total revenue	Tax revenue	Other revenue	Of which:			Of which:			Of which:			
				Total	Individual	Corporate	Total	General sales, turnover, or VAT	Excises	Total	Import duties	Export duties	Property taxes
As percent of GDP													
Unweighted average													
OECD	33.62	30.36	3.27	9.01	7.54	2.42	10.32	6.24	3.17	0.56	0.56	0.00	0.71
Africa	20.13	16.40	3.73	4.62	2.19	2.37	5.54	2.85	1.83	4.77	4.19	0.31	0.28
Non-OECD Asia	19.62	14.41	5.21	4.91	1.81	2.74	5.81	2.94	1.96	2.52	2.39	0.12	0.12
Non-OECD Western Hemisphere	20.74	17.42	3.32	3.77	1.02	2.25	6.22	3.63	2.03	3.72	3.66	0.06	0.40
Middle East													
(Including Israel)	27.01	15.61	11.40	5.36	2.58	2.99	5.48	2.60	1.86	2.98	3.02	0.07	0.37
(Excluding Israel)	25.38	12.95	12.43	3.56	0.39	2.93	4.09	0.59	1.95	3.44	3.48	0.08	0.37
Mediterranean 1/ 2/	24.41	14.96	9.45	3.75	1.39	3.15	6.98	4.90	2.47	4.21	4.09	0.12	0.31
As percent of total revenue													
Unweighted average													
OECD	100.00	90.28	9.72	26.79	22.44	7.19	30.69	18.56	9.43	1.67	1.66	0.00	2.11
Africa	100.00	81.48	18.52	22.95	10.85	11.79	27.50	14.14	9.08	23.69	20.79	1.55	1.41
Non-OECD Asia	100.00	73.44	26.56	25.02	9.25	13.95	29.64	15.00	10.01	12.86	12.20	0.63	0.62
Non-OECD Western Hemisphere	100.00	83.98	16.02	18.18	4.89	10.85	29.99	17.51	9.77	17.95	17.63	0.29	1.92
Middle East													
(Including Israel)	100.00	57.80	42.20	19.86	9.56	11.08	20.30	9.62	6.90	11.03	11.17	0.26	1.39
(Excluding Israel)	100.00	51.02	48.98	14.05	1.54	11.55	16.10	2.32	7.67	13.55	13.73	0.33	1.47
Mediterranean 1/ 2/	100.00	61.29	38.71	15.35	5.68	12.91	28.61	20.07	10.14	17.25	16.75	0.50	1.27

Sources: IMF, *Government Finance Statistics* (various years); and IMF, *International Financial Statistics* (various years).

1/ Data provided by the country authorities; and IMF staff estimates.

2/ Data refer from 1994-96; for Libya data are for 1994-95; for West Bank and Gaza Strip for 1995-96.

regions, reflecting the narrow bases on which direct taxes are assessed and the weakness of the region's collection and enforcement capacity. One feature that stands out in the SMR revenue structure is the relatively high share of nontax revenue to total budgetary receipts, a feature common to other Middle Eastern countries. Whereas in the OECD countries non-tax revenue constitutes less than 10 percent of total receipts, and in the non-OECD regions about 20 percent, the comparable ratios for Middle Eastern countries is 42.2 percent and for the SMR countries 38.7 percent. As indicated earlier, these elevated ratios reflect heavy regional dependence on government income from the exploitation of energy resources or from ownership of productive enterprises. The relatively high nontax receipts have enabled the SMR group of countries to attain one of the highest regional revenue-to-GDP ratios in the world (24.4 percent) despite an unremarkable tax effort. The tax-to-GDP ratio is 15.0 percent, somewhat higher than non-OECD Asia but lower than either Africa or Latin America. As the SMR countries proceed to liberalize their economies over the medium-to-long term, nontax revenue is bound to decline. In view of the relatively high expenditure ratios built into these countries' fiscal systems,¹⁸ failure to reduce spending and/or improve the tax effort points to a potential revenue shortfall and an increased risk of fiscal deterioration in the future.

33. Table 8 shows the revenue structure of the individual SMR countries and confirms observations made earlier. Morocco and Tunisia and, to a lesser extent, Egypt and Jordan, have relatively well-developed tax systems and generate high tax revenue in relation to GDP (in the range of 16–25 percent of GDP); however, in most other cases, heavy reliance on nontax receipts helps to augment modest collections from weak tax systems. This is the case especially in Libya, Syria, and Lebanon, which have yet to introduce a broad-based consumption tax. As noted earlier, trade taxes constitute an important share of total tax receipts in Lebanon, Jordan, Tunisia, and Morocco, although in the case of the last two, a reasonably well-developed domestic tax system should facilitate the transition toward a more liberal trade regime with reduced reliance on import tariffs. As noted earlier, revenue from direct taxes remains relatively weak and the ratio of direct tax receipts-to-GDP of 3.75 percent for the region as a whole, low by international standards, is buoyed by the case of Egypt whose high ratio of 6.16 percent is due to the exceptional importance of tax collections from the oil sector, the Suez Canal, and central bank profits.

¹⁸The average expenditure ratio in the SMR countries (excluding Israel) during 1994-96 was 31.2 percent, compared to 30.5 percent for the OECD countries and 18.9 percent and 28.1 percent for non-OECD Asian and African countries, respectively.

Table 8. Southern Mediterranean Region Countries: Central Government Revenue Structure, 1994-96

(As percent of GDP)

				Taxes on Income, Profits, and Capital Gains			Domestic Taxes on Goods and Services			International Trade Taxes			
	Total revenue	Tax revenue	Other revenue	Of which:			Of which:			Of which:			
				Total	Individual	Corporate	Total	General sales, turnover, or VAT	Excises	Total	Import duties	Export duties	Property taxes
Algeria	31.02	11.52	19.49	2.78	1.51	...	4.91	...	0.97	3.45	3.45	...	...
Egypt	24.88	17.05	7.83	6.16	0.70	5.46	4.57	4.57	...	3.37	3.37	...	0.01
Jordan	30.24	16.65	13.59	3.31	1.21	2.10	7.09	...	...	5.90	5.77	...	...
Lebanon	16.26	11.52	4.74	1.65	1.36	...	...	...	...	7.34	6.83	...	1.26
Libya 3/	24.75	7.32	17.43	...	...	...	...	...	...	...	...	...	...
Morocco 5/	24.52	24.52	--	5.90	2.75	2.03	10.61	5.71	4.87	4.31	4.30	...	0.03
Syria 7/	25.29	11.12	14.17	3.85	0.78	3.03	0.97	0.63	0.34	2.63	2.43	0.19	0.19
Tunisia	25.48	20.06	5.42	4.69	...	...	9.82	5.34	3.54	4.57	4.45	0.05	0.35
West Bank and Gaza Strip 9/	17.24	14.87	2.37	1.64	...	...	10.89	8.24	2.65	2.11	2.11	...	0.02
Unweighted average 10/	24.41	14.96	9.45	3.75	1.39	3.15	6.98	4.90	2.47	4.21	4.09	0.12	0.31

Sources: Data provided by the country authorities; and IMF staff estimates.

1/ Including hydrocarbon revenue.

2/ Including additional tax on imports.

3/ Data are for 1994-95.

4/ Including oil revenue.

5/ Calendar year data through 1995; starting 1996 fiscal year data are for July/June. The 1996 calendar year data are estimated by averaging fiscal year data for the first half of 1996 and 1996/97.

6/ Excluding privatization.

7/ General government.

8/ Excluding social security and payroll taxes.

9/ Data are for 1995-96.

10/ The components do not add up to the unweighted averages of tax revenue because detailed data are not available for all countries.

V. CONCLUDING OBSERVATIONS

34. The decision by several SMR countries to proceed to establish a free trade area with the EU, although carrying some risks, provides these countries with the opportunity to deepen and accelerate fiscal reforms and thus enhance the economic benefits of a more liberal trade regime. Fiscal reforms in general, that is, reforms affecting both revenue and expenditure, contribute to macroeconomic stability, a condition for realizing the benefits of trade liberalization, while enhancing national savings and facilitating productive investment and growth. Tax and tariff reforms, the focus of this paper, reinforced by institutional modernization and capacity- building in customs and tax administration, would ensure more durable improvements in revenue mobilization and allow the SMR countries to reduce their reliance on the taxation of imports. Equally important, these reforms would help reduce economic distortions and improve the efficiency of resource allocation, thereby promoting higher rates of sustainable growth.

35. On the expenditure side, structural reforms may also need to be undertaken. Given the relatively high levels of government spending and persistent deficits in the SMR, fiscal consolidation could further reduce the pressure on resources and stimulate private sector activity. A larger role for the private sector could, inter alia, contribute to greater flexibility in adapting the region's economies to the more competitive environment of freer trade and wider economic integration with the EU. Reform of government spending would not only help eliminate the less productive government activities, but by shifting spending priorities toward investment in essential physical and human capital, it could stimulate higher rates of sustainable growth.

36. Fiscal reforms in the context of, or as response to, trade liberalization are not carried out in isolation but are generally accompanied by other reforms in the macroeconomic and structural areas. Although trade liberalization in the SMR countries would, in the context of the association agreements with the EU, proceed gradually, the more vigorous liberalization episodes have required, or at least been accompanied by, exchange rate devaluations. In such cases, to guard against possible erosion of the benefits of an exchange rate action and prevent a possible deterioration of the external current account, monetary and fiscal policies generally need to be somewhat more contractionary than otherwise. In order to further enhance the benefits of trade liberalization, structural reforms are also required. These commonly include the introduction of greater flexibility in labor markets, an improved regulatory environment, reform of the banking system and of state institutions, including more vigorous privatization of enterprises. Finally, if the SMR countries are to overcome the adverse consequences of the "hub-and-spoke" problem inherent in current agreements with the EU and to benefit more fully from the rules of origin for promoting exports, they should more quickly eliminate the existing barriers to the movements of capital, labor, and products among themselves and establish policies and institutions to achieve closer regional integration.

37. Several of the SMR countries have already made considerable progress in reforming their fiscal systems and liberalizing their economies. However, these countries remain heavily dependent on international trade taxes. The implementation of the association agreements with

the EU will increasingly compel the signatory states in the SMR to find alternative sources of revenue and, simultaneously, to confront a more competitive trade environment. A more vigorous reform of domestic tax systems, as outlined in this paper, will therefore become increasingly urgent, both for its revenue mobilization potential but also for its likely impact on economic efficiency. The benefits to the SMR from closer trade and economic relations with the EU, in terms of inward investment, greater efficiency, and economic growth, could be considerable. However, as the experience of trade liberalization elsewhere clearly indicates, these potential gains can be realized only if the SMR countries accelerate and deepen ongoing fiscal and macroeconomic reforms and reinforce them with needed structural and institutional reforms.

Appendix Table 9. Tunisia: Revenue Losses from Reductions in Import Duties on EU Trade

(In 1995 Tunisian dinars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
List 1	35.7 ^{1/}	35.4 ^{2/}	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
List 2	0	35.3	52.9	70.6	88.2	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6
List 3	0	24.3	36.4	48.5	60.7	72.8	84.9	97.1	109.2	121.3	133.5	145.6	151.7
List 4	0	0	0	0	13.3	25.5	37.7	49.9	62.1	74.3	86.5	98.7	110.8
Total	35.7	95.0	124.7	154.5	197.6	251.3	275.6	300.0	324.3	348.6	373.0	397.3	415.5

Source : Tunisian Directorate of Customs; and IMF staff estimates.

^{1/} Loss resulting from taxation of capital goods (EU and non-EU origin) at zero rate.

^{2/} Loss resulting from completely phasing out tariffs on all products on the list. Regular taxation resumed as of January 1, 1997 for non-EU countries.

Appendix Table 10. Tunisia: Revenue Losses from Reductions in Import Duties and the Elimination of Compensatory Duties on EU Trade

(In 1995 Tunisian dinars)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Customs duty losses	35.7	95.0	124.7	154.5	197.6	251.3	275.6	300.0	324.3	348.6	373.0	397.3	415.5
DC ^{1/} losses	19.0	28.3	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
Total	54.7	123.3	156.9	186.7	229.8	283.5	307.8	332.2	356.5	380.8	405.2	429.5	447.7
Percent of GDP	0.3	0.7	0.9	1.1	1.3	1.6	1.8	1.9	2.1	2.2	2.4	2.5	2.6

Source: Tunisian Directorate of Customs; and IMF staff estimates.

^{1/} Compensatory duty

Appendix Table 11. Morocco: Revenue Losses from Reductions in Import Duties - No Trade Diversion

(In millions of Moroccan dirhams)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Import duties	430	566	701	1,019	1,202	1,384	1,568	1,751	1,935	2,119	2,303	2,487
Fiscal levy	399	694	1,110	1,395	1,507	1,619	1,731	1,853	1,976	2,099	2,222	2,345
VAT	122	200	277	408	462	516	569	625	682	738	794	850
Total	951	1,460	2,088	2,822	3,171	3,519	3,868	4,229	4,593	4,956	5,319	5,682
(As percent of GDP)	0.3	0.5	0.6	0.8	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.8

Sources: Data provided by Moroccan Directorate of Customs and Indirect Taxes; and IMF staff estimates.

Appendix Table 12. Morocco: Revenue Losses from Reductions in Import Duties - Total Trade Diversion

(In millions of Moroccan dirhams)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Import duties	582	836	995	1,446	1,690	1,935	2,179	2,425	2,672	2,917	3,163	3,410
Fiscal levy	540	955	1,371	1,937	2,089	2,240	2,391	2,553	2,715	2,877	3,039	3,201
VAT	168	280	392	577	649	965	793	868	943	1,017	1,092	1,167
Total	1,290	2,071	2,758	3,960	4,428	5,140	5,363	5,846	6,330	6,811	7,294	7,778
(As percent of GDP)	0.4	0.6	0.8	1.3	1.4	1.6	1.7	1.8	1.9	2.1	2.3	2.4

Sources: Data provided by Moroccan Directorate of Customs and Indirect Taxes; and IMF staff estimates.

Appendix Table 13. Lebanon: Customs Revenue Losses Implied by Tariff Dismantlement, 1996

(In billions of Lebanese pounds)

Tariff Rates	EU Imports 1996	By year												
		1	2	3	4	5	6	7	8	9	10	11	12	13
2	1199	24.0	24.0	--	--	--	--	--	--	--	--	--	--	--
5	502	25.1	25.1	25.1	25.1	25.1	23.1	21.1	19.1	17.1	14.0	10.0	5.0	0.0
10	1035	104.0	104.0	104.0	104.0	104.0	95.2	87.0	79.0	70.4	56.0	41.4	21.0	0.0
15	335	50.3	50.3	50.3	50.3	50.3	46.2	42.2	38.2	34.2	27.1	20.1	10.1	0.0
20 ¹	524.1	113.2	113.2	113.2	113.2	113.2	96.4	88.1	80.0	71.3	57.0	42.0	21.0	0.0
25	134	33.4	33.4	33.4	33.4	33.4	31.0	28.0	25.4	23.0	18.0	13.4	7.0	0.0
30	237.2	71.2	71.2	71.2	71.2	71.2	66.0	60.0	54.1	48.4	38.4	29.0	14.2	0.0
35	57	20.0	20.0	20.0	20.0	20.0	18.2	17.0	15.1	14.0	11.0	8.0	4.0	0.0
40	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
50 ²	204	199.2	199.2	199.2	199.2	199.2	183.3	167.3	151.4	135.4	108.0	80.0	40.0	0.0
80	11	8.4	8.4	8.4	8.4	8.4	8.0	7.0	6.4	6.0	5.0	3.4	2.0	0.0
100	0.3	294.0	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.0
Total customs revenue from EU		648.3	648.3	624.4	624.4	624.4	567.0	518.0	468.2	419.0	333.0	246.4	123.2	0.0
Memorandum items:														
Implied gross revenue loss ³		--	--	-24.0	-24.0	-24.0	-82.0	-131.0	-180.2	-230.0	-36.0	-402.0	-521.1	-648.3
As a percent of total customs revenue		--	--	-1.9	-1.9	-1.9	-6.4	-10.3	-14.1	-18.0	-24.8	-31.5	-41.2	-50.9
As a percent of total revenues		--	--	-0.8	-0.8	-0.8	-2.7	-4.3	-6.0	-7.6	-10.5	-13.3	-17.4	-21.5
As a percent of GDP		--	--	-0.2	-0.2	-0.2	-0.5	-0.9	-1.2	-1.5	-2.1	-2.6	-3.4	-4.2

Source: IMF staff calculations based on data submitted by the Lebanese High Customs Council, and limited to the period of January 1- September 30, 1996.

¹ Includes imports of cars of which imports from EU generated customs revenue of LL 75.0 billion in 1996.

² Includes imports of some petroleum products that are taxed at ad valorem tariff rates of 50 percent but assessed according to the max-min valuation procedure. Data provided by country authorities.

³ The gross revenue loss is the maximum loss to result from the application of the tariff reduction schedule to EU imports under static conditions and in the absence of any offsetting measures.

Appendix Table 14. Taxes on International Trade in World Regions, 1975-95
(As percent of GDP)

	1975	1980	1985	1990	Last Available Year 1/
Trade taxes					
All countries	4.21	4.20	4.20	3.38	3.24
OECD countries	1.23	1.02	0.89	0.68	0.61
Non-OECD countries	5.30	5.25	5.36	4.46	4.34
Non-OECD African countries	6.67	6.25	6.56	5.49	5.61
Non-OECD Asian countries	3.80	4.76	5.25	4.35	3.76
Non-OECD Middle Eastern countries	5.01	4.25	4.08	3.48	3.64
Non-OECD Western Hemisphere countries	4.28	4.68	4.48	4.05	3.82
Import duties					
All countries	3.24	3.36	3.44	3.12	3.01
OECD countries	1.18	0.86	0.80	0.65	0.59
Non-OECD countries	4.00	4.20	4.38	4.15	4.04
Non-OECD African countries	4.98	5.02	5.45	5.30	5.21
Non-OECD Asian countries	2.78	3.07	3.76	3.85	3.32
Non-OECD Middle Eastern countries	4.34	4.11	3.88	3.27	3.54
Non-OECD Western Hemisphere countries	3.08	3.80	3.69	3.72	3.61
Export duties					
All countries	0.85	0.73	0.49	0.23	0.16
OECD countries	0.05	0.14	0.04	0.02	0.02
Non-OECD countries	1.14	0.93	0.66	0.31	0.23
Non-OECD African countries	1.61	1.14	1.06	0.34	0.31
Non-OECD Asian countries	0.71	1.26	0.71	0.49	0.43
Non-OECD Middle Eastern countries	0.56	0.09	0.05	0.04	0.05
Non-OECD Western Hemisphere countries	1.00	0.82	0.40	0.31	0.08

Sources: IMF, *Government Finance Statistics* (various years); and IMF, *International Financial Statistics* (various years).

1/ Last available year is 1995 for most countries, but when this information is not available the last available year is used.

Appendix Table 15. Taxes on International Trade in World Regions, 1975-95

(As percent of tax revenue)

	1975	1980	1985	1990	Last Available Year 1/
Trade taxes					
All countries	26.36	25.92	24.00	21.71	19.42
OECD countries	5.70	4.83	3.42	2.66	2.16
Non-OECD countries	33.63	32.85	31.21	29.10	26.42
Non-OECD African countries	41.23	36.77	35.54	33.77	32.46
Non-OECD Asian countries	29.59	32.99	33.07	27.34	23.98
Non-OECD Middle Eastern countries	29.39	31.26	29.86	28.89	26.91
Non-OECD Western Hemisphere countries	26.89	27.76	24.88	25.63	21.46
Import duties					
All countries	20.21	19.88	19.02	18.68	17.05
OECD countries	5.38	3.78	3.16	2.57	2.10
Non-OECD countries	25.51	25.25	24.65	25.22	23.21
Non-OECD African countries	30.87	28.35	27.85	28.75	27.36
Non-OECD Asian countries	23.06	21.21	23.44	21.83	18.88
Non-OECD Middle Eastern countries	25.35	30.26	28.64	26.98	26.35
Non-OECD Western Hemisphere countries	19.15	21.02	19.84	23.06	20.25
Export duties					
All countries	5.07	5.11	3.44	1.98	1.36
OECD countries	0.28	0.95	0.12	0.06	0.05
Non-OECD countries	6.78	6.50	4.62	2.75	1.91
Non-OECD African countries	9.34	9.03	8.22	5.08	4.03
Non-OECD Asian countries	4.63	6.60	3.70	2.10	2.04
Non-OECD Middle Eastern countries	3.14	0.60	0.29	0.19	0.28
Non-OECD Western Hemisphere countries	6.50	6.00	2.87	2.28	0.41

Sources: IMF, *Government Finance Statistics* (various years); and IMF, *International Financial Statistics* (various years).

1/ Last available year is 1995 for most countries, but when this information is not available the last available year is used.

REFERENCES

- Abed, George T., Liam Ebrill, Sanjeev Gupta, Benedict Clements, Ronald McMorran, Anthony Pellechio, Jerald Schiff, and Marijn Verhoeven, 1998, *Fiscal Reforms in Low-Income Countries: Experience Under IMF-Supported Programs*, IMF Occasional Paper No. 160 (Washington: International Monetary Fund).
- Alonso-Gamo, Patricia, Susan Fennell, and Khaled Sakr, 1997a, "Adjusting to New Realities: MENA, The Uruguay Round, and the EU-Mediterranean Initiative," IMF Working Paper 97/5 (Washington: International Monetary Fund).
- Alonso-Gamo, Patricia, Annalisa Fedelino, and Sebastian Paris Horvitz, 1997b, "Globalization and Growth Prospects in Arab Countries," IMF Working Paper 97/125 (Washington: International Monetary Fund).
- Dean, Judith M., Seema Desai, and James Riedel, 1994, "Trade Policy Reform in Developing Countries Since 1985: A Review of the Evidence," World Bank Discussion Paper 267 (Washington: World Bank).
- Devarajan, Shantayanan, Delfin S. Go, Sethaput Suthiwart-Narueput, and John Voss, 1997, "Direct and Indirect Fiscal Effects of the Euro-Mediterranean Free Trade Agreements" (unpublished; Washington: World Bank).
- Ebrill, Liam P., Janet G. Stotsky, and Reint Gropp, forthcoming, "Revenue Implications of Trade Liberalization: Statistical Evaluation and Case Studies" (Washington: International Monetary Fund).
- Havrylyshyn, Oleh, 1997, *A Global Integration Strategy for the Mediterranean Countries: Open Trade and Market Reforms* (Washington: International Monetary Fund, August).
- Hoekman, Bernard, and Simeon Djankov, 1997, "Towards a Free Trade Agreement with the European Union: Issues and Policy Options for Egypt," Working Paper No. 10 (Cairo: Egyptian Center for Economic Studies).
- International Monetary Fund, 1998, *Trade Liberalization in IMF-supported Programs*, Prepared by a Staff Team led by Robert Sharer, World Economic and Financial Surveys (Washington).
- , 1997, *World Economic Outlook, May 1997: Globalization Opportunities and Challenges*, World Economic and Financial Surveys (Washington).
- , *Direction of Trade Statistics Yearbook* (Washington, various years).
- , *Government Finance Statistics* (Washington, various years).

- , *International Finance Statistics* (Washington, various years).
- Martin, Will, 1996, "Assessing the Implications for Lebanon of Free Trade with the European Union" (unpublished; Washington: World Bank).
- Moukarbel, Iskandar, 1996, "The Proposed Free-Trade Agreement Between Lebanon and the European Union Countries: Evaluation and Recommendations" (unpublished; Beirut: Association of Banks of Lebanon).
- Nabli, K. Mustapha, 1996, "A Comparative Perspective on Trade Liberalization in the Magreb Countries in the Context of the Free Trade Area Agreements with Europe" (unpublished; Tunis: University of Tunis and North African Bureau of Economic Studies).
- Nsouli, Saleh M., Amer Bisat, and Oussama Kanaan, 1996, "The European Union's New Mediterranean Strategy," *Finance and Development*, Vol. 33 (September), pp. 14-17.
- Page, John, and John Underwood, 1996, "Growth, the Magreb and the European Union - Assessing the Impact of the Free Trade Agreements on Tunisia and Morocco" Working Paper No. 7 (Cairo: Egyptian Center for Economic Studies).
- Rutherford, F. Thomas, Elisabeth E. Rutström, and David Tarr, 1993, "Morocco's Free Trade Agreement with the European Community," World Bank Working Paper 1173, (Washington: World Bank).
- Saidi, Nasser, 1996, "Lebanon and European Union at the Cross-roads: An Interim Assessment of the Partnership Agreement" (unpublished; Beirut: Association of Banks of Lebanon).

