

Taxation of foreign capital in the Mediterranean region

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Foreign direct investment entering the ten Arab countries considered in this study (Algeria, Egypt, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Syrian Arab Republic, Tunisia and Yemen) was found to be taxed at an effectively high rate when compared with foreign direct investment in other Mediterranean countries. The other Mediterranean countries considered, which can be viewed as competitors with the Arab countries for foreign direct investment from France, include France, Greece, Italy, Portugal and Spain from the European Union, with the addition of Cyprus, Malta and Turkey.

The article places emphasis on foreign direct investment in manufacturing, services and petroleum-related activities. Also, consideration was given to the effects of tax holidays, which are offered by all countries except the European Union countries and Turkey. It was found that in general tax holidays provide modestly lower effective marginal corporate tax rates.

Several distinct conclusions follow from the analysis. To begin with, the Arab countries considered impose taxes on foreign direct investment that are generally higher than those of the other Mediterranean countries. This is the result of a reliance on high corporate tax rates, withholding tax rates and other capital-related taxes. However, tax holidays do provide a

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tax incentive that has the potential to attract foreign direct investment. But while holiday incentives lower the effective marginal corporate tax rate, tax holidays do not work well for the purpose of attracting foreign direct investment. They are less successful than targeted, transparent and simpler incentives that could be provided by the Arab countries to attract investment. Finally, a package of lower corporate tax rates (35 per cent), withholding tax rates and property and capital excise tax rates would act to attract investment more successfully to most Arab countries if compared with tax holidays. In addition, investment tax allowances or credits could be a simpler and more efficient method of attracting investment than tax holidays.

Introduction

The purpose of this article is to review the impact of taxation on foreign direct investment (FDI) in the Mediterranean region. Eighteen European Union, Arab and other Mediterranean countries are considered for comparative purposes. The European Union countries are France, Greece, Italy, Portugal and Spain. The Arab countries are Algeria, Egypt, Jordan, Libyan Arab Jamahiriyah, Lebanon, Morocco, Oman, Syrian Arab Republic, Tunisia and Yemen. The other Mediterranean countries are Cyprus, Malta and Turkey.

The interest in comparative studies on taxation of FDI reflects the increased attention paid by governments to global economic integration. Ultimately, each government is interested in improving the standard of living of its population by pursuing economic policies that will enhance economic growth. In recent years, many governments have developed policies to improve their countries' competitive position in markets by promoting exports, deregulating markets and encouraging FDI. An increasing number of countries previously hostile to FDI have taken the view that economic growth can be enhanced by encouraging this type of foreign participation in the economy that provides not only new sources of finance, but also managerial and technical skills to the private sector.

In the Mediterranean region, many countries have adopted, or are currently adopting, policies to encourage FDI. Their strategies, however, differ in substantial ways. Countries such as Spain and Portugal have reformed their tax systems, aiming at reducing government interference in

the market economy. These reforms have led to the reduction of tax rates and the curtailment of tax preferences. But many developing countries in the Mediterranean region rely on government intervention in deciding which types of investments might qualify for special tax incentives, such as tax holidays, and investment accelerated depreciation and allowances, to attract foreign investors. In some cases, oil-rich countries like the Libyan Arab Jamahiriya and Algeria have imposed substantial taxes or resource levies to ensure that they receive a significant share of resource rents.

Background

The theoretical framework of the analysis

As is well known, taxation is only one of many determinants of FDI. Countries are able to attract foreign capital if they offer profitable opportunities for investment. The amount of profits that can be earned depends on such factors as the domestic and foreign demand for the product, the cost of skilled and unskilled labour, the cost of finance, government policies as regards procurement and regulations, and expenditures on infrastructure and other government services. Unless tax rates are so high as to make investments unattractive in terms of profitability, foreign investors will be willing to invest in a country as long as the opportunities are “sufficiently” profitable.

How do investors determine when a project is “sufficiently” profitable? The most appropriate criterion is for investors to invest in those projects that earn a profit, adjusted for risk, that is more than that available from investments in alternative opportunities. For transnational corporations (TNCs), the investment opportunities are global: the best location for an investment is one which yields the greatest profit, net of taxes. Given this assumption, a TNC will choose a country for investment in which the rate of profit is the greatest. The TNC will continue to invest in the country until such time that any new project will earn profits below those that could be obtained elsewhere. For example, if the profit rate (e.g. the rate of return on capital, net of taxes) for investment in Spain is 10 per cent per year and for Morocco it is 15 per cent, then Morocco will be a more favourable location for investment.

¹ Although profit maximization is a common assumption used in most neoclassical models, other hypotheses regarding motives for multinational firm investments have also been suggested. Two excellent summaries of alternative views on the motives of TNC investments can be found in Richard Caves (1996) and Edward J. Coyne (1995).

Given the assumption that TNCs wish to maximize profits,¹ it is then important to compare tax regimes of different countries since taxes affect the profitability of investments. Assuming all other factors being the same, a TNC will invest in the country where the tax rate is the lowest. For example, suppose the rate of return on capital for investments in country A and B is 15 per cent prior to the payment of taxes. If country A has a tax rate of 50 per cent on profits, then the net-of-tax rate of return on capital is 7.5 per cent. If country B has a tax rate on capital equal to 10 per cent, then the rate of return on the project, net of taxes, is 13.5 per cent. Clearly, the investment opportunity in country B is much more favourable than in country A. Thus, when there is a great difference in tax rates across countries, there is an incentive for TNCs to invest in those countries with the lowest tax rate, all else being equal.

The methodology applied permits a comparison of tax systems that affect investment decisions. The taxes most relevant to investment decisions include the corporate income tax, property or asset taxes, sales or excise taxes on machinery, equipment and construction, customs duties and stamp duties.

We measure the effect of the tax system on the profitability of marginal projects by calculating the effective tax rate (ETR). The ETR is a summary statistic that takes into account all the features of a tax system that might affect the profitability of projects. Even though the statutory tax rate may be at some rate, say 40 per cent, the true impact of the tax system on profits depends on many provisions of the tax law, such as depreciation allowances, inventory cost deductions, interest expense deductions and investment allowances or credits that may increase or lower the amount of tax to be paid. For example, suppose that a project earns a rate of return on capital equal to 20 per cent. If by taking into account corporate income taxes, property taxes, etc. the effective tax rate is 50 per cent, then the net-of-tax rate of return on capital is only 10 per cent.

This article examines a large number of countries, but limits the analysis to the impact of taxation on three sectors or industries: manufacturing, services (tourism) and petroleum.² The analysis also includes as many

² Calculations take into account corporate income tax, capital gains tax, withholding taxes, petroleum royalties, property taxes, sales and excise taxes on capital goods and asset taxes, and exclude tariffs on capital goods and user fees, such as stamp duties, from the analysis. Developing countries tend to rely much more on capital good tariffs and stamp duties compared to developed countries. Thus, effective tax rates for developing countries are likely underestimated relative to those of developed economies.

Table 1. Foreign direct investment flows, 1984-1990*(Millions of dollars and percentage)*

Country	FDI flows (Millions of dollars)	Percentage of region's total	Percentage of total FDI
European Union			
France	45 412	52.10	45.74
Greece	4 750	5.45	4.78
Italy	-2 408	-2.76	-2.43
Portugal	5 632	6.46	5.67
Spain	33 784	38.76	34.03
<i>Total</i>	87 170	100.00	87.80
Arab countries			
Algeria	-8	-0.09	-0.01
Egypt	7 156	77.28	7.21
Jordan	232	2.51	0.23
Lebanon	..	..	..
Libyan Arab Jamahiriya	-102	-1.10	-0.10
Morocco	545	5.89	0.55
Oman	842	9.09	0.85
Syrian Arab Republic	..	..	..
Tunisia	594	6.42	0.60
Yemen	..	..	..
<i>Total</i>	-9 259	100.00	9.33
Other countries			
Cyprus	471	16.49	0.47
Malta	225	7.87	0.23
Turkey	2 160	75.64	2.18
<i>Total</i>	2 856	75.64	2.18
All regions	99 285	100.00	100.00

Source: International Monetary Fund (1992). *Balance of Payments Statistics Yearbook*.

taxes on capital as possible, subject to data limitations.³ To simplify the analysis, the article presents an effective tax rate for only one FDI source country, France.⁴ France generally exempts from taxes the foreign-source income (particularly dividends) earned by resident corporations.⁵

³ Some taxes are overestimated based on the legal interpretation of tax law since there may be special arrangements made to avoid the tax, or there may be tax evasion. Some taxes are underestimated or entirely excluded from the analysis since it is not possible to estimate their value. For example, in Egypt, property tax can be avoided if the building has a facility for religious observance.

⁴ Marginal effective tax rates were also estimated for FDI from the United States, but these are not presented here because it would lengthen the article without altering the main results and conclusions.

⁵ France levies a special tax paid by corporations on dividends distributed by French corporations to its owners as part of the system used to integrate corporate and personal taxes in France. This tax is credited against the regular corporate income tax. However, given that foreign profits are not subject to the regular French corporate income tax, profits received from foreign countries are effectively subject to this special tax unless they can be fully credited against corporate taxes on other sources of domestic income.

Tax rates are estimated on the basis of project data obtained from the World Bank for investments in manufacturing and services. Effective tax rates for petroleum FDI are based on project data obtained from oil companies operating in Canada. When calculating effective tax rates, the structure of investments (i.e. the percentage share of amounts invested in machinery, buildings, land and inventories) is assumed to be the same across all countries examined here. The financing of foreign affiliates is the same across countries. In particular, it is assumed that equity is financed by the parent firm and debt is obtained from local markets, offshore lenders or the parent firm on the same terms. Interest rates for financing are adjusted so that the same rate, adjusted for currency depreciation, is used across all countries.⁶ Thus, projects are identical across countries, so that any differences in effective tax rates result from differences in country tax systems and certain economic characteristics, such as inflation rates.⁷

Foreign direct investment and corporate taxes in the Mediterranean region

Before analysing the impact of taxes on FDI in the Mediterranean region, it is useful to gain an understanding of the position of various countries as regards attracting FDI, as well as the contribution that corporate taxes make to the fiscal needs of governments in that region.

Pattern of foreign direct investment flows

Table 1 shows the distribution of FDI inflows across the countries under examination for 1984-1990. France and Spain account for almost four fifths of FDI flowing into the Mediterranean region. In fact, most FDI is directed to the five European Union countries. Among the Arab countries, Egypt attracts by far the most FDI, accounting for 75 per cent of total inflows. Small amounts of FDI flow to Oman, followed by Tunisia and Morocco.

⁶ More specifically, it is assumed that interest rates are determined in the long run by "purchasing power parity". Thus, the rate of interest in a country is equal to the international (United States) rate plus the difference between the anticipated inflation rate of the country and that of the United States.

⁷ We assume that the risk faced by investors is related to the income stream of the investment. Effective tax rates are calculated on the basis of the rates of return on capital, adjusted for income risk. However, "income risk" has no impact on the effective tax rate measures so long as the company can fully use any losses against other sources of income. When tax losses are not fully written off, effective tax rate measures will be affected by risk.

Table 2. Energy production, oil and gas, 1992

	Petajoules
European Union countries	
France	153
Greece	39
Italy	197
Portugal	0
Spain	43
Arab countries	
Algeria	2 378
Egypt	1 868
Jordan	1
Lebanon	0
Libyan Arab Jamahiriya	2 322
Morocco	1
Oman	1 344
Syrian Arab Republic	767
Tunisia	211
Yemen	353
Other countries	
Cyprus	0
Malta	0
Turkey	120

Source: United Nations Statistical Office (1991). *Energy Tape*.

As for other Mediterranean countries, only Turkey attracts any significant amounts of FDI, although less than those received by the European Union countries, or Egypt.

Table 2 shows oil and gas production in the Mediterranean region by country.⁸ Petroleum production is mainly in the Arab countries, particularly Algeria, the Libyan Arab Jamahiriya, Egypt, Oman and the Syrian Arab Republic. In the case of Algeria, the Libyan Arab Jamahiriya and Oman, the largest share of FDI relates to the petroleum industry. European Union countries attract a greater share of FDI related to manufacturing and services.

Table 3 shows the amount of corporate income taxes and other direct corporate tax levies paid to governments as a percentage of GDP and of total taxes for 1987-1991 (data were unavailable for Algeria, Lebanon and the

⁸ The IMF data show only the amount of FDI related to the petroleum industry for a few countries (Libyan Arab Jamahiriya, Oman and Algeria). For other countries, there were no data that disaggregated in FDI to the oil and gas industry from that in other industries.

Table 3. Corporate taxes collected, 1987-1991

	Percentage of GDP	Percentage of total taxes
European Union countries		
France	2.02	5.58
Greece	1.94	5.33
Italy	2.51	6.75
Portugal	2.55	7.77
Spain	2.81	9.38
Arab countries		
Algeria	..	..
Egypt	3.74	17.93
Jordan	3.39	17.43
Lebanon	..	..
Libyan Arab Jamahiriya	..	..
Morocco	1.78	8.53
Oman	8.20	81.04
Syrian Arab Republic	5.88	45.94
Tunisia	1.74	7.35
Yemen	0.82	6.67
Other countries		
Cyprus	10.25	45.21
Malta	3.67	14.36
Turkey	1.64	10.21

Source: International Monetary Fund, 1992.

Libyan Arab Jamahiriya). Indirect taxes paid by corporations, such as sales and property taxes and tariffs, are not included because of data limitations.

At times, analysts use corporate tax revenues as a percentage of GDP or total tax revenues as a measure of the degree to which governments' taxes on the corporate sector discourage investments. The analysis is based on the view that corporate tax revenues are eroded when governments provide special tax concessions or incentives. However, it would be fallacious to conclude that countries that collect more taxes as a percentage of GDP or of tax revenues tend to discourage investments. The amount of corporate tax revenues depends on the size of profits earned by the corporate sector. In developed countries, corporate profits as a percentage of GDP tend to be small since capital income in the form of interest and rents, which is deducted from profits, is much more important.⁹ Thus, if corporate profits

⁹ Corporate profit figures for many of the developing countries are unavailable. However, for developed countries in the European Union, corporate profits as a ratio to GDP are relatively low. For example, in OECD countries, the ratio of corporate income tax to GDP is about 3 per cent, but corporate profits as a ratio to GDP are less than 10 per cent which implies that corporate taxes as a ratio to corporate profits are about 30 per cent on average.

are low as a percentage of GDP, the amount of tax paid will also be low. It is therefore more relevant to compare the amount of taxes paid as a percentage of profits rather than of GDP or of tax revenues in order to gain an understanding of how investment may be affected. This is the task of the analysis undertaken below.

Nonetheless, it is useful to examine the amount of corporate tax revenues collected in order to gain an understanding of how much corporate tax is actually collected by governments. This is particularly important since many governments, as shown in the survey below (see appendix), provide tax incentives that result in a significant loss in collected revenues.

As shown in table 3, the five European Union countries are not particularly reliant on corporate taxes, which tend to be about 2.5 per cent of GDP and less than 10 per cent of total taxes. This trend is consistent with that observed in other developed countries at a similar stage of development. For Arab countries, corporate taxes are relatively more important, accounting for about 4 per cent of GDP (on average) and about 20 per cent of revenues. However, there is considerable disparity among those countries. Oman and the Syrian Arab Republic are highly dependent on corporate tax revenues (especially from the oil and gas industry), while Morocco, Tunisia and Yemen are more similar to the European Union countries. As for other Mediterranean countries, Turkey's reliance on corporate tax revenues is similar to that of the European Union countries, while Cyprus and, to a far lesser extent, Malta are more reliant on corporate tax revenues.

Comparative analysis of effective tax rates

This section provides an overview of the effective rates of tax on investments by France in the Mediterranean region. Summary calculations for manufacturing, services and petroleum are provided in tables 4, 5 and 6, while detailed calculations (by asset, industry and country) are presented in the appendix.

Two specific cases are presented. In the first case, effective tax rates are shown for the "base case". The base case is the effective rate of tax on company investments when the normal rules of tax law apply in the country (this could include accelerated depreciation and investment tax credits that generally apply for qualifying investments without firms requiring an approval process for use of the incentive). The base case is particularly

relevant for corporations that have existed in a country for some time, so that they are replacing capital or undertaking expansions of existing facilities. The second case takes into account tax holidays that require government approval. The tax holiday effective tax rates are calculated assuming that the investments have taken place prior to, or in the first year of, the holiday when the firm goes into production.¹⁰ This second case is applicable to new firms undertaking investment in the country or new projects or significant expansions.

Dividends remitted to French parent firms are not subject to tax in France (except in certain circumstances mentioned above), and so the only underlying taxes are those paid to the host country. To begin with, the case of manufacturing companies is considered. Services and petroleum investments are discussed in the subsequent sections in less detail.

Manufacturing

In table 4, effective rates of tax on French investments are shown in the base case and tax holiday firms in the 18 Mediterranean countries. For the European Union countries, effective tax rates vary in general from as low as 7 per cent in Greece to as high as 46 per cent in Italy, averaging about 32 per cent. The effective tax rate in Greece is low because companies (i) claim relatively generous tax depreciation allowances, especially for structures (8 per cent rate on a straightline basis); (ii) use the "last-in-first-out" (LIFO) method for inventory valuation; and (iii) pay little property, withholding or excise taxes. Greece's statutory corporate income tax rate is not particularly high either (35 per cent). In Italy, however, the corporate income tax rate is high (46.4 per cent, including surcharges), tax depreciation deductions are not particularly generous (3 per cent straightline for buildings and 15 per cent straightline for machinery) and withholding taxes on income accruing to non-resident shareholders are quite high. The lower effective tax

¹⁰ By calculating the effective tax rate for the first year of the tax holiday, we tend to estimate the lowest effective tax rate that is possible. Generally, effective tax rates on the holiday investments increase when the investments take place in years closer to the end of the holiday. The logic to this observation is the following. If the investment takes place closer to the end of the holiday, the income will be taxed after the holiday period for more years until the asset fully depreciates. At the end of the holiday period, it might even be possible for the asset to be taxed more than in the year without the holiday if the asset loses generous tax write-offs, such as investment allowances, which are only available at the time that the investment is put into place. See Mintz (1990) for further explanations; for an application to Morocco, see Mintz, Sewell and Tsiopoulos (1994).

Table 4. Marginal effective corporate tax rates in manufacturing
(Percentages)

Country	Base case	Tax holidays		
		Case A	Case B	Case C
European Union countries				
France	39.4	..	..	..
Greece	6.9	..	..	..
Italy	45.8	..	..	..
Portugal	27.5	..	..	..
Spain	36.5	..	..	..
Arab countries				
Algeria	46.9	17.4	8.9	8.4
Egypt	46.2	19.3	17.8	17.6
Jordan	46.5	16.5	12.4	8.2
Lebanon	27.7	8.1	8.1	8.1
Libyan Arab Jamahiriya	30.1	..	..	..
Morocco	45.7	..	22.8	18.1
Oman	35.7	8.9	2.8	2.8
Syrian Arab Republic	80.5	27.6	27.6	27.6
Tunisia	47.9	10.9	7.6	6.4
Yemen	39.1	10.5	6.3	6.3
Other countries				
Cyprus	25.4	8.1	8.1	8.1
Malta	30.5	20.7	20.7	20.7
Turkey	-226.3	..	..	..

Source: Authors' own estimations.

rates for Portugal primarily relate to relatively rapid depreciation write-offs for fixed assets, as well as the use of LIFO for inventories (the rate of withholding tax on dividends, on the other hand, is high at 20 per cent).

With respect to the Arab countries, the effective tax rates for the base case are generally above the average of the European Union countries, except for Lebanon (with a 10 per cent corporate tax rate) and the Libyan Arab Jamahiriya (which has a presumptive tax on gross revenues equal to 15 per cent). The Syrian Arab Republic's effective tax rate is quite high (almost 80 per cent), resulting from a high corporate income tax rate, a high property tax rate, a relatively high rate of withholding tax on dividends (15 per cent) and rather low tax depreciation rates (2 per cent straightline depreciation for buildings and 10 per cent straightline depreciation for structures). Despite having a corporate income tax rate of 50 per cent, Oman taxes capital at a rate close to the European Union average because of its rapid write-offs for tax depreciation (4 per cent straightline for buildings and 25 per cent straightline for machinery), zero withholding tax on dividends, and zero property and excise taxes on capital.

In the absence of tax holidays, Egypt, Jordan, Morocco, Tunisia and Yemen all have effective tax rates that average 40-45 per cent. The reason for these relatively high effective tax rates varies. Egypt, for example, has a low corporate income tax rate on manufacturing (34 per cent). However, it provides few write-offs for capital and imposes relatively high rates of tax on capital, such as the excise taxes on structures and machinery. On the other hand, Jordan and Morocco have similar corporate income tax rates (about 41 per cent) and somewhat lower property taxes and faster write-offs for tax depreciation for buildings than Egypt. Moreover, Jordan and Morocco both have much lower inflation rates than Egypt, so that the effective tax on assets, particularly inventories, is much lower than in Egypt.¹¹ Tunisia and Yemen have rates of corporate income tax on manufacturing that are close to 35 per cent, but annual tax depreciation allowances are not particularly generous. Both countries, unlike Egypt, Morocco and Jordan, pay tax dividends to French non-residents at relatively high rates.

With tax holidays, it is evident that, on average, effective tax rates in the Arab countries fall considerably below effective tax rates in the European Union countries but are still well above those of Greece in most cases (table 4). The tax holidays for case A are typically shorter than those for cases B and C. Thus, as expected, the effective tax rates for case A tend to be higher than for the other cases.

The value of tax holidays depends on more than just their duration. It depends also on corporate income tax provisions for depreciation of capital, inflation rates and other taxes that may be exempted. For example, the longest tax holiday is in Egypt (case C: 15 years) and the shortest holiday is in Tunisia (case A: 3 years). For Egypt, the long tax holidays reduce effective tax rates to 18 per cent (from 46 per cent), while Tunisia's tax holiday results in a decline in effective tax rates from 48 per cent to 11 per cent. Why is the Tunisian tax holiday, which is of a shorter period, so much more effective than the Egyptian one?

The first explanation is obvious: Egypt's tax holiday does not provide an exemption for excise and property taxes, while Tunisia's provides an exemption for the property tax (there is no excise tax on capital goods in Tunisia).

¹¹ Egypt permits the use of the LIFO method for valuing inventories, but firms do not seem to use this method for inventory valuation. This is somewhat puzzling since LIFO is clearly advantageous to companies in inflationary climates.

The second explanation is less obvious. The value of tax holidays for long-lived depreciable assets (structures and machinery) depends on the value of tax depreciation on assets first purchased during the holiday, but remaining after the holiday is completed. As discussed earlier, in the background section, depreciable assets purchased during the holiday still generate income after the holiday, depending on the economic life of the asset. Also, in the countries that are considered here, firms must write down for tax purposes the value of their assets during the holiday. If there is little tax depreciation left after the holiday, long-lived assets could bear considerable tax. Thus, the value of tax depreciation claimed in years after the holiday on assets purchased before or during the holiday depends on the tax depreciation rate and the inflation rate. The higher the rate of depreciation and the greater the inflation rate under normal tax laws, the lower the value of tax depreciation allowances in real terms, and the less beneficial the tax holiday. This is the case when comparing the tax holidays of Tunisia and Egypt. Egypt has a higher inflation rate and permits a faster write-off for assets than Tunisia. Thus, Egypt's tax holiday is less beneficial.

With respect to the other Mediterranean countries, it is clear that Cyprus has a low effective rate of tax on capital for both the base and tax holiday cases. This is due to the low corporate tax rate and the long (10 years) tax holiday. Malta also has relatively low effective tax rates, although the holiday is not so beneficial. It allows assets to be written off at a rapid rate, so that the effective tax rate is low for the base case and, in contrast, relatively high (but not as high as in the base case) for the 10-year tax holiday investments.

For the base case, the lowest effective tax rate for capital is in Turkey (-226 per cent). A negative effective tax rate implies that the tax value of capital cost write-offs is more than the amount of tax paid on operating income generated by the investment. This situation implies that investments in Turkey generate losses for tax purposes (the projects can still be quite profitable in an economic sense). For the calculations made here, it is assumed that the tax losses can be fully used by the firms in Turkey to shelter other investments from taxation.¹² Thus, the effective tax rate for these situations is, most likely, underestimated.

¹² If the tax losses cannot be used fully (for example, they may be carried forward at no rate of interest, or simply be left to expire), then the effective tax rate is much higher, although it can still be negative in value. For a discussion of the effective tax rates for tax loss situations, see Mintz (1988), and Altshuler and Auerbach (1990).

Why is the effective tax rate in Turkey so low?

- The first reason is that fixed assets in Turkey are indexed for inflation, with no similar adjustment made for interest expenses. Therefore, companies are able to deduct the part of interest that compensates investors for a loss from the real value of the debt's principal. Even though firms are able to write off assets over time through their depreciation allowances, they are given an opportunity to write off the debt's principal (in real terms) in addition to the depreciation write-offs. This allows capital to be deducted more than once over time. Given that asset values are corrected for inflation but not liabilities, taxable income in Turkey is understated compared with economic income.
- The second reason is that Turkey provides relatively generous write-offs for capital costs. Inventories are valued according to LIFO (the cost basis for inventory valuation is close to the current replacement cost of inventories). Also, investment allowances are provided for machinery and structures (these allow companies to list their investments as expenditures in the first year up to 70 per cent). Annual tax depreciation is quite liberal as well (6 per cent straightline depreciation for structures and 25 per cent straightline depreciation for machinery, figures which are about three times as high as the economic depreciation rates). This favourable treatment of investments in Turkey is offset by high withholding tax on dividends and corporate income tax rates (20 per cent). Nonetheless, the substantial tax write-offs result in a low corporate income tax yield (table 3).

Services

The taxation of services (tourism) follows a pattern similar to that in manufacturing, except that effective tax rates are higher (table 5). On average, the effective tax rate for services in the European Union countries is about 41 per cent, in the Arab countries (base case) about 45 per cent and in other Mediterranean countries -68.7 per cent (dominated by Turkey).

In the base case, the effective tax rates for services are higher for three reasons. First, the corporate tax rate for manufacturing is lower in one country (Egypt). Secondly, manufacturing is more machinery-intensive compared with services, and machinery is taxed at a lower rate compared

Table 5. Marginal effective corporate tax rates in services
(Percentage)

Country	Base case	Tax holidays		
		Case A	Case B	Case C
European Union countries				
France	57.4	..	..	..
Greece	20.5	..	..	..
Italy	51.4	..	..	..
Portugal	40.1	..	..	..
Spain	35.9	..	..	..
Arab countries				
Algeria	33.9	15.6	11.7	11.2
Egypt	46.8	24.7	23.7	23.5
Jordan	46.1	21.1	18.1	12.5
Lebanon	33.7	13.5	13.5	13.5
Libyan Arab Jamahiriya	37.2	..	..	..
Morocco	39.1	20.8	20.8	12.9
Oman	32.2	9.7	3.5	3.5
Syrian Arab Republic	84.9	28.3	26.5	26.5
Tunisia	53.3	..	6.3	6.2
Yemen	41.4	9.8	8.1	8.1
Other countries				
Cyprus	20.3	8.8	8.8	8.8
Malta	28.2	20.3	20.3	20.3
Turkey	-250.6	..	..	..

Source: Authors' own estimates.

with structures in France, Italy, Portugal, Egypt, Lebanon, Oman, the Syrian Arab Republic, Tunisia, Yemen, Cyprus, Malta and Turkey. The lower effective tax rate for machinery results from more generous tax depreciation laws provided for machinery and the application of property taxes to structures. Thirdly, tax depreciation rates tend to be more generous for manufacturing compared with machinery in many of the countries examined here, particularly Lebanon, Portugal and Spain.

In the case of holidays, effective tax rates are positive and somewhat lower for services compared to manufacturing. The positive value of the effective tax rate results from the fact that a depreciable asset purchased during the holiday generates income that is taxed after the holiday. In the case of services, most depreciable assets are structures that are depreciated at a rate somewhat closer to economic depreciation rates compared with machinery. Thus, after the holiday is completed, the tax depreciation claimed is closer to the true economic costs of replacing the asset, and so less tax is paid after the holiday for services compared to manufacturing.

Table 6. Marginal effective corporate tax rates in petroleum
(Percentages)

European Union countries	
France	11.9
Greece	10.0
Italy	36.5
Spain	28.8
Arab countries	
Algeria—Joint venture	28.7
Algeria—Case B	48.9
Algeria—Case A	64.6
Algeria—Base case	79.6
Egypt	13.5
Libyan Arab Jamahiriya	35.2
Oman	15.6
Syrian Arab Republic	64.4
Tunisia	33.6
Yemen	25.4
Other countries	
Turkey	-235.6

Source: Authors' own estimates.

Petroleum

As is shown in table 6, petroleum investments are taxed at somewhat lower rates (base case) than manufacturing or services in many European Union countries (the average for four countries is close to 22 per cent) and Arab countries (the average for seven countries is close to 35 per cent). For the Arab countries in particular, it is likely that the effective tax rates are understated since many oil-based investments are subject to production-sharing agreements with governments. Moreover, petroleum investments do not qualify for tax holidays.

The lower effective tax rates for petroleum result from the generally favourable treatment of exploration and development intangible expenditures under tax law. However, in some cases, effective tax rates for petroleum are very high (i.e., close to 80 per cent in Algeria), and corporate income tax rate can be high as well (e.g., as high as 85 per cent).

Policy analysis

From the analysis presented in the previous section, two conclusions can be drawn. The first is that without tax holidays the present tax regimes

of Arab countries are less competitive than those of European Union countries (exceptions are Lebanon, Oman and Yemen). The second is that tax holidays make the tax regimes of Arab countries competitive for FDI, but no more so than in Greece, which relies on other tax incentives (LIFO accounting for inventories and accelerated depreciation).

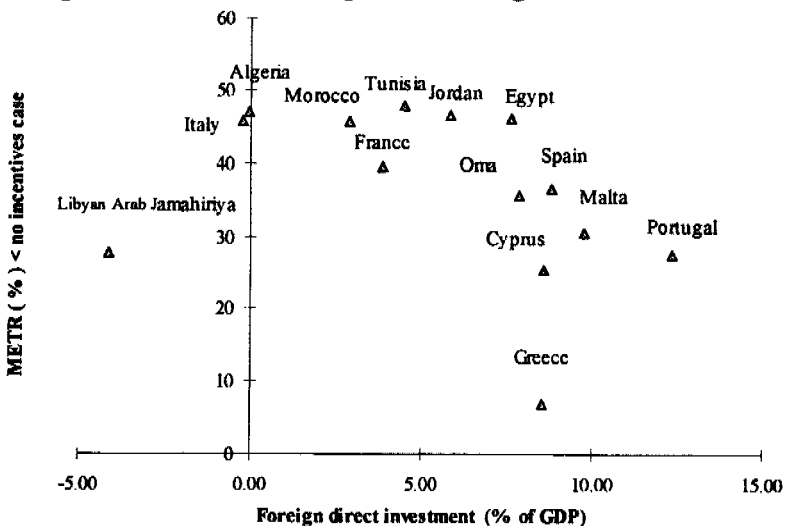
From a policy perspective, these conclusions raise two issues.

- Does it make any difference that a country's tax system is more or less competitive than another country's?
- If tax incentives matter to foreign investors, which incentives are the most desirable for governments?

The effectiveness of tax incentives

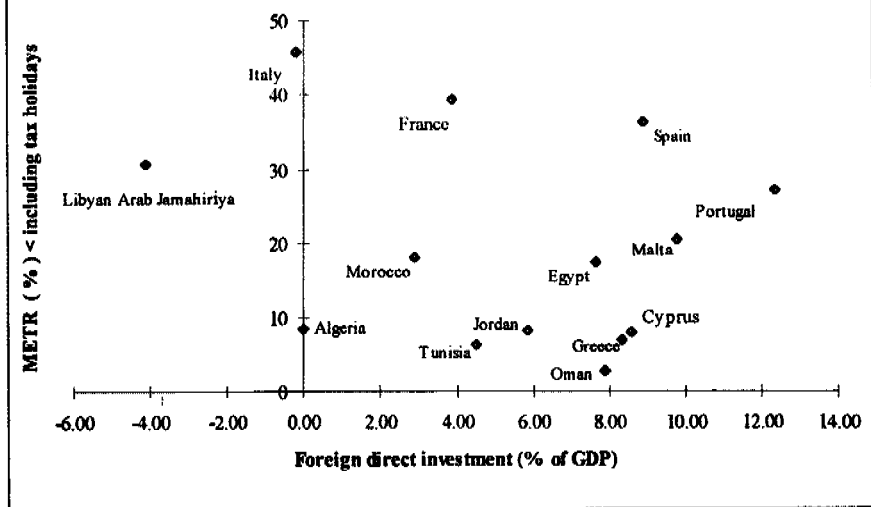
Economists have long argued about whether tax incentives are effective in encouraging investment by companies. The literature testing the relationship between investment and taxation has not been conclusive (Chirinko, 1993). Although recent studies (e.g., Devereux *et al.*, 1994) using firm panel data sets have had some measured success, there are significant

Figure 1. Taxation of capital and foreign direct investment



Note: METR = Marginal effective tax rate.

Figure 2. Taxation of capital and foreign direct investment



Note: METR = Marginal effective tax rate.

data problems in trying to estimate the impact of taxes on investment. In large part, the lack of clear evidence regarding that impact is the result of insurmountable data problems. It is difficult for empirical investigations to measure investors' expectations with respect to future tax rates and other factors influencing profitability, such as interest rates.

Nonetheless, given the estimates of effective tax rates made here, it might be appropriate to consider the relationship between those rates and investment. As a first step, it would be useful to consider the relationship between the effective tax rate for capital in manufacturing and FDI flowing to each of the 18 countries. Figure 1 plots each country's effective tax rates for capital (taking the case of manufacturing with no tax holidays) and the amount of FDI inflows (including FDI from France) as a percentage of GDP. As seen in that figure, there appears to be a negative relationship between the two—higher effective tax rates result in less FDI—although there is considerable variation across countries. Figure 2 shows a similar relationship, except that effective tax rates in the presence of tax holidays are used instead. It indicates that there is little relationship between effective tax rates for capital and investment.

Table 7. Regression results^a

Item	Dependent variable: FDI as a percentage of GDP	
	Without tax holidays (1)	With tax holidays (2)
Intercept	7.65 (2.74) ^b	4.23 (1.59)
Marginal effective tax rate	-0.135 (-1.92)	-0.05 (-55)
GDP growth rate (5-year average)	1.00 (3.89)	0.58 (1.69)
Adjusted R ²	0.57	0.13
F-statistic	9.62	1.94
Number of observations	14	14

Source: Authors' own estimates.

^a This table presents two regression results. For regression equation 1 the independent variable "marginal effective tax rate" does not include tax-holiday firms, while the same variable for equation 2 includes tax holidays.

^b Numbers in parentheses represent t-statistic.

Neither figure 1 nor figure 2 provides an appropriate picture for analysing the relationship between FDI and taxation of capital since they both ignore other factors that might explain FDI, such as growth of economic output.¹³ In table 7, the impact of effective tax rates on FDI as a proportion of GDP is estimated, taking into account the growth rate of GDP in each country (a measure of the output effect on investment). Columns 1 and 2 provide an estimate using French corporate manufacturing effective tax rates for the base and tax holiday cases, respectively.

The regression results differ significantly between the two columns. In column 1, a one point increase in the effective tax rate for capital (base case) causes a 0.13 point decline in FDI as a share of GDP (with a 93 per cent level of confidence). Also, a one point increase in GDP causes FDI as a ratio of GDP to increase by one point.

Column 2 regression results are less successful when effective tax rates for tax holidays are used instead. Although the impact of effective

¹³ Slemrod (1990) uses two other variables—the real exchange rate and lagged tax rates. Given that a cross-section of data is used (average FDI over five years and one measure of current effective tax rates), neither of these variables are relevant for the regressions.

tax rates on FDI is still negative, there is only a 60 per cent chance of its being significant. The impact of the GDP growth rate on FDI is positive, but only at the 89 per cent level of confidence. The explanatory power of both effective tax rates and GDP growth rates as regards FDI is quite small. Thus, there seems to be little evidence that tax holidays as an incentive have much impact on FDI. What seems to be a more important variable in terms of explaining how tax policies affect FDI is the effective tax rate in the absence of holidays.

Why might tax holidays be so unsuccessful in explaining FDI in the Mediterranean region? There are three possible reasons:

- Foreign investors might be more interested in a tax system's impact over the long run than in a temporary tax incentive that is useful only for the first years if the projects earn income. Thus, more permanent incentives such as investment tax allowances or credits may be more important in encouraging investments.
- Tax holidays are not generally applied. For example, they are often aimed at particular industries or regions, and companies must satisfy certain criteria to qualify for a holiday (e.g., minimum amounts of capital, domestic labour content, export promotion). Moreover, the approval process for holidays can be quite long and costly, eroding some of the tax benefits that would otherwise accrue to the investor.
- The tax holiday may be clawed back by the home country, especially in the case of the United States. Any tax relief provided in the host country may result in additional taxes paid to the home country, thereby reducing the value of tax incentives (Mintz and Tsiopoulos, 1994).

It thus seems that taxes do affect FDI, but tax holidays themselves are not successful in encouraging investment in a country. If countries are to encourage FDI, which tax incentive would be the most effective? This is discussed next.

Which tax incentive?

Tax policy is based on various considerations that might be pursued by governments in improving economic growth prospects. There are three

broad strategies for governments to pursue in designing tax incentives for foreign investors: ‘levelling the playing field’, ‘kick-starting’ and ‘following thy neighbour’.

Levelling the playing field

Recent tax reform measures adopted in a number of developed countries have aimed at reducing tax rates and broadening tax bases so that the tax system interferes less with market decisions by ‘making’ the playing field more even. Under this strategy, a low tax rate is seen as a sufficient incentive for improving industrial activity and economic performance. Such policies have been popular in the Latin American economies (e.g., Mexico, Chile and Argentina), which have reduced tax rates and eliminated tax preferences under corporate tax regimes.

The value of ‘levelling the playing field’ is that it reduces discretionary actions by governments that may worsen, rather than improve, economic performance through mistaken, even if well-intended, policies. Governments are often misinformed about private-sector activities and they really do not know which industry it is best to assist. Moreover, public authorities are pressured by interest groups into providing special relief or direct resources to certain activities away from more profitable opportunities. Even if discretionary tax assistance is aimed at the ‘right’ industry, it is often very difficult to contain the incentive so that it will not have unintended effects, such as large revenue losses for the government (this is particularly true for tax holidays, as discussed above).

On the other hand, there are some disadvantages to the ‘levelling the playing field’ strategy for tax policy. One concern is that it is unclear what ‘levelling the playing field’ actually means. Should assets be taxed at the same rate (as under an income tax), or should governments eliminate the tax on capital altogether (as in the case of a consumption tax)? Another concern is that market failures may exist (e.g., environmental problems or inadequate research and development), so that it may be appropriate to use the tax system to correct for market failures through tax penalties or tax subsidies as one form of public intervention. ‘Levelling the playing field’ is therefore an inadequate policy response in these situations.

Kick-starting

Kick-starting strategies for tax policy imply that governments act as partners with the private sector to improve economic growth. Under such strategy, it is recognized that governments have too important a role to play in the economy, so that it becomes difficult for them to pursue a simple “levelling the playing field” strategy. After all, governments in many countries are responsible for infrastructure expenditures, education, redistribution of wealth and other economic policies that ultimately affect industry and growth. Therefore, if industry needs assistance to expand in export markets, improve economic linkages across regions within the country or pursue new product markets, why should governments not work along with industry to achieve a high level of economic growth? This philosophy has dominated the 10-year national economic plans put forth by governments for export promotion and infrastructure development in the Asian “tigers” (Republic of Korea, Taiwan Province of China, Hong Kong, Singapore) and in other South-East Asian countries.

The arguments in favour or against kick-starting strategies are simply the “other side of the coin” when discussing “levelling the playing field” strategies. Kick-starting is appropriate if there are market failures—even the most developed-country governments that have pursued “levelling the playing field” strategies have still maintained special tax incentives for such items as research and development and investments in slow-growth regions. However, governments that pick winners and losers often fail in making the correct decisions, or succumb to political pressures.

Follow thy neighbour

With growing integration into the global economy, governments are acutely aware of the need to maintain the attractiveness of their economies to FDI. In terms of developing strategies for tax policy, one option is to simply “follow thy neighbour”. If neighbouring countries in a region provide tax incentives, such as holidays, a government might provide the same benefit in the interest of tax competition.

Examples of neighbouring countries following similar tax policies are plentiful: they are to be found in Eastern and Central Europe, South-East Asia, South Asia, the Caribbean region and Latin America. However, there are some important examples of governments breaking the trend and

pursuing tax strategies quite different from those of their neighbours. These include the abolition of tax holidays in Indonesia in the mid-1980s, the elimination of investment allowances and other fast write-offs for capitals in Mexico and Chile in the early 1990s, the recent abolition of tax holidays in Venezuela, and the proposed elimination of tax holidays in Guyana.

The advantage of “follow thy neighbour” strategies is that a country is able to provide the same tax benefits as those of surrounding countries that compete for foreign capital. In terms of neutrality, one could argue that matching tax policies across countries help maintain a “levelling the playing field” strategy for a specific industry operating across international borders even though it violates the “levelling the playing field” strategy amongst industries within a country.

The disadvantage of “follow thy neighbour” strategies for tax policy is that they ignore other factors that influence tax policy as well as FDI. For example, resource-rich countries do not need to engage in tax competition since they would be likely to attract investments anyway. Also, corporate tax incentives can erode tax revenues available to finance important government services, such as infrastructure facilities. Thus, there is a cost to tax incentives that could outweigh the benefits derived by foreign investors.

Below, the impact of various tax policy changes on effective tax rates for the Arab countries is examined by taking into consideration:

- Policies that would “level the playing field”: the elimination of withholding taxes, property taxes and excise taxes on capital, and the introduction of a standard corporate tax rate of 35 per cent (tax holidays would be abolished);
- Policies that would “kick-start” the economy, such as investment tax allowances instead of tax holidays;
- “Follow thy neighbour” policies, that is the status quo policy for maintaining tax holidays.

“Levelling the playing field” strategies for Arab countries

The argument in favour of a “levelling the playing field” strategy for Arab countries is that the current system of tax holidays does not effectively encourage FDI. The evidence presented in the previous section suggests

Table 8. Marginal effective corporate tax rates for manufacturing
(Percentage)

Country	Base case	Simulations ^a			
		Without withholding taxes	Withholding tax of 35 per cent	Without property taxes	Without capital taxes
Arab countries					
Algeria	46.9	42.5	36.9	34.8	34.8
Egypt	46.2	46.2	47.9	39.9	27.9
Jordan	46.5	46.5	41.4	37.4	33.8
Lebanon	27.7	22.7	42.1	35.3	35.3
Libyan Arab Jamahiriya	30.1	30.1	..	30.1	30.1
Morocco	45.7	41.9	35.8	32.1	32.1
Oman	35.7	35.7	22.1	22.1	22.1
Syrian Arab Republic	80.5	75.4	63.0	37.9	37.9
Tunisia	47.9	44.7	44.7	36.9	36.9
Yemen	39.1	36.3	35.3	32.5	32.5

Source: Authors' own estimates.

^a Each new simulation is a continuation from the previous case. For example, the reduction of the corporate income tax rate (CIT) to 35 per cent for all countries assumes no withholding taxes.

that effective tax rates for the tax holiday case do not explain FDI compared with effective tax rates calculated for the base case. Thus, tax incentives that are permanent and more general may have a more sustained impact on increasing FDI for Arab countries.

The impact of eliminating tax holidays and providing other tax incentives, such as the removal of withholding taxes on dividends (the second column), imposing a corporate tax rate of 35 per cent,¹⁴ eliminating property taxes and imposing no excise tax on capital goods, is considered next (table 8). The analysis is done for manufacturing only.

Pursuing policies of this sort would result in a significant reduction in effective tax rates (base case, excluding holidays) except for Lebanon, where the corporate tax rate would increase. The effective tax rate declines most dramatically (by over 40 percentage points) to 38 per cent in the Syrian Arab Republic (where the corporate income and property tax rates are very high). Other significant reductions in effective corporate tax rates include those in Egypt (19 points), Jordan (13 points), Morocco (14 points) and Oman (14 points).

¹⁴ For most countries, this means a decline in the corporate tax rate. The exceptions are Egypt (the manufacturing tax rate increases from 34 per cent to 35 per cent) and Lebanon (the tax rate increases from 10 per cent to 35 per cent).

For the Arab countries, the (unweighted) average effective tax rate would decline from about 45 per cent to about 32 per cent. Using the regression results obtained above, this would imply an increase in FDI as a proportion of GDP equal to 1.7 percentage points, on average.

Unfortunately, it cannot be determined what impact these policies would have on tax revenues for each country. This would require confidential tax information compiled by revenue departments. Even if there is a loss (or gain) in revenues for a government, it is possible to make adjustments to other taxes to keep the level of revenues constant.

Kick-starting: tax holidays versus investment tax allowances

Sometimes governments may be interested in providing some form of tax incentives in order to encourage specific industrial activities. Such incentives should be well targeted and directed at the "right" activities, simple to administer and not too costly in terms of forgone revenue. In the Arab countries, tax holidays have been the most popular form of tax incentive for capital for kick-starting industries.

Under certain circumstances, tax holidays offer some distinct advantages to the Arab countries that provide them. As discussed earlier, they are primarily advantageous to firms that use short-lived capital in production. If the intention of a government is to attract footloose enterprises and investments with a short-term horizon, tax holidays would encourage such investments to locate in the country. Also, tax holidays that result in low rates of taxation of capital during the initial years of investments signal a government's intention that investors should be able to earn an adequate rate of return on capital over time without facing onerous levels of taxation. Finally, interest rate deductions for firms during tax holidays may be of little value; therefore, firms are not encouraged to incur debt that could subsequently result in bankruptcy with its attendant costs.

Tax holidays, however, have a number of disadvantages, some of which were alluded to in the previous section. One clear disadvantage is that the holiday requires an approval process, as well as monitoring to ensure, for example, that the firm does not close down to reappear under new ownership for a new holiday. Also, tax holidays discriminate against projects with long-lived capital. If the object of governments is to seek capital investment from investors willing to make a long-term commitment

to the economy, tax holidays are not very effective. Moreover, they could result in a serious erosion of government revenues. Firms can shift income from associated tax-paying companies to tax holiday firms and thus shelter income from taxation. This can be done through transfer pricing techniques (e.g., when one firm sells a product to another), or by simply shifting debt financing from a tax holiday company to a non-holiday company. Finally, tax holidays are usually not well targeted. Investments in non-holiday firms can benefit from tax holidays when firms claim deductions for depreciation and interest expenses in the non-holiday firm and report at least a portion of the income in the holiday firm. This could result in much lower effective tax rates for capital for non-holiday investments.

Given the above criticisms of tax holidays, it might seem that a better targeted and simpler-to-administer incentive would be valuable for Arab countries. The clearest alternative is the investment tax allowance, which is an additional deduction allowed for investments in fixed assets (structures and machinery). The investment allowance is assessed at rates based on the cost of assets purchased and deducted from taxable income (when assets are sold, the investment allowance is "recaptured" by being included in the income). Alternatively, governments could provide an investment tax credit, which is calculated as a percentage of qualifying investment expenditures and deducted from corporate taxes paid.

The advantages of the investment tax allowance or credit are manifold. The allowance or credit only benefits new investments, not old capital. Also, the allowance or credit encourages investments by firms that take a longer-term view of the country, unlike the tax holiday, which attracts investors with short-time horizons. Furthermore, the incentives are more easily monitored, since the company must invest in fixed assets such as structures or machinery that are put into place. The allowance or credit can also be adjusted to benefit certain locations or industries more than others. The allowance or credit incurs less revenue cost to governments since it is far better targeted. Finally, taxpayers cannot engage in tax planning techniques to increase the value of the allowance or credit, as that depends solely on the cost of the investment, not the amount of profits reported by a firm (as in the case of an exemption or tax holiday).

On the other hand, there are disadvantages associated with investment tax allowances or credits:

- The bias of the allowance is towards assets that have shorter lives, since assets that have a quick turnover are able to claim successively

more investment allowances or tax credits over time. Moreover, it is less advisable to provide an investment allowance for investments in inventories, because companies could gather inventories in those areas where the allowance or credit is given, thus resulting in a significant revenue loss.

- The incentives benefit primarily tax-paying companies that are capital-intensive and discriminate against more labour-intensive projects.
- The incentive helps more growing (riskier) firms than companies that are in decline (this may also be viewed as an advantage).
- Unlike a reduction in the corporate tax rates, which is more obvious to the investor, the investment allowance or credit is best understood by company accountants or by managers who have an understanding of tax planning.

In principle, the investment tax allowances or credits can be equivalent in value by letting the tax credit be equal to the allowance multiplied by the statutory tax rate. In practice, however, the two incentives are not the same. The investment tax allowance is a deduction that reduces the taxable income of the company, or alternatively, increases the tax losses of the company to be carried forward to the future. The value of the allowance depends on the corporate statutory tax rate. If countries, such as Egypt, have differential corporate tax rates for different types of firms, the allowance has a different value to each company depending on its corporate tax rate. On the other hand, the investment tax credit is calculated after corporate taxes have been calculated. Its value does not depend on the corporate tax rate. Moreover, unless an explicit rule allows the investment tax credit to be carried forward to future years, the credit is lost if the tax-loss company is not paying corporate taxes in that year.

The investment tax credit that would be needed in Arab countries and which would provide the same tax benefits to companies as a tax holiday would provide in its first year for manufacturing companies is calculated next (table 9). As is shown, the investment credits would be quite large, some over 100 per cent of asset values. However, the credit would be provided only in the first year of the investments. In later years, it could be significantly reduced to much lower values since the tax-holiday effective tax rates increase during the holiday period.¹⁵ Thus, if the investment tax

¹⁵ See Mintz *et al.*, (1994) for estimates of investment tax credits and allowances that would be equivalent to tax holidays in Morocco in different years.

Table 9. Investment tax credit in manufacturing^a
(Percentage)

Country	
Algeria	76.8
Egypt	60.7
Jordan	51.3
Lebanon	117.2
Oman	24.5
Syria	107.3
Tunisia	71.2
Yemen	46.7

Source: Authors' own estimates.

^a This table presents the investment tax credit that would be required to equate the base-case effective tax rates with the tax-holiday effective tax rates.

credit was provided on a permanent basis for investments, rather than on a temporary basis as a tax holiday, the value of the credit need not be as large as suggested.

Conclusions

In summing up, the analysis contained in this paper provides a number of distinct conclusions:

- The Arab countries impose taxes on FDI that are generally higher than those of most other Mediterranean countries. This is due to a reliance on high corporate tax rates, withholding taxes and other taxes on capital goods. Only tax holidays provide a tax incentive that has the potential to attract investment.
- The analysis suggests that the tax holiday system is not working well in attracting FDI. The tax holidays are less successful than targeted, transparent and are smaller incentives that could be provided by Arab countries in attracting FDI.
- A package of lower corporate tax rates (35 per cent) and withholding, property and capital excise taxes would attract investments in most Arab countries more successfully than tax holidays.
- Investment tax allowances or credits could be a simpler and more efficient method for attracting FDI than tax holidays. ■

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Appendix

Taxation of capital in the Mediterranean: a survey

The Mediterranean countries all impose corporate income taxes—the most important form of capital taxation for businesses. Other taxes include property taxes, excise taxes on capital goods, withholding taxes on income paid to non-residents, gross receipt taxes, and, in the case of the oil and gas industry, royalties. The types of taxes imposed by the various countries in the Mediterranean region are listed below (see tables A1 to A9).

Corporate income taxes

Most of the countries in the Mediterranean region impose taxes on the income that accrues to the shareholders of a company. The tax is calculated by multiplying the corporate statutory tax rate by the base, which is the taxable income of the corporation. The base taxable income includes accrued revenues from sales of goods and services, and financial income (primarily interest, rents and sometimes inter-corporate dividends and capital gains), and allows for a deduction of labour costs, material expenditures, indirect taxes and capital expenses. Capital expenses include depreciation of capital, inventory costs and the interest incurred on borrowed money. The amount of corporate tax paid may also be reduced by tax credits that are deducted from the amount of corporate taxes paid.

Generally, to determine capital expenses for tax purposes, the original cost of assets is used without revising asset prices for inflation. In the Mediterranean region, almost none of the countries indexes profits for inflation. The exception is Turkey, which indexes capital values for inflation when determining depreciation expenses. However, Turkey does not require companies to adjust interest expenses for inflation even though the interest costs reflect a payment made to the lender to maintain the purchasing power of the lender's wealth.

Below, each element of the corporate tax is compared across the countries. This appendix contains details of various tax provisions by country and type of industry (manufacturing, services and petroleum).

- *The corporate tax rate.* The most transparent provision of corporate income taxes to investors is the rate of tax. In recent years, governments in many countries have been reducing the rate of tax in order to encourage investments. In the five European Union countries included in this study, the general corporate tax rate (including any surcharges) averages 38 per cent, although most of the countries impose taxes at rates that range between 33.3 per cent (France) and 39.6 per cent (Portugal). Only in Italy is the tax rate above 40 per cent (actually 46.4 per cent).

On the other hand, a majority but not all Arab countries tend to assess corporate income taxes at rates above 40 per cent. These include Egypt (42 per cent except for manufacturing—34 per cent), Jordan (41 per cent), Morocco (41.8 per cent), Oman (50 per cent) and the Syrian Arab Republic (61.4 per cent). The lowest corporate tax rate is in Lebanon (10 per cent) while in other countries tax rates tend to be between 35 per cent and 40 per cent (Algeria, Tunisia and Yemen). Other Mediterranean countries have tax rates that range from as low as 28 per cent (Cyprus) to 42.2 per cent (Turkey).

Petroleum tax rates tend to be higher than the tax rates for other industries for most countries in this study. In Algeria, the corporate tax rate for petroleum companies is as high as 85 per cent (38 per cent for other industries); it is 42.5 per cent in Egypt (42 per cent for other industries), 55 per cent in Oman (50 per cent for other industries) and 40 per cent in Spain (35.3 per cent for other industries). In the Libyan Arab Jamahiriya, companies other than petroleum companies pay a presumptive tax of 15 per cent of gross revenues instead of the regular corporate income tax. However, petroleum companies in the Libyan Arab Jamahiriya are taxed at a rate of 65 per cent on corporate income.

- *Depreciation costs.* Most of the countries in this study allow companies to depreciate capital on a straightline basis (the company deducts the same amount of depreciation year by year until the asset is fully depreciated). In Malta, declining balance depreciation is used for machinery (declining balance methods require assets to be written off at a rate multiplied by the undepreciated cost basis of the assets). Algeria permits companies to use different depreciation schemes, although the most beneficial one seems to be one based on declining balance. No country indexes depreciation costs for inflation except Turkey, which allows firms to increase the cost basis of fixed assets for inflation when determining depreciation deductions.

Generally, rates of depreciation (straightline basis) for buildings range from 1.5 per cent (Tunisia) to as high as 8 per cent (Greece). Depreciation rates for machinery vary widely for each country. On average, we estimate the (straightline) tax depreciation rate for machinery to be as low as 7 per cent (manufacturing in Tunisia) and as high as 25 per cent (in Morocco and Oman). Malta's declining balance rate for depreciation is 25 per cent (approximately equivalent to a straightline depreciation rate of 13 per cent) and Algeria's declining balance rate is 31 per cent (approximately equal to 16 per cent on a straightline basis). Rates in the European Union countries for buildings are between 2 per cent (Portugal) and 8 per cent (Greece), and for machinery between 12 per cent (Spain) and 17 per cent (Portugal).

- *Inventory costs.* Inventory costs may be valued according to either of two principles: "market value" or "cost". "Cost" may be valued according to FIFO (first-in-first-out), LIFO (last-in-first-out), average cost or acquisition costs. When there is inflation, inventory valuation methods provide a signi-
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ficant advantage when the method allows firms to value inventories at prices close to the inventory replacement cost. With either LIFO (the value of the newest inventory) or acquisition cost methods of valuation, the firm is permitted a more favourable deduction compared with average cost or FIFO (the latter uses the cost of the oldest inventory in place).

Most Mediterranean countries require firms to use the lower of cost or market value. The European Union countries permit the use of FIFO (France and Spain) or LIFO (Greece, Portugal and Italy) for cost valuation. In general, all Arab countries require the use of FIFO except Egypt, which permits LIFO. However, most Egyptian firms actually use FIFO or average cost valuation methods.¹⁶ Turkey allows companies to use LIFO, while Cyprus and Malta allow only FIFO to be used.

- *Exploration and development expenses.* In petroleum, companies responsible for exploration and development of reserves of oil and gas incur tangible or intangible expenses on labour and capital. These are either expensed or depreciated. In the countries examined in this study, most exploration and development expenditures are depreciated, including intangibles.
- *Interest expense.* In general, interest expense is deductible.
- *Corporate income tax incentives.* There are significant differences amongst the Mediterranean countries with respect to corporate tax incentives. In general, European Union countries offer on a limited basis accelerated depreciation (Greece) and investment tax credits (Spain provides a credit equal to 5 per cent of investment expenditures in qualifying structures and machinery). The Arab countries provide tax holidays (except the Libyan Arab Jamahiriya) and investment tax allowances or accelerated depreciation (as in Algeria, Egypt and Tunisia). In Cyprus, Malta and Turkey, investment allowances are granted. Cyprus and Malta also provide tax holidays for qualifying companies.

Tax holidays vary from as short a period as 5 years to as long a period as 15 years. They usually begin in the first year of production. Income, at least in the first qualifying years, is exempt from taxation (in later years it may be partially taxed). In many countries, tax holidays can vary by region (Algeria, Egypt, Jordan, Morocco, Oman and Tunisia) and by industry. Often petroleum companies are not eligible for tax holidays or other tax incentives.

There are a few other points to be made with regard to tax holidays. First, countries usually require companies to claim depreciation deductions during the holiday. As discussed in Mintz (1990), this is a significant point since long-lived investments can be penalized by the tax holiday relative to short-

¹⁶ This was confirmed to the authors by the Egyptian authorities.

lived assets. The reason for this is that tax law may require assets to be written off quickly, so that after the holiday the tax depreciation deducted from profits may be far less than the true economic depreciation cost of replacing the asset. Secondly, it is always possible for some companies to close down and then restart, so as to qualify for a new holiday. Thus, holidays could in fact be much longer than those that are legally possible. Thirdly, some countries permit holidays for other taxes besides the corporate income tax. In particular, holiday companies may be exempt from customs duties, property taxes (Algeria, Cyprus, Egypt, Morocco and Tunisia) or excise taxes on business inputs (Cyprus, Jordan and Tunisia).

Property taxes

Property taxes are assessed in many of the Mediterranean countries, although they tend not to yield large amounts of revenue. In some European Union countries, they are levied on property values at a very low rate (Italy, Greece and Portugal). In France, they are based on assessed rental value (the rate of 20 per cent). The Arab countries tend to follow the French method of property taxation by imposing a tax on rental values (Egypt, Jordan, Lebanon, Morocco, Syrian Arab Republic, Tunisia and Yemen). Rates of property tax on rental value vary from 10 per cent in Yemen to 50 per cent in the Syrian Arab Republic. Only Algeria bases its property tax on asset values rather than on rental values (the tax rate is 1 per cent on structures and 5 per cent on land). A property tax at a relatively low rate is found in Cyprus. Other countries do not levy property taxes.

Withholding taxes on income paid to non-residents

Withholding taxes on income remitted to non-residents are commonly found in many countries. With respect to FDI, an important withholding tax is the one imposed on remitted profits (i.e. dividends) of affiliates—the common form of organization chosen by TNCs for investment purposes.

In the European Union countries, withholding taxes on dividends paid to French and United States investors are found in Italy (15 per cent), Spain (10 per cent), France (15 per cent for United States investors) and Portugal (20 per cent). Greece imposes no withholding tax on dividends. In the Arab countries, withholding taxes on dividends are similar, ranging from no withholding in Egypt, Jordan, the Libyan Arab Jamahiriya and Oman to 20 per cent in Algeria. As for other Mediterranean countries, Turkey imposes a 20 per cent withholding tax on dividends; Cyprus imposes a 15 per cent withholding tax on dividends paid to United States investors, but no tax for French investors; and Malta imposes a withholding tax of 35 per cent on dividends paid to United States investors and certain French investors.

Capital gains taxes

Many countries impose taxes on capital gains arising from the sale of property and, to a lesser extent, shares. In the European Union countries, capital gains taxes are levied at rates similar to the corporate income tax rate except for Greece and France, where preferential treatment is offered for capital gains on shares. In the Arab countries, capital gains are usually exempt from taxation (except in the Syrian Arab Republic, Tunisia and Yemen). Capital gains taxes are levied in Turkey, Cyprus and Malta.

Indirect taxes on capital

The two particular indirect taxes considered in this study are gross receipts taxes and excise taxes on capital (including VAT applied to capital goods when no rebate of VAT is given to businesses purchasing taxable capital goods from other firms).

Except for the Libyan Arab Jamahiriya, which uses a gross receipts tax as a presumptive tax on corporations, there are no other gross receipt taxes levied in the Mediterranean region other than a corporate minimum tax on turnover (a gross receipts tax is creditable against the corporate income tax in Morocco).

Excise taxes on capital goods are found in Egypt (both the 10 per cent VAT on machinery and a special 5 per cent excise tax on structures), Cyprus and Jordan. In the European Union countries, VAT is imposed on the sale of capital goods, but businesses can claim a credit for VAT paid on purchases.

Petroleum taxes

In addition to the corporate income tax, many of the oil-rich economies impose special taxes on petroleum companies.¹⁷ The usual tax is a royalty which is based on the value of production. Algeria has the most complex royalty system, which varies by region (with rates ranging from 10 per cent to 20 per cent). Egypt has a royalty of 2 per cent. As discussed above, the remainder of the oil-producing countries tend to rely on special corporate income tax revisions rather than impose royalty tax. ■

¹⁷ There are also petroleum-sharing contracts and other special arrangements that allow governments to derive greater resource revenues from the petroleum industry.

Table A1. Indicators related to capital taxation: manufacturing
(Percentage)

Item	Algeria	Cyprus	Egypt	Greece	Jordan	Lebanon
Corporate income tax	38.0	28.0	34.0	35.0	41.0	10.0
Expected inflation rate	23.8	5.0	17.0	18.6	9.0	12.8
Nominal interest rate	28.5	10.0	22.0	23.6	14.0	17.8
Excise tax	0.0	3	5-Bldg	..	3	..
Gross receipts tax	0.0	..	..	..	..	..
Property tax:						
Buildings	1.0	0.35	32 ^a	0.04	17.0 ^a	27.5 ^a
Land	5.0	0.35	32 ^a	..	17.0 ^a	27.5 ^a
Investment tax	12.0	25.0	..	..	..	..
allowance:						
Machinery	12.0	20.0	25	..	..	..
Tax depreciation						
rate:						
Buildings	2-SL	4-SL	2-SL	8-SL	6-SL	7-SL
Machinery	31-DB	10-SL	15-SL	15-SL	10-SL	11-SL
Dividend with-	France	0.0	0.0	0.0	0.0	5.0
holding tax:	United States	15.0	0.0	0.0	0.0	5.0
Capital gains tax	0.0	20.0	0.0	15.0	0.0	0.0
Inventory valuation	FIFO	FIFO	Cost ^b	Cost ^b	FIFO	FIFO
Tax holidays:						
Case A	3+1+1 ^c	10 yrs	5 yrs	- ^d	5+2yrs ^e	10 yrs
Case B	8 yrs	10 yrs	10 yrs	-	8+2yrs	10 yrs
Case C	10 yrs	10 yrs	15 yrs	-	12yrs	10 yrs
Other taxes exempted	Property	Property/	-	-	Excise	-
		Excise				

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a The Egyptian, Jordanian and Lebanese property taxes are based on the rental value of the asset. However, firms in Egypt can effectively eliminate their property tax on structures by including a prayer room.

^b Greece permits firms to value inventories at cost or market value while Egyptian firms are permitted to value inventories lower than the cost or market value.

^c Case A for Algeria: Firms are offered a three-year tax holiday. In the fourth year, the firm has a 50 per cent reduction in the corporate income tax rate and for the fifth year, the corporate income tax rate is reduced by 25 per cent.

^d Greece offers firms accelerated annual depreciation deductions which range from 20 per cent to 35 per cent and 50 per cent.

^e Firms qualify for five- and eight-year tax holidays. In both cases, firms receive an additional two years where the corporate income tax rate is reduced by 50 per cent.

Table A2. Indicators related to capital taxation: manufacturing
(Percentage)

Item	Libyan Arab Jamahiriya	Malta	Morocco	Oman	Portugal	Spain
Corporate income tax	.. ^a	35	41.8	50	39.6	35.3
Expected inflation rate	8.1	2.4	6.6	4.1	7.9	6.2
Nominal interest rate	13.1	7.4	11.6	9.1	12.9	11.2
Excise tax	0	0	0	0	0	0
Gross receipts tax	15	0	0.5	0	0	0
Property tax:						
Buildings	0	0	13.5 ^b	0	1.0	0
Land	0	0	13.5 ^b	0	1.0	0
Investment tax						
Buildings	0	15	0	0	0	5 ITC
allowance:						
Machinery	0	30	0	0	0	5 ITC
Tax depreciation						
rate:						
Buildings	..	4-SL	5-SL	4-SL	5-SL	3-SL
Machinery	..	25-DB	10-SL	25-SL	19-SL	12-SL
Dividend with-						
holding tax:						
France	0	15/35	15	0	20	10
United States	0	35	15	0	20	10
Capital gains tax	0	35	0.0	0	39.6	35
Inventory valuation	..	FIFO	FIFO	FIFO	Cost ^c	FIFO
Tax holidays:						
Case A	..	10 yrs	.. ^d	5 yrs	..	..
Case B	..	10 yrs	5 yrs	10 yrs	..	..
Case C	..	10 yrs	5+5 yr ^e	..	..	..
Other taxes exempted	..	..	Property	..	..	..

Source: International Bureau of Fiscal Documentation (Ernst & Young).

Note: Spain offers investment tax credits (ITC) rather than investment tax allowances.

^a The Libyan Arab Jamahiriya does not apply a tax on corporate profits. Enterprises are subject to a 15 per cent tax on gross receipts.

^b Based on the rental value of the asset.

^c Firms are permitted to value inventories according to their cost of acquisition or cost of production.

^d Firms that qualify for Case A incentives do not qualify for tax holidays but do qualify for reductions of import duties based on the percentage of sales exported.

^e Firms qualify for a five-year tax holiday followed by an additional five years where the corporate income tax rate is reduced by 50 per cent.

Table A3. Indicators related to capital taxation: manufacturing
(Percentage)

Item	Syrian Arab Republic	France	Italy	Tunisia	Turkey	Yemen
Corporate income tax	61.4	33.3	46.4	35	42.2	36
Expected inflation rate	12.8	3.3	6.1	6.8	65.8	5.7
Nominal interest rate	17.8	8.3	11.1	11.8	70.8	10.7
Excise tax	0	0	0	0	0	0
Gross receipts tax	0	0	0	0	0	0
Property tax: Buildings	50 ^a	20 ^a	0.75	27.5 ^a	0	10 ^b
Land	50 ^a	20 ^a	0.75	27.5 ^a	0	10 ^b
Investment tax allowance: Buildings	0	0	0	100	45	0
Machinery	0	0	0	100 ^c	45	0
Tax depreciation rate: Buildings	2-SL	5-SL	3-SL	1.5-SL	6-SL	2-SL)
Machinery	10-SL	15-SL	15-SL	7-SL	25-SL	10-SL
					(Indexed)	
Dividend withholding tax: France	15	0	15	14	20.0	10.0
United States	15	15	15	14	20.0	10.0
Capital gains tax	61.4	18	46.4	10	42.2	36
Inventory valuation	FIFO	FIPO	LIFO	FIFO	LIFO	FIFO
Tax holidays: Case A	5 yrs	..	..	3 yrs	..	5 yrs
Case B	5 yrs	..	..	7 yrs	..	10 yrs
				(5 CIT)		
Case C	5 yrs	..	..	10 yrs	..	..
				(5 CIT)		
Other taxes exempted	..	..	..	All	..	..

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a Based on the rental value of the asset.

^b Yemen levies a 2.5 per cent tax on working capital.

^c Firms are allowed to write off 100 per cent of the acquisition cost of the asset up to 50 per cent of profits. This incentive applies to those firms that are investing, expanding or relocating.

Table A4. Indicators related to capital taxation: services
(Percentage)

Item	Algeria	Cyprus	Egypt	Greece	Jordan	Lebanon
Corporate income tax	38.0	28.0	42.0	35.0	41.0	10.0
Expected inflation rate	23.8	5.0	17.0	18.6	9.0	12.8
Nominal interest rate	28.5	10.0	22.0	23.6	14.0	17.8
Excise tax	0.0	3	10	0	3	0
Gross receipts tax	0.0	0	0	0	0	0
Property tax:						
Buildings	1.0	0.35	32 ^a	.04	17.0 ^a	27.5 ^a
Land	5.0	0.35	32 ^a	0	17.0 ^a	27.5 ^a
Investment tax allowance:						
Buildings	12	25	0	0	0	0
Machinery	12	20	25	0	0	0
Tax depreciation rate:						
Buildings	2-SL	4-SL	2-SL	8-SL	6-SL	5-SL
Machinery	31-DB	12-SL	15-SL	15-SL	10-SL	13-SL
Dividend withholding tax:						
France	20.0	0.0	0.0	0.0	0.0	5.0
United States	20.0	15.0	0.0	0.0	0.0	5.0
Capital gains tax	0.0	20.0	0.0	15.0	0.0	0.0
Inventory valuation	FIFO	FIFO	Cost ^b	Cost ^b	FIFO	FIFO
Tax holidays:						
Case A	3+1+1 ^c	10 yrs	5 yrs	..	5+2 yrs ^d	10 yrs
Case B	8 yrs	10 yrs	10 yrs	..	8+2 yrs	10 yrs
Case C	10 yrs	10 yrs	15 yrs	..	12 yrs	10 yrs
Other taxes exempted	Property	Property/ Excise	Property	..	Excise	..

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a The Egyptian, Jordanian and Lebanese property taxes are based on the rental value of the asset. However, firms in Egypt can effectively eliminate the rental tax on structures by including a prayer room.

^b Greece and Egypt permit firms to value inventories lower than the cost or market value.

^c Case A incentives offer a three-year tax holiday. For the fourth year, the firm has a 50 per cent reduction in the corporate income tax rate and for the fifth year, the corporate income tax rate is reduced by 25 per cent.

^d Firms qualify for five- and eight-year tax holidays. In both cases, firms receive an additional two years where the corporate income tax rate is reduced by 50 per cent.

Table A5. Indicators related to capital taxation: services
(Percentage)

Item	Libyan Arab Jamahiriya	Malta	Morocco	Oman	Portugal	Spain
Corporate income tax	.. ^a	35	41.8	50	39.6	35.3
Expected inflation rate	8.1	2.4	6.6	4.1	7.9	6.2
Nominal interest rate	13.1	7.4	11.6	9.1	12.9	11.2
Excise tax	0	0	0	0	0	0
Gross receipts tax	15	0	0.5	0	0	0
Property tax: Buildings	0	0	13.5 ^b	0	1.0	0
Land	0	0	13.5 ^b	0	1.0	0
Investment tax allowance: Buildings	0	15	0	0	0	5 ITC
Machinery	0	30	0	0	0	5 ITC
Tax depreciation rate: Buildings	..	4-SL	4-SL	4-SL	2-SL	2-SL
Machinery	..	25-DB	25-SL	25-SL	17-SL	12-SL
Dividend withholding tax: France	0	15.0/35.0	15.0	0	20.0	10.0
United States	0	35.0	15.0	0	20.0	10.0
Capital gains tax	0	35.0	0	0	39.6	35.0
Inventory valuation	FIFO	FIFO	FIFO	FIFO	Cost ^c	FIFO
Tax holidays: Case A	..	10 yrs	5(50) yrs ^d	5 yrs	..	..
Case B	..	10 yrs	5(50) yrs	10 yrs	..	..
Case C	..	10 yrs	5+5 yrs ^e	..	..	..
Other taxes exempted	..	..	Property	..	..	..

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a The Libyan Arab Jamahiriya does not apply a tax on corporate profits. Enterprises are subject to a 15 per cent tax on gross receipts.

^b Based on the rental value of the asset.

^c Firms are permitted to value inventories according to their cost of acquisition or cost of production.

^d Firms qualifying for Case A and Case B incentives receive a five-year tax holiday where the corporate income tax rate is reduced by 50 per cent.

^e Firms qualify for a five-year tax holiday followed by an additional five years where the corporate income tax rate is reduced by 50 per cent.

Table A6. Indicators related to capital taxation: services
(Percentage)

Item	Syrian Arab Republic	France	Italy	Tunisia	Turkey	Yemen
Corporate income tax	61.4	33.3	46.4	35	42.2	36
Expected inflation rate	12.8	3.3	6.1	6.8	65.8	5.7
Nominal interest rate	17.8	8.3	11.1	11.8	70.8	10.7
Excise tax	0	0	0	0	0	0
Gross receipts tax	0	0	0	0	0	0
Property tax: Buildings	50 ^a	20 ^a	0.75	27.5 ^a	0	10 ^b
Land	50 ^a	20 ^a	0.75	27.5 ^a	0	10 ^a
Investment tax allowance: Buildings	0	0	0	0	45	0
Machinery	0	0	0	0	45	0
Tax depreciation rate: Buildings	2-SL	5-SL	3-SL	2-SL	6-SL	2-SL
Machinery	10-SL	15-SL	15-SL	11-SL	25-SL	10-SL
					(Indexed)	
Dividend withholding tax: France	15	0	15	14	20.0	10.0
United States	15	15	15	14	20.0	10.0
Capital gains tax	61.4	18	46.4	10	42.2	36
Inventory valuation	FIFO	FIFO	LIFO	FIFO	LIFO	FIFO
Tax holidays: Zone 1	5 yrs	..	..	3 yrs	..	5 yrs
Zone 2	5 yrs	..	..	8 yrs (10 CIT)	..	10 yrs
Zone 3	5 yrs	..	..	10 yrs	..	..
Other taxes exempted	..	..	..	All	..	..

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a Based on the rental value of the asset.

^b Yemen levies a 2.5 per cent tax on working capital.

Table A7. Indicators related to capital taxation: petroleum
(Percentage)

Item	Algeria	Egypt	Greece	Libyan Arab Jamahiriya	Oman
Corporate income tax	42/65/75/85	42.55	35	65	55.0
Expected inflation rate	23.8	17.0	18.6	8.1	4.1
Nominal interest rate	28.5	22.0	23.6	13.1	9.1
Royalties	10/12.5/16.25/20	2	0	0	0
Excise tax	0	10	0	0	0
Gross receipts tax	0	0	0	15	0
Property tax: Buildings	1.0	32 ^a	0.04	0 ^a	0 ^a
Land	5.0	32 ^a	0	0 ^a	0 ^a
Investment tax allowance: Buildings	12	0	0	0	0
Machinery	12	25	0	0	0
Tax depreciation rate: Buildings	2-SL	2-SL	8-SL	5-SL	4-SL
Machinery	31-DB	15-SL	15-SL	20-SL	25-SL
Exploration & Development	15-SL	25-SL	15-SL	15-SL	15-SL
Dividend with-holding tax: France	20.0	0	0	0	0
United States	20.0	0	0	0	0
Capital gains tax	0	0	15.0	0	0
Inventory valuation	FIFO	Cost ^b	Cost ^b	FIFO	FIFO

Source: International Bureau of Fiscal Documentation (Ernst & Young).

^a The Egyptian, Jordanian and Lebanese property taxes are based on the rental value of the asset.

^b Greece and Egypt permit firms to value inventories lower than the cost or market value.

Table A8. Indicators related to capital taxation: petroleum
(Percentage)

Item	Spain	Syrian Arab Republic	Tunisia	Turkey	Yemen
Corporate income tax	40	61.4	35	42.2	36
Expected inflation rate	6.2	12.8	6.8	65.8	5.7
Nominal interest rate	11.2	17.8	11.8	70.8	10.7
Royalty	0	0	0	0	0
Excise tax	0	0	0	0	0
Gross receipts tax	0	0	0	0	0
Property tax: Buildings	0	50 ^a	27.5 ^a	0	10 ^{a, b}
Land	0	50 ^a	27.5 ^a	0	10 ^a
Investment tax allowance: Buildings	5-TC	0	0	45	0
Machinery	5-TC	0	0	45	0
Tax depreciation rate: Buildings	3-SL	2-SL	1.5-SL	6-SL	2-SL (Indexed)
Machinery	12-SL	10-SL	7-SL	25-SL (Indexed)	10-SL
Exploration & Development	25-SL	15-SL	15-SL	15-SL (Indexed)	15-SL
Dividend with-holding tax: France	10	15	14	20.0	10.0
United States	10	15	14	20.0	10.0
Capital gains tax	35	61.4	10	42.2	36
Inventory valuation	FIFO	FIFO	FIFO	LIFO	FIFO

Source: International Bureau of Fiscal Documentation (Ernst & Young).

NOTE: Spain offers investment tax credits (ITC) rather than investment tax allowances.

^a Based on the rental value of the asset.

^b Yemen levies a 2.5 per cent tax on working capital.

Table A9. Indicators related to capital taxation: petroleum
(Percentage)

Item	France	Italy
Corporate income tax	33.3	46.4
Expected inflation rate	3.3	6.1
Nominal interest rate	8.3	11.1
Royalty	0	0
Excise tax	0	0
Gross receipts tax	0	0
Property tax: Buildings	20-Rental value	0.75
Land	20-Rental value	0.75
Investment tax allowance: Buildings	0	0
Machinery	0	0
Tax depreciation rate: Buildings	5-SL	3-SL
Machinery	15-SL	15-SL
Exploration & Development	15-SL	15-SL
Dividend withholding tax: France	0	15
United States	15	15
Capital gains tax 35	18	46.4
Inventory valuation	FIFO	FIFO

Source: International Bureau of Fiscal Documentation (Ernst & Young).