INTERNATIONAL INEQUALITIES, ECONOMIC STRUCTURE AND DEVELOPMENT OF SOUTHERN MEDITERRANEAN COUNTRIES

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Abstract

This paper will first examine international inequalities and the increase in such inequalities over time between the developing countries of the southern Mediterranean and the industrial and developed countries of the North. Then, the paper will examine the economic structure of the economies of the southern mediterranean countries and the change in their structure over time as they move along the path of economic development. Finally, the paper will identify and provide data on the endogenous and the exogenous factors that contributed to the growth and development of southern mediterranean countries over the past decade and a half.

Résumé

Ce travail commence par examiner les inégalités internationales et leur accroissement au fil du temps entre les pays en développement de la rive sud de la Méditerranée et les pays industriels et développés du Nord. Successivement, ce travail analysera la structure économique des économies des pays méditerranéens de la rive sud et sa variation dans le temps au fur et à mesure que ces pays avancent dans leur chemin vers le développement, Enfin, il présentera des données sur les facteurs endogènes et exogènes qui ont contribué à la croissance et au développement des pays de la rive sud de la Méditerranée dans ces quinze dernières années.

The problem of increasing international inequalities in per capita incomes and living standards between developed and developing countries is one of the most serious concerns in the world today. Indeed, it would not be an exaggeration to say that there is no other single problem that raises more immediate concern than the vast and increasing inequalities between the rich and the poor countries of the world today. The reason is that in today's interrelated global economy, we can hardly expect the world to be peaceful and safe when millions of people live in dismal poverty at the same time that the people in a few rich countries thrive on abundance and consume a disproportionate share of world resources. Furthermore, the knowledge that millions of people live in dismal poverty in the poorest developing countries cannot but deeply affect the sensitivities of all people in developed and rich countries. Thus, there are both selfish and ethical reasons for being greatly concerned about wide and growing inequalities in the world today. Although the countries of the southern Mediterranean are generally better off than the average developing country, their income per capita and standard of living are much lower than in the developed countries of the northern Mediterranean and of the European Union, and the inequalities between the countries on both shores of the Mediterranean are growing. Being so close geographically and so economically interdependent, the countries of the northern Mediterranean and of the European Union have a deep interest in the growth and development of the southern mediterranean countries, and this conference is only one evidence of such deep interest. In this paper, I will first provide data on international inequalities and on the increase in such inequalities over time between the developing countries of the southern Mediterranean and the industrial and developed countries of the North. Then, I will examine the economic structure of the economies of the southern mediterranean countries and the change in their structure over time as they move along the path of economic development. Finally, I will examine the endogenous and the exogenous factors that contributed to the growth and development of southern mediterranean countries over the past decade and a half.

International inequalities between Southern Mediterranean and Developed Countries

Table 1 shows the inequality in per capita income and in other measures of the standard of living between the countries of the southern Mediterranean, on the one hand, and all developing and developed countries, on the other, for the year 1992, as well as the changes from 1980 to 1992. The data for the year 1992 were the latest available when this paper was prepared, but preliminary data for 1993 and 1994 do not seem not very different. The nations of the southern Mediterranean included in **table 1** are: Morocco, Algeria, Tunisia, Libya, Egypt, Lebanon, Jordan, Syria, Turkey, Albania, Cyprus, and Malta. Of course, the average data for these countries hides major differences among them, but the data are nevertheless useful in comparing these countries with all developing countries and developed countries. Individual country data are presented in subsequent tables.

Inequalities in per capita incomes

Before examining inequalities in per capita incomes, it is useful to get an idea of the relative size of the countries of the southern Mediterranean in relation to all developing and developed countries. Column (1) of **table 1** shows that the population of the 12 southern mediterranean countries was 205 million, which was 4 percent of the population of 4,610 million for all developing countries and 25 percent of the population of 828 million for all developed countries. Column (2) of **table 1** shows the average GNP per capita in U.S. dollars in 1992 for each group of countries. It shows that the average per capita income of the 12 southern mediterranean countries was \$2,752, which represented 265 percent of the average income of \$1,040 for all developing countries but only 12 percent of the average income of \$22,160 for all developed countries. In other words, the average per capita income of the southern Mediterranean countries was 2.65 higher than the average income per capita for all developing countries but 8 times *less* than the average income of developed countries. Col-

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Table 1 ***Inequality measures 1992.***

	(1) Population (millions)	(2) GNP per capita (U.S.$)	(3) % Growth in per capita GNP (1980-1992)	(4) PPPGNP per capita (U.S.$)	(5) Life expectancy (years)	(6) Adult literacy (% of pop.)	(7) Human development index
Mediterranean Developing Countries*	205	2,752	1.7	5,876	68	73	0.745
All Developing Countries	4,610	1,040	0.9	3,249	64	67	0.557
Developed Countries	828	22,160	2.2	22,554	77	100	0.929
Mediterranean Countries as a % of:							
Developing Countries	4	265	189	181	106	109	134
Developed Countries	25	12	77	26	88	73	80

*Includes:Albania, Algeria, Cyprus, Egypt, Jordan, Lebanon, Libya, Malta, Morocco, Syria, Tunisia,Turkey.
Source: Elaborated from World Bank and United Nations Data.

umn (3) of **table 1** shows the average percentage growth in real (i.e., inflation-adjusted) per capita income for each group of countries from 1980 to 1992. The figure was 1.7 percent for the 12 southern Mediterranean countries, as compared with 0.9 percent for all developing countries, and 2.2 percent for all developed countries. To get some sense of the importance of these different growth rates, we can point out that at the average rate of growth indicated in **table 1**, it would take about 42 years for the real per capita income to double in the 12 southern Mediterranean countries, 80 years for all developing countries as a group, and about 32 years for developed countries. Thus, with the growth rate in real per capita income higher in developed than in the 12 southern Mediterranean countries, the difference in average per capita income between the two groups of countries increased over the period 1980 to 1992, both absolutely and relatively. Indeed, it was practically impossible for the *absolute* differences in per capita incomes not to increase between the two groups of countries. Specifically, since the average real per capita income in the 12 southern Mediterranean countries was 8 times lower than in developed countries, the average growth in real per capita income in the former would have had to be 8 times greater than the average growth rate in developed countries for the absolute differences in per capita incomes between the two groups of countries to remain the same. Since the average growth rate was 2.2 percent in developed countries, the average annual growth rate in the 12 southern Mediterranean countries would have had to be 17.6 percent (8.8 times 2.2) for absolute difference in real per capita income between the two groups of countries to remain the same. These growth rates are unheard of and practically impossible to achieve by any country over a sustained period of time. The most rapidly growing countries over the past decade (S. Korea and Taiwan) averaged annual growth rates in real per capita incomes only about half those required rate for southern Mediterranean countries to keep absolute differences in real per capita income constant between them and the developed countries. Thus, it was practically impossible for differences in income inequalities between the countries on both shores of the Mediterranean not to increase. This, of course, does not mean that the countries of the southern Mediterranean are getting poorer. Their real per capita incomes are growing, but not as fast as those of developed countries, and so their differences are growing. Unrealistically raising hopes of reducing these differences would only lead to frustration later on. The truth, no matter how painful, is always better in the long run.

PPP per capita income inequalities

Column (4) of **table 1** shows the so-called PPP GNP per capita. PPP refers to the purchasing-power-parity. PPP per capita income is a more appropriate measure of real per capita income because it uses estimates of equilibrium exchange rates or the purchasing power of the various currencies to express the real per capita income of all countries in terms of U.S. dollars (so as to make international comparisons possible). Since many developing countries usually kept their currencies undervalued, the uncorrected measure of real per capita incomes exaggerated the differences between developed and developing countries. For example, if the actual exchange rate between the Egyptian dollar and the U.S. dollar is 3.3 Egyptian dollars for one U.S. dollar, a per capita income of 1,980 Egyptian pounds would equal 606 U.S. dollars. But if the equilibrium exchange rate were 2 Egyptian pounds for one U.S. dollar, then the same per capita income of 1,980 Egyptian pounds would refer instead to 990 U.S. dollars. Developing countries usually kept their currencies undervalued in order to encourage exports and discourage imports, but this exaggerated the difference in their real per capita incomes vis-à-vis the real per capita income of developed countries. Column (4) of **table 1** shows that the average PPP reil per capita income of the 12 southern Mediterranean developing countries was $5,876, or almost twice the average PPP per capita income for all developing countries and 26 percent (about one-fourth) of the PPP per capita income of developed countries. Thus, using the PPP measure of per capita income cuts in half (i.e., from 8 times to 4 times) the difference in average real per capita income between developed and the 12 southern Mediterranean developing countries. But there are other reasons why even this fourfold difference exaggerates actual differences. The reason is that only the goods and services that are actually sold in the market are counted as part of the Gross National Product (GNP) of the country. But in developing countries a great deal of what is produced is in fact consumed on the farm and not sold in the market. As a result, the GNP and the per capita GNP of developing nations are underestimated, and this underestimation is larger the less developed the country. In developed countries, on the other hand, most of what is produced is actually sold in the market and so the level of underestimation is much less than in developing countries. This adjustment in per capita incomes, however, is extremely difficult to make and is not reflected in the data shown in **table 1**.

Inequalities in life expectancy and adult literacy, and the human development index

Another measure of inequality between developed and developing countries is the difference in life expectancy and adult literacy. These are important because they capture an important dimension of socio-economic development of a nation that are not captured by real per capita income - even PPP per capita income. Column (5) of **table 1** shows that the average life expectancy at birth is 68 years in the 12 southern Mediterranean developing countries, as compared with 64 years for all developing countries, and 77 years for all developed countries. Thus, average life expectancy in southern Mediterranean countries is 88 percent of the life expectancy in developed countries, so that the difference between them is only about 12 percent according to this measure. The same is generally true for the difference in adult literacy. Column (6) in **table 1** shows that average adult literacy is 73 percent in the 12 southern Mediterranean developing countries, as compared with 67 years for all developing countries, and 77 years for all developed countries. Thus, average adult literacy in southern Mediterranean countries is 73 percent of the average adult literacy in developed countries, making the difference between them only 27 percent.
The United Nations has now combined the PPP income per capita, life expectancy, and adult literacy into a so-called Human Development Index, which can range in value from 0 to 1. This is given in the last column of **table 1**. Column (7) shows that the average Human Development Index was 0.745 for southern Mediterranean developing countries, 0.557 for all developing countries, and 0.929 for all developed countries. Thus, the average Human Development Index (HDI) for the 12 southern Mediterranean countries was 134 percent the HDI for all developing countries and 80 percent of the HDI for all developed countries. Thus, there is huge discrepancy between the 400 percent difference in PPP per capita incomes between southern Mediterranean countries and developed countries and the 20 percent difference according to the HDI measure. Actual differences in standards of living between southern Mediterranean countries and developed countries and likely to be between these two measures, but more precise measurement has thus far eluded development economists.

Economic structure and its change in Southern Mediterranean Countries

Since the level of economic development of a nation depends in a very crucial way on the economic structure of the nation and its change over time, we now turn to an analysis of this topic.

Economic structure in Southern Mediterranean Countries

Table 2 presents an overview of the economic structure of the seven southern Mediterranean countries (Algeria, Egypt, Morocco, Tunisia, Albania, Jordan, and Turkey) for which data were available. No data on economic structure were available for Libya, Lebanon, Jordan, Syria, Cyprus, and Malta. First, however, it is useful to examine the economic size of each country, as measured by the level of Gross Domestic Product (GDP) in the years 1980 and 1994. Column (1) of **table 2** shows that the GDP of Algeria was $42.3 billion in 1980 and $41.9 billion in 1994. Algeria was the only country for which GDP declined from 1980 to 1994. This was due to the decline in petroleum and energy prices and the political turmoil in the nation. The GDP in billion of U.S. dollars in 1980 and 1994 were, respectively, 22.9 billion and 42.9 for Egypt, 18.8 and 30.8 for Morocco, 8.7 and 15.8 for Tunisia, 1.6 and 1.8 for Albania, and 56.9 and 131.1 for Turkey. The GDP of Jordan was $6.1 billion in 1994 but was not available for the year 1980. To get an idea of the relative size of these countries, we can compare the GDP of these nations with those of other nations: $90 billion for Portugal, $480 billion for Spain, about $1,000 billion for Italy and the United Kingdom, $1,300 billion for France, about $2,000 billion for Germany, $4,500 for Japan, and $6,600 for the United States. Column (2) of **table 2** shows that the percentage of total production from agriculture in 1980 and 1994 were, respectively, 10 and 12 for Algeria, 18 and 20 for Egypt, 18 and 21 for Morocco, 18 and 15 for Tunisia, 28 and 55 for Albania, and 23 and 16 for Turkey. For Jordan it was 8 percent in 1994 but no data were available for 1980. Thus, only for Tunisia and Turkey did the percentage of GDP originating in agriculture decline from 1980 and 1994.

Table 2 ***Structure of production in Mediterranean Developing Countries in 1980 and 1994 (percentage of total production, except for real GDP).***

	(1) Real GDP (billion $)		(2) Agriculture		(3) Industry		(4) Manufacturing)		(5) Services	
	1980	1994	1980	1994	1980	1994	1980	1994	1980	1994
North Africa:										
Algeria	42.3	41.9	10	12*	54	44	9	11*	36	44*
Egypt	22.9	42.9*	18	20*	37	21	12	15*	45	59*
Morocco	18.8	30.8*	18	21*	31	30	17	17	51	49
Tunisia	8.7	15.8*	18	15	36	32	14	20*	48	53*
Other:										
Albania	1.6	1.8*	28	55*	37	22	...	...	35	23
Jordan	...	6.1	...	8	...	27	...	14	...	65
Turkey	56.9	131.1*	23	16	30	31	21	20	47	52*

* Refer to an increase in 1994 with respect to 1980.
Source: World Bank.

Particularly striking was the increase in the percentage of GDP originating in agriculture in Albania between 1980 and 1994. Striking is also the difference between the performance of agriculture and industry. The data in column (3) of **table 2** show that the percentage of GDP originating in industry declined in all countries, except Turkey (with no data were available for Jordan) between 1980 and 1994. The reason for this sharp difference in the performance of agriculture and industry was the restructuring along market lines that took place in these economies between 1980 and 1994. Specifically, the nations of the southern Mediterranean, following the general trend in most developing nations in the world during the past two decades, reduced the subsidies and protectionism that they had provided to their industries during the decades of the 1960s and 1970s and removed their bias against agriculture. As a result, the structure of these nations changed and began to reflect more closely their natural comparative advantage. This does not mean that developing nations are relegated to be primarily producers of agricultural commodities (after all, in none of these country, except Albania, did agriculture account for more than 21 percent of GDP). What it does mean is that many of the grossly inefficient industries that had been previously created and supported by heavy protection and subsidies were allowed to be phased out, while many agricultural activities that had previously been neglected and discouraged were now allowed to expand along the lines of comparative advantage of the nation. Column (4) shows that the percentage of GDP originating in manufacturing, as a subcategory of industry (which includes also construction and mining) expanded, respectively, from 1980 to 1994 from 9 to 11 for Algeria, from 12 to 15 for Egypt, and from 14 to 20 for Tunisia. It remained the same at 17 percent for Morocco and declined only slightly from 21 percent to 20 percent in Turkey. The percentage of GDP originating in manufacturing was 14 in Jordan in 1994 (no data were available for 1980). To be noted is that manufacturing is the most dynamic sector of industry and manufacturing production now takes place, much more than in the past, along market lines and with much less protection and subsidies than in the past in most developing countries, including southern Mediterranean countries. Finally, column (5) of **table 2** shows that the proportion of GDP originating in the service sector increased, respectively from 1980 to 1994 from 36 to 44 in Algeria, from 45 to 59 in Egypt, from 48 to 53 in Tunisia, and from 47 to 52 in Turkey. It declined only in Morocco (from 51 to 49) and Albania (from 35 to 23). For Jordan, services represented 65 percent of GDP in 1994 (and no data were available for 1980). To be noted is that the high proportion of GDP originating in the service sector in the economies of the southern Mediterranean is a reflection of the higher level of development in these countries relative to all developing countries. After all, modern economies are often called service economies because of the large and increasing proportion of GDP originating in this sector.

Growth of structural output in Southern Mediterranean Countries

Table 3 shows the average growth of real GDP and sectoral outputs during the 1980-1990 period as compared with the 1990-1994 period. Column (1) shows that the average annual percentage growth rate during the decade of the 1980s and during the 1990-1994 period were, respectively, 2.9 and -0.6 for Algeria, 5.0 and 1.1 for Egypt, 4.2 and 1.7 for Morocco, 3.3 and 4.5 for Tunisia, 1.5 and -4.2 for Albania, -1.5 and 8.2 for Tunisia, and 4.6 and 3.2 for Turkey. Thus, the growth of real GDP was smaller during the more recent period than during the decade of the 1980s for all countries, except for Tunisia and Jordan. This is due to the recession and much slower growth in the European Union, which is by far the major trade partner of the countries of the southern Mediterranean, during the 1990s than during the 1980s. Note that during the 1990-1994 period the growth of GDP was negative in Algeria and Albania. The former because of the low price of its energy exports and political turmoil. The latter because of the sharp restructuring resulting from the recent collapse of the communist regime. As the rest of **table 3** shows, however, not every sector was affected equally.

Column (2) of **table 3** shows that the average annual growth rate agricultural output in the two time periods were, respectively, 4.5 and -0.2 in Algeria, 1.5 and 1.8 in Egypt, 6.7 and -1.5 in Morocco, 2.8 and 0.5 in Tunisia, 2.4 and 6.4 in Albania, 13.2 and 10.2 in Jordan, and 4.4 and 0.8 in Turkey. To be noted is the negative growth rate in the more recent period for Algeria and Morocco and the very high growth rates in Jordan and Albania. Column (3) and (4) show, respectively, the growth of industrial and service output during the

Table 3 ***Growth of sectoral output in Mediterranean Developing Countries, 1980-1990 and 1990-1994 (average annual percentage growth rate).***

	(1) Real GDP		(2) Agriculture		(3) Industry		(4) Services	
	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94
North Africa:								
Algeria	2.9	-0.6	4.5	-0.2	1.7	-0.8	3.3	-0.6
Egypt	5.0	1.1	1.5	1.8*	2.6	0.1	7.5	1.2
Morocco	4.2	1.7	6.7	-1.5	3.0	0.3	4.2	3.4
Tunisia	3.3	4.5*	2.8	0.5	3.1	4.0*	3.5	5.9*
Other:								
Albania	1.5	-4.2	2.4	6.4*	3.2	21.8	-2.4	4.3*
Jordan	-1.5	8.2*	13.2	10.2	-1.3	7.9*	-7.3	7.9*
Turkey	5.6	3.2	4.4	0.8	6.4	4.3	-5.5	3.3*

* Refers to an increase in 1990-1994 with respect to 1980-1990.
Source: World Bank.

two periods. The highlight for the most recent period for the industrial sector is the large negative growth rate for Albania and the large positive growth rate for Jordan, and in the service sector the large growth rates in all countries, with the exception of Algeria (where the growth rate was negative) and Egypt (where growth was positive but very low). Three conclusions can be reached from the data in **table 3**. First, Algeria is the only country which experienced negative growth in real GDP and in each sector in the more recent period. Second, in general (but with some exception), the economic performance in the 1990-1994 period was worse than that for the 1980-1990 decade in the countries of the southern Mediterranean primarily because of the economic difficulties faced by the European Union during this period. Third, the service sector generally fared better than agriculture and much better than industry in the countries of the southern Mediterranean since 1980.

Endogenous and exogenous factors in the growth of Southern Mediterranean Countries

We now identify the endogenous and exogenous factors that are believed to affect growth in developing countries in general and the effect of each of these factors on the growth and development of southern Mediterranean countries during the past decade and a half.

Endogenous and exogenous factors in economic development

Although we do not have an acceptable theory of economic development, we do know the general factors that affect development. These can be separated into endogenous factors (i.e., those arising from within the nation) and exogenous factors (those arising from outside the nation). Let us identify and examine each of these factors, starting with the endogenous factors.

Perhaps, the most important endogenous factor positively affecting the growth and development of a nation is the level of investment. As it is well known, the more capital and equipment a worker has to work with the more productive the worker generally is and the higher is his or her remuneration. Investments are also required to provide infrastructures (such as telecommunications and transportation) which are essential for high and increasing productivity and income over time in the nation. The problem is that in order to provide investments the nation must save and this is difficult to do when the nation is poor. Thus, a poor nation can find itself into a vicious circle of poverty. That is, the nation saves little because it is poor; low savings result in low investments; low investments result in low productivity, and low productivity leads to low incomes. Although the nations of the southern Mediterranean are generally better off than the average developing country, they still face a serious savings and investment constraint.

A second endogenous factor that is expected to be strongly and positively associated with growth over time is social service expenditures. These refer to expenditures for education, health, and training. In general, the higher the proportion of GDP that a nation spends on education, health and training, the more productive its workers will be and the higher the nation's per capita income and standard of living. A third endogenous factor that can strongly affect the growth and development of the nation is population growth. Although some economists believe that a high rate of population growth can stimulate development, the majority believes this not to be the case. The reason is that each percentage point increase in the rate of population growth will require an increase in the rate of savings and investment of about 4 percentage points to provide the growing labor force with the same capital equipment and training as the rest of the labor force. But as we have seen, the rate of investment in most developing countries is highly constrained by inadequate savings. With a lower rate of population growth, more of the nation's savings can go to increase the capital-labor ratio and to provide more and better infrastructures, both of which lead to an increase in labor productivity and incomes over time. Finally, another important endogenous factors that strongly but *negatively* affects the rate of growth of a nation is the rate of inflation. Experience indicates that an inflation rate of 1 to 2 percent per year has a stimulating effect of growth, but an inflation rate much higher than that introduce great distortions in the economy and can operate as a strong hinderance to growth in the nation.

Among the most important exogenous factors affecting a nation's growth rate are the growth of the nation's exports, the change in its terms of trade, and the inflow of foreign direct investments. The growth of exports can operate as a strong stimulus to growth and all the Asian tigers (S. Korea, Taiwan, Hong Kong, and Singapore) have relied on fast growing exports during the past four decades to stimulate rapid domestic growth. The nation's terms of trade are also very important. The terms of trade of a nation refer to the ratio of the index of its export prices to the index of its import prices. An increase in a nation's terms of trade means that the nation must give less of its exports for each unit of its imports. It is equivalent to the nation receiving a higher price for its exports for given prices for its imports, and this will positively affect growth. Of course, a reduction in the nation's terms of trade will adversely affect its growth. Finally, a developing countries growth can also be strongly affected by inflows of foreign direct investments. These are important not only because they help overcome the savings and investment shortage in the developing nation, but also, and perhaps more importantly, because foreign direct investments embody new and more productivity technologies, which are very important for growth.

The most important factors affecting growth in Southern Mediterranean Countries

Table 4A includes the most important endogenous and exogenous factors that have been closely associated with the growth of southern Mediterranean countries during the past decade and a half. These are the growth of investment and exports (positively affecting the growth of the country) and the rate of inflation (negatively affecting growth). For ease of reference, column (1) of **table 4A** is repeated as column (1) of **table 3** and shows the growth of real GDP during the 1980-1990 and the 1990-1994 periods in the seven southern Mediterranean countries for which data were available. As column (1) shows, the rate of growth of all countries, with the exception of Tunisia and Jordan, was lower in the 1990-1994 period than in the earlier period (and the rate of growth of Algeria and Albania was in fact negative). According to theory we would expect this lower growth during the more recent period to be the result of a lower growth rate of investments and exports, and increased inflation rate. This is clearly the case for Algeria.

That is, the growth rate of real GDP of Algeria was negative during the more recent period and this is consistent with negative investments, reduced exports, and increased rate of inflation.

For Egypt, the reduced growth rate of real GDP in the more recent period is associated with reduced exports and increased inflation (but a constant rate of investment growth relative to the 1980-1990 period). For Morocco, the reduced growth rate of real GDP during the more recent period is associated with negative investments and a reduced growth rate of exports (but also reduced inflation). To be noted is that the reduced inflation rate should stimulate rather than decrease growth. However, this effect was obviously more than overwhelmed by the other two negative forces. For Tunisia, the increased growth rate during the more recent period is associated with a higher growth rate of investments and exports, and a lower rate of inflation - exactly as predicted by growth theory. The same is true (but in a negative sense) for Albania. That is, the negative growth rate in Albania during the more recent period is associated with a negative growth of investments and exports, and a sharp increase in the rate of inflation.

For Jordan, the increased growth in real GDP in the more recent period was associated with a lower inflation rate (but lower growth of investments and exports). For Turkey, the reduced growth rate during the more recent period is associated with a lower growth rate of investments and exports, and a higher rate of inflation - exactly as predicted by growth theory.

Other factors affecting growth in Southern Mediterranean Countries

As shown in **table 4B**, the other endogenous and exogenous factors usually considered important for development operated in a less consistent manner for the countries of the southern Mediterranean countries during the past decade and a half. Once again, column (1) of **table 4B** is included, which shows the growth rate of real GDP in the seven southern Mediterranean countries for which data are available during the 1980-1990 and 1990-1994 periods.

For Algeria (the first row in **table 4B**), the negative growth rate of real GDP during the more recent period was consistent with the reduced growth rate of foreign direct investments (FDI) and decline in its terms of trade - exactly as predicted by growth theory (no data were available for social service expenditures). For Egypt, the reduced growth rate of real GDP in the more recent period was associated with the reduced growth of FDI and deterioration in its terms of trade (but with increased social service expenditures). Thus, the effect of the increase in the rate of social service expenditures on the growth of real GDP in Egypt seems to have been overwhelmed by the lower growth of FDI and the deterioration of its terms of trade (the other two variables shown in **table 4B**), as well as the negative growth of exports and the higher inflation rate (shown in **table 4A**). Also to be pointed out, is that the effect of social service expenditures on the growth of real GDP in a nation can be long delayed and thus impossible to capture by contemporaneous correlations. Furthermore, some expenditures on social services are in the nature of consumption rather than investments in human beings and so, while they are an important component of the standard of living, they are not expected to lead to a higher growth of real GDP in the nation.

In Morocco, the reduced growth rate of real GDP during the more recent period is associated with the reduced rate of FDI (but with a higher rate of social service expenditures and higher terms

Table 4A ***Factors affecting growth in Mediterranean Developing Countries, 1980-1990 and 1990-1994 (average annual percentage growth rate).***

	(1) Real GDP		(2) Gross domestic investment		(3) Exports of goods and nonfactor services		(4) Inflation (GDP deflator)	
	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94
North Africa:								
Algeria	2.9	-0.6	-2.3	-6.8*	4.1	-0.4*	7.8	27.1*
Egypt	5.0	1.1	2.7	2.7	6.1	-1.5*	11.7	14.9*
Morocco	4.2	1.7	2.5	-2.7*	5.6	2.1*	7.2	4.4
Tunisia	3.3	4.5*	-1.8	2.3*	5.6	5.9*	7.5	5.5*
Other:								
Albania	1.5	-4.2	-0.3	-11.3*	-2.6	-6.6*	-0.4	101.6*
Jordan	-1.5	8.2*	7.3	6.5	14.0	3.3	7.0	4.7*
Turkey	5.6	3.2	5.3	2.2*	16.6	7.7*	48.4	71.7*

Source: World Bank.* Change from 1990-1994 to 1980-1990 consistent with growth theory.

Table 4B ***Other factors affecting growth in Mediterranean Developing Countries, 1980-1990 and 1990-1994 (average annual percentage growth rate).***

	(1) Real GDP		(2) Social service* expenditures		(3) FDI** as a % of GDP		(4) Terms of trade(1987 = 100)	
	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94	1980-90	1990-94
North Africa:								
Algeria	2.9	-0.6	...	...	7.7	0.1***	173	83***
Egypt	5.0	1.1	8.7	10.4	8.3	1.4***	147	95***
Morocco	4.2	1.7	6.3	6.6	2.2	2.0***	99	107
Tunisia	3.3	4.5***	7.8	11.3***	18.9	1.9	123	93
Other:								
Albania	1.5	-4.2	...	...	...	...	...	...
Jordan	-1.5	8.2***	6.2	11.0***	...	...	127	118
Turkey	5.6	3.2	4.5	4.7	0.2	0.4	82	109

* Refer to education, health, social security, welfare, housing, community amenities.
** As a proxy for new technology.
*** Change from 1990-1994 to 1980-1990 consistent with growth theory.
Source: World Bank.

of trade). For Tunisia, the increased growth rate during the more recent period is associated with a higher growth rate of social service expenditures, but lower rate of FDI and reduced terms of trade. It seems that all the other factors positively affecting growth (the higher rate of investments and exports, and lower inflation rate shown in **table 4A** - as well as the higher social service expenditures shown in **table 4B** - overwhelm the other forces (i.e. the reduction in the growth of FDI and reduced terms of trade) which tend to reduce the rate of growth of real GDP.

No data are available for Albania to examine the association between its negative growth of real GDP during the 1990-1994 period and social service expenditures, FDI, and terms of trade. For Jordan, the increase and very high growth rate of real GDP during the 1990-1994 period is directly related to the increase in social service expenditures (as predicted by growth theory) but inversely related with its terms of trade. For Turkey, the reduced growth rate in real GDP during the most recent period is inversely related to the growth in social service expenditures, FDI, and increase in its terms of trade. Obviously, the reduction in the growth rate of investments and exports and reduced inflation rate (the variables shown in **table 4A**) overwhelm the effect of the variable shown in **table 4B**. Finally to be noted is that the simple correlations between the endogenous and exogenous variable that growth theory identifies as important determinants of growth in a nation only show the type (i.e., direct or inverse) and degree (i.e., strength) of association between each "explanatory" or independent variable and the rate of growth of real GDP in the nation and do not prove causality. Furthermore, these variables could be used together in multiple regression analysis of growth (see Salvatore 1993). Nevertheless, even these simple correlations clearly show, for the most part, a high degree of association between the variables that growth theory identifies as important for growth and the level of growth actually experienced by the nations of the southern Mediterranean countries since 1980.

Summary and conclusions

A number of important conclusions can be reached from the above analysis. These are:

1. The average growth of real per capita income in southern Mediterranean countries during the past decade and a half exceeded that of all developing countries as a group but was smaller than that of all developed countries; thus differences in average real per capita incomes between southern Mediterranean countries and developed countries increased since 1980.
2. Differences between southern Mediterranean countries and developed countries in PPP per capita incomes are half as large as (i.e., they are one quarter rather than one eighth) the differences in unadjusted per capita incomes. But even these differences may be overestimated because of a relatively large non-market-economy sector in developing countries.
3. As the result of market opening measures adopted since the early 1980s southern Mediterranean countries have increased their production efficiency in all sectors; this is reflected in an increase in the share of agricultural, manufacturing and services output and a reduction in the share of industrial output, as inefficient industries established during the 1960s and 1970s under heavy protection and subsidies were phased out.
4. The endogenous factors that seemed most strongly related to growth in southern Mediterranean countries during the past decade and a half were the growth of investments (positive) and the inflation rate (negative); while the exogenous factor most strongly and positively associated to growth was the increase in exports. The other endogenous and exogenous factors that growth theory identifies as important for growth operated less consistently for the countries of the southern Mediterranean during the past decade and a half.
5. For the future, the countries of the southern Mediterranean would do well to continue to restructure their economies along market lines, as well as to continue to increase savings, investments and exports, and to reduce their rate of inflation. They must also continue to increase social service expenditures, encourage foreign direct investments, and reduce population growth - even though these forces do

not seem as strongly correlated with their growth as the growth of investments and exports and the reduction in the inflation rate.
This may be due to the lagged effects of these other forces on growth and the difficulties in actually measuring their effects. 6. For their part, the developed nations, especially those of the European Union, should encourage foreign direct investments and provide more technical assistance and, above all, should open their markets more widely to the exports of southern Mediterranean countries. ●

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