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GROWTH AND STRUCTURAL CHANGE IN THE MIDDLE EAST

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IN THE DECADE ending with the Arab-Israeli war of 1967, the Middle East's economic performance compared very favorably with that of other regions. Indeed the data in the Pearson Report show that in almost every respect the Middle East stood ahead of both the industrialized and the developing countries, with the exception of Southern Europe.[1] The average annual growth rate in 1960-67 was put at 7.2 per cent.

The Report's definition of the Middle East is rather narrow and covers only Iran (eight per cent), Iraq (5-5.5), Israel (10), Jordan (10), Lebanon (about five) and Syria (five). In the oil producing countries of the Arabian Peninsula growth was almost certainly slightly higher, and in the non-producing it was very low. In Sudan it was about 4-4.5 per cent, in Turkey six and in UAR about five. Thus the overall average for the region as conventionally defined may have been around 6.5 per cent, and the *per capita* growth about 3.5.[2]

The Arab-Israeli war had little or no effect on the countries not immediately involved, and the previous trend seems to have continued. The disruption caused in Jordan, Lebanon, Syria and UAR does not yet seem to have been overcome. In Israel, however, which had been in a depression in 1966 and 1967, growth accelerated sharply after the war.[3]

The paucity of data makes it impossible to discuss in detail how this growth in income has affected its distribution. The following general statements may however be made with confidence. First, in almost every country, private consumption has risen appreciably, and this applies to the poor as well as to the rich. Secondly, the amount of social services extended by the governments—in the form of education, health, cheap housing, drinking water, rural electrification and assistance—has greatly increased. Thirdly, and in consequence, the level of living of the masses is distinctly higher than it was some twenty or thirty years ago. But, fourthly, in most parts of the region, the incomes and wealth of the rich have risen still more rapidly, and the distribution of both

1. Lester B. Pearson, *Partners in Development* (New York, 1969).
2. For details and sources see original paper.
3. For a good recent study see Eliyahu Kanovsky, *The Economic Impact of the Six-Day War* (New York, 1970).

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is probably more unequal than it was, say, before the Second World War. This last tendency has been checked by land reforms in some countries and—of course—reversed by the nationalizations of large sectors of the economy in UAR, Iraq and Syria.

Forces of Growth

Before discussing in detail the structural changes that accompanied and made possible these high rates of growth, four factors making for expansion must be mentioned: the provision of infrastructure and development of human resources in the inter-war and immediate post-war periods; the rapid growth of the petroleum industry; the huge amount of foreign aid received by the Middle East, and the population increase.

Although the 1920s-1940s are usually regarded as a period of stagnation in the Middle East, much was done to provide the region with infrastructure. Railways were built in the countries that needed them most: Turkey, Iran, Iraq and Saudi Arabia. Many thousands of miles of roads were laid down, and carried a large part of the region's traffic. Numerous modern ports and airports were constructed. Irrigation works were extended, especially in Egypt, Sudan and Iraq. And output of electricity increased severalfold. Similarly, the school system, starting almost everywhere from scratch, expanded greatly.[4] No less important, in these countries and still more in Israel and Lebanon, a nucleus of trained engineers, agronomists, statisticians, economists and other technicians had come into being.

The growth of the petroleum industry can be indicated by a few figures. Output of crude oil in the Persian Gulf area rose from 56 million tons in 1948 to 223 million in 1958 and 559 million in 1968: over the same period, refining throughout increased from 33 million tons to 50 million and 91 million respectively. Thanks to the changes in the concession agreements, which raised payments by the companies from about 22 cents a barrel in the 1940s to about 75 cents in the 1950s and 86 in 1968, the Middle Eastern governments' oil revenues multiplied severalfold—from $154 million in 1948 to $1,278 million in 1958 and $3,394 million in 1968. It may be added that, barring a catastrophe, exports of Middle Eastern oil should continue to rise at about seven to eight per cent per annum in the foreseeable future, and revenues by at least as much, implying a total revenue of $6,000 million by 1975.

As for foreign aid, the Middle East has probably received a larger amount per head of population than any other area in the world. Credits extended by the Soviet bloc and China to nine countries in 1954-1968, inclusive, amounted to $4,285 million out of a world total of $9,705 million; of these, a little

4. Thus between the early 1920s and 1950, the school population of Egypt rose from 600,000 to 1,600,000, of Iran from 76,000 to 740,000, of Iraq from 10,000 to 240,000, of Syria from

over two-thirds came from the Soviet Union. The main recipients were U
$1,679 million, Iran $839 million, Afghanistan $737 million, Syria $
million, Turkey $218 million and Iraq $184 million. These figures do
include military credits. Data on actual disbursements, as distinct from cr
extended, are not available but "The ratio between deliveries and commitm
[is] at about 40 per cent." It seems unlikely that the regional share is n
higher—say $1,700 million.[5]

United States aid is even larger and has gone to practically every countr
the region. Between July 1946 and July 1967 total obligations in econ
aid were over $6,500 million, of which $3,000 million were in grants
$3,500 million in loans. The main beneficiaries were Turkey $2,247 mil
Israel $1,086 million, UAR $1,039 million, Iran $958 million and Jo
$560 million.[6] United States private investments in the Middle East were
at $1,749 million at the end of 1968, of which $1,608 million was in oil

To this should be added several hundreds of millions of dollars represen
loans from the IBRD and grants from the United Nations and Special
Agencies to all the countries of the region, and West German and British
to the UAR, Turkey, Jordan, South Yemen and other countries. British inv
ments in oil are probably of the order of $1,200 million. As for Kuway
1961-66 it advanced some $500 million to the other Arab countries.

Population increase must also be regarded as a factor making for gro
since the marginal productivity of labor seems to be positive.[8] However, t
is no reason to doubt that this marginal productivity is, almost everywh
very low and that *per capita* incomes would rise much more rapidly, and m
economic and social problems would be eased, if the growth of population co
be slowed down. At present, the annual rate of increase is in practically all
Middle Eastern countries either equal or very close to three per cent. Birth c
trol measures are only just being introduced in a few countries, such as Tur
and UAR, and their effect for some time to come will be minor; since impro
hygiene may be expected to reduce mortality appreciably, the rate of popula
growth may rise well over the three per cent level.

Structural Changes

The main structural changes in the last fifteen or twenty years may be stud
under the following headings: savings and investment; development of hun

5. US Department of State, Director of Intelligence and Research, "Communist Governm and Developing Nations: Aid and Trade," September 5, 1969. In 1969, the Soviet Union op a credit of $350 million for Turkey.

6. US Agency for International Development, *United States Overseas Loans and Grants* (W ington, D. C., March 29, 1968).

7. US Department of Commerce, *Survey of Current Business*, October 1969 (Washington, D.

8. That this is so in the UAR is suggested by Bent Hansen, "Employment and Wages in Egy *American Economic Review*, June 1969. The UAR has the most intensive agriculture of the reg and is the most densely populated country; hence one can presume that the same holds for o countries.

resources; infrastructure; composition of GNP; agriculture; industry; foreign trade and balance of payments; planning and growth of government sector.

Savings and Investment

Rapid growth in GNP presupposes a high investment rate, and Table I shows that a marked rise did indeed take place in the 1950s and 1960s from the very low levels previously prevailing in most countries.[9]

TABLE I *Gross Investment and Saving Ratios*
(as percentages of GNP)[a]

Country	1957-58 Investment	1957-58 Saving	1965 Investment	1965 Saving
Iran	17	16	19	15
Iraq	24	24	15	15
Israel	31	0	28	14
Jordan	13	0	14	0
Kuwayt	20	45	19[b]	37[b]
Lebanon	16	15	15	9
Saudi Arabia	—	—	19	24
Sudan	11	10	10[b]	9[b]
Syria	20	20	17	16
Turkey	14	11	20[b]	18[b]
UAR	14	12	20	14

a) For Kuwayt percentages of GDP.
b) 1966.

Sources: AID, *Near East and South Asia: Economic Growth Trends* (September, 1965); Iran, *4th Development Plan;* UN, *Studies, 1968; ibid., 1969; Israel, Statistical Abstracts,* 1966; Republic of Sudan, *Economic Survey,* 1967; Saudi Arabian Monetary Agency, *Report,* 1387 A. H.; Industrial Development Bank of Turkey, *Annual Statement,* 1968.

Five groups of countries may be distinguished in the Table. In Kuwayt and Saudi Arabia, with their huge oil revenues, saving was higher than investment, the balance being transferred abroad in the form of foreign exchange reserves. In Iran and Iraq, oil revenues, though also large, could be absorbed at home, and investment was roughly equal to saving. The same was true of Lebanon,

9. On the eve of the Second World War, the gross investment rate was probably around five per cent in Egypt, six per cent in Iraq and eight per cent in Syria. In Iran it may have been somewhat higher, and in Turkey it was about 10 per cent. All this investment was covered by domestic saving. In Palestine the investment rate in 1936 was as high as 30 per cent, but this was more than covered by foreign resources, giving a negative saving rate.

During the Second World War inflation and a shortage of goods produced a high level of savings, but the limited possibilities for investment meant that most savings were transferred

Sudan and Syria, which had no—or negligible amounts of—oil revenue where a relatively high level of savings made it possible to maintain a high level of investment. In Turkey and the UAR, foreign aid finan sizeable proportion of total investment. Lastly, in Israel and Jordan, fo resources accounted for the bulk, or even the whole, of investment, and in local savings were small or even negative.

Developments since 1965 have varied sharply between countries. In investment has increased more rapidly than GNP (at an average of 17 per in 1963-1968), and the investment rate rose steadily to about 21 per ce 1967-68; almost all of this was met by higher saving. Although the vas crease in government investment has sharply raised its share of the total, pr investment still accounts for just over one-half.

In Turkey investment has also risen more rapidly than GNP, and the in ment rate climbed to about 21.5 per cent in 1968; of this about 19.7 per was covered by domestic saving. Although in recent years private invest has been growing faster than public, it still accounts for just under half the t

Another country in which capital formation has risen sharply and con ously is Saudi Arabia. By 1966-67 it accounted for 20 per cent of GNP, available data indicate that this rate has at least been maintained, and even have increased. As in the past, saving has exceeded domestic investm but since the 1967 war a rising share has been absorbed by aid to Jordan the UAR—$35 million in 1967 and $140 million in 1968. In recent y public investment has risen twice as fast as private (20 per cent and 9 per a year, respectively), and the two are now roughly equal.

The Israeli gross investment rate has fluctuated sharply. From an ave of over 30 per cent in 1961-64 it fell off during the 1965-67 recession to in 1966 and 15 in 1967. However, since the 1967 war it has once more r to over 20 per cent in 1968 and about the same in 1969. The saving rate even more sharply, from 14 per cent to 11 and four respectively, but rose a to six in 1968. Private investment accounts for about 55 per cent and pu for 45 per cent.

In Jordan, too, the investment rate had been declining before the 1967 from over 17 in 1959-60 to 14 in 1965-66. In all those years, the saving was negative, *i.e.* consumption was slightly greater than GNP. No recent fig are available, but it seems reasonable to infer that the disruption caused by war must have lowered the investment rate. In the early 1960s, private inv ment accounted for somewhat over half the total.

Data for Iraq are fragmentary, but show a marked decline in governm expenditure on development after 1964-65. Since private investment, wh until then had accounted for 40 per cent of the total, fell off sharply after nationalization measures of 1964, it may be taken that the overall investm

rate was greatly reduced. In Lebanon, the crisis caused by the failure of the Intra Bank in October 1966 was aggravated by the 1967 war, and the sharp decline in construction—the main form of domestic investment—points to a decline in the overall rate of investment. Data for Syria are even scantier, but also indicate a general decline.

In the UAR, the gross investment rate also declined before the 1967 war, from a peak of 20 to 17 in 1966-67, while the saving rate was slightly reduced, to a little under 14. There is reason to believe that these figures fell further after the 1967 war, with the loss of productive resources and the rise in military expenditure. The bulk of investment is in the public sector.

Lastly, in the Sudan gross capital formation fell sharply, in absolute terms, from 1963-64 to 1966-67, and rose only slightly in 1967-68. As a percentage of GDP, it declined to under 10 per cent in 1966-67 and 11 per cent in 1967-68. This was mainly due to the reduction in the use of foreign resources, and the savings rate fell only slightly, to 10 per cent. In recent years public investment has accounted for over two-thirds of the total.[10]

Development of Human Resources

The figures on Middle Eastern school enrolment given in the Pearson Report (Appendix II, Table 4) show growth rates that compare favorably with those of other regions. For the countries omitted in the Table—Kuwayt, Lebanon, Saudi Arabia, Syria and Turkey—rates of increases are equally high, or higher.

This rapid growth has, over the greater part of the region, raised the ratio of the primary school population to the total population above the 10 per cent level which has been defined as critical for economic development.[11] The countries that have passed that level now include: Iran, Iraq, Israel, Jordan, Kuwayt, Lebanon, Syria, Turkey and UAR. In secondary education, the Middle Eastern enrolment ratios are higher than those of Africa and most of Latin America, but below those of some Asian countries, such as India, Taiwan, South Korea and the Philippines. Ratios in higher education compare favorably not only with those of developing countries but also with those of most European countries.

Of course such a purely statistical approach can be seriously misleading. First, it does not allow for the large percentage of dropouts, who represent a partial wastage of investment. Secondly, in secondary education—and much more so in higher—the quality of teaching is generally low. Thus, although the number

10. These figures are taken from the annual reports of the Central Banks of Egypt, Iran, Israel and Sudan, the Saudi Arabian Monetary Agency, the Industrial Bank of Turkey, the *Sudan Economic Survey* and the United Nations *Studies on Selected Development Problems in Various Countries of the Middle East,* 1968 (New York, 1968).

11. Alexander L. Peaslee, "Education's Role in Development," *Economic Development and Cultural Change,* April 1969; as a proportion of children of primary school age, primary school enrolments vary from over one-half to four-fifths.

of students in higher education in the Arab countries, including North Africa, was put at 300,000, "as recently as 1965 no fully-fledged graduate schools existed throughout the entire region."[12] Conditions in Iran and Turkey are no better. However, many students are enrolled, as undergraduates or graduates, in the United States and Western and Eastern Europe—about 40,000 Arabs, 20,000 Iranians and several thousand Turks and Israelis.

These high rates of school attendance mean that, in the next two or three decades, as the present older generation is replaced by men and women who have had at least primary education, the literacy rate should rise sharply. At present, excluding Israel and Lebanon, it stands at 20-40 per cent in the major countries and at perhaps 10-15 per cent in the more backward ones, figures distinctly below those of Latin America and many parts of Asia.

The inflow of university graduates is also rapidly increasing the stock of skills in the Middle East. Data on the latter are very scanty except for physicians, whose number rose by over 50 per cent between 1957 and 1965. The figures in the Pearson Report show that, per head of population, the Middle East stands well below Latin America in this respect, but far above Africa and somewhat above Asia. The available evidence on other professions indicates that the number of engineers, natural scientists and social scientists is growing much more rapidly than that of physicians.

Infrastructure

Except for Egypt, the Middle East had, until quite recently, a very inadequate infrastructure. In the last twenty years, however, great progress has been made and the Pearson Report puts the rate of growth in the Middle East in railway traffic and electricity far above that of other regions. The rates of growth in the other Middle Eastern countries were quite as high.

But the main emphasis has been not on railways but on ports and roads. New ports have been built at Aqaba, Dammam and Jiddah, Hudayda, Kuwayt, Latakia, Tel Aviv-Jaffa, Eilat, Iskenderun and Trabzon, while the older ports have been enlarged and improved. And tens of thousands of miles of highways and secondary roads have been laid down. Between 1948 and 1965, the number of trucks multiplied by four, and the total freight (measured in ton-miles) must have risen much more since the size and length of the average haul has considerably increased.

Composition of GNP

Table II brings out both the distinctive pattern and the trend of the composition of GNP in the Middle East. As regards the first, the main characteristics

12. Claire Nader and A. B. Zahlan (eds.) *Science and Technology in Developing Countries* (Cambridge, 1969)

TABLE II *Composition of Gross National Product, 1953-1966*
(per cent of total)[a]

	1953			1966		
	Agriculture	Industry	Other	Agriculture	Industry	Other
Iran[b]	31	27	42	28	29	43
Iraq[c]	22	47	31	21	45	33
Israel	12	23	65	8	24	68
Jordan[d]	18	7	75	19	12	69
Lebanon[e]	20	13	67	13	13	74
Sudan	61	5	34	54	6	40
Syria	44	12	44	28	15	57
Turkey	48	11	41	37	18	45
UAR	32	9	59	28	23	49

a) Agriculture includes forestry and fishing; industry includes mining.
b) 1959 and 1965.
c) 1953 and 1965.
d) 1959 and 1966.
e) 1950 and 1964.

Source: Pearson Report, Appendix II, Table 3; *Statistical Yearbook.*

are the small share of agriculture and the high share of services, compared to other regions with similar *per capita* incomes. The small share of agriculture is explained partly by the aridity of the Middle East, which makes expansion very costly in many countries, and partly by the large size of the oil and services sectors. The services sector is swollen by income accruing because of location (*e.g.* Suez Canal, airlines); by pilgrimage and tourism (particularly in Israel, Jordan, Lebanon and Saudi Arabia); by the very large size of the government sector, including army and bureaucracy, and by the receipt of massive foreign aid.

As for the trend, the most marked features are the steady decline in the share of agriculture and rise in that of services in practically every country; and the marked increase in the industrial sector. In Israel and the UAR manufacturing and mining now account for nearly a quarter of GNP and in Turkey, Syria, Iran (excluding oil), and Lebanon for a sixth or a seventh. Thus, leaving aside the oil industry, the Middle East is distinctly more industrialized than Africa, where manufacturing accounts for under 10 per cent of GNP, about as industrialized as Asia, where the figure is 15 to 20 per cent, and well below Latin America, where it is 15 to 30 per cent.

Agriculture

The shift to manufacturing and the relative decline of agriculture form part of a world-wide pattern. However, both have been more marked in the Middle

East than in other regions. Taking the developing countries as a whole, agriculture's share in GNP declined from an average of 35.7 per cent in 1950-54 to one of 30.5 per cent in 1960-64; conversely, that of industry rose from 14.5 to 17.9 per cent.[13]

Over the last dozen years, the average annual rate of growth of agricultural output in the Middle East was 3.3 per cent, and the *per capita* increase 0.7 per cent, both figures slightly above those for all other developing regions. Somewhat over half of this increase was due to the extension of acreage and a little under half to higher yields, reflecting the efforts being made to intensify production.

One aspect of intensification has been the shift away from the traditional cereals (mainly wheat and barley) and towards the more valuable cash crops: cotton, rice, fruits, vegetables and sugar beets. As a result, exports of the latter have risen appreciably in the last few years but, on the other hand, imports of cereals have also increased rapidly, to well over 5,000,000 tons, worth nearly $500 million.[14]

Intensification has proceeded on other fronts. Large irrigation works have been built in almost every country, and the irrigated area has been considerably extended. Mechanization is increasing relatively fast and the number of tractors has doubled in the last ten years; however there are still less than 1.5 tractors per 1,000 hectares in the Middle East, a figure equal to the average in developing countries. Between 1952-56 and 1967-68 the use of chemical fertilizer almost quadrupled, to 800,000 tons (nutrient content) and, where until recently only the UAR and Israel used chemical fertilizers on a large scale, Lebanon, Turkey and Iran are now applying rapidly rising amounts and some of the other countries are also beginning to use significant quantities. This advance has been made possible largely thanks to the development of a domestic chemical fertilizer industry, whose output is expected to multiply fourfold by 1972, to a total of about 3,000,000 tons (nutrient content). And, whereas until recently again only the UAR and Israel used selected seeds in significant quantities, Turkey and other countries are now planting rapidly expanding areas to Mexican dwarf wheat and other high-yielding varieties.

Technical progress has been accompanied—and often facilitated—by structural and organizational changes. Major land reforms were implemented in the UAR in 1952, Syria and Iraq in 1958, and Iran in 1963. All four transferred large areas to small holders or landless workers and gave tenants greater security and a higher share of the produce. And all four set up extension services and cooperatives, backed by agricultural banks, to provide credit and technical assistance to the new owners. But their outcome was very different. The evidence

13. United Nations, *Industrial Development Survey* (New York, 1969) Vol. I, p. 19.
14. Food and Agricultural Organization, *The State of Food and Agriculture, 1969*, pp. 2 and 65, where indexes for the main countries are given, pp. 66-67, p. 98

date indicates that both the Egyptian and Iranian land reforms have had vorable effects on production, leading to more intensive cultivation in both untries and to the reclamation of new land in Iran, but the Syrian—and still ore the Iraqi—land reforms have been disruptive. In Syria the previous—very npressive—expansion had been carried out by landlords and merchants, whose nction does not seem to have been adequately taken over by the government ganizations and cooperatives set up to replace them. And in Iraq political stability and ecological deterioration have led to a sharp fall in agricultural itput.[15]

dustry

In the last fifteen years or so, Middle Eastern industrial output has risen ery rapidly. The average annual rate of growth in 1960-67 given in the Pearson eport is 10.8 per cent, which stands above that of all other regions, and Turkey nd the UAR also had rates of 10 per cent or over.

But in all these countries industry started from a very narrow base and, except Israel, production of manufactured goods per head of population is still ther small. A rough indication is given by the following figures (in dollars): rael 320, Lebanon 60, Turkey 50, UAR 37, Iran (excluding oil) 28, Syria 28, aq (excluding oil) 19, Sudan 6. Comparable figures for 1963 were Puerto ico $201, Mexico $108, Colombia $47, Taiwan $27, India $14, Pakistan $8, enya $8, and Tanzania and Nigeria $3.[16] For most Western European counies the figure ranges between $600 and $800 and in the United States it is ver $1,000.

This growth in industrial output has gone primarily to the domestic market, though in a few countries—notably Israel, the UAR and Lebanon—exports f manufactured goods have increased appreciably. As a result, in some of the ore industrialized countries of the region local production now meets the reater part of domestic consumption of manufactured goods, but the less eveloped countries still rely on imports for the bulk of their consumption. hus a recent estimate showed that the UAR produced 82 per cent of its conimption of manufactured goods; for agricultural processing industries the

15. See Doreen Warriner, *Land Reform in Principle and Practice* (London, 1969); *idem, Land eform and Development in the Middle East* (London, 1962); Gabriel Saab, *The Egyptian Agrarian eform* (London, 1969); Robert Fernea, "Land Reform and Ecology in Postrevolutionary Iraq," *conomic Development and Cultural Change,* April 1969; A. K. S. Lambton, *Persian Land Reform* London, 1969).

16. The figures for non-Middle Eastern countries were taken from United Nations, *Industrial evelopment,* p. 11 and "refer to *per capita* gross domestic product, in current US dollars, multilied by the share of manufacturing production in total product." The Middle Eastern figures were btained by applying the same method to the latest available figures, generally 1966 or 1967, given the United Nations *Statistical Yearbook, 1968.* Allowing for the growth in output, these figures e in line with those for 1963 given in United Nations, *The Growth of World Industry* (New ork, 1970).

figure was 96, but for metals, non-metals and chemicals only 54. The corresponding figures for Iraq were 59, 71, and 40 per cent.[17] It may be taken that the Sudan and the Arabian Peninsula countries fall below Iraq, and the other countries—with the exception of Israel—between Iraq and the UAR.

As regards the sectoral composition of manufacturing industry, in the Middle East as in other developing regions industrialization started with three main groups: food processing, textiles and non-metallic minerals (mostly building materials). Since then—in the Middle East as in other developing regions—heavy industry has grown much more rapidly than light. Nevertheless, except where petroleum plays a predominant part in the economy, light industry is still predominant. Its share in value added in 1962 or 1963 was as follows: Israel 52 per cent, Jordan 53, UAR 64, but Iraq only 46. In Iran in 1962-64, the percentage accounted for by the food and drink, tobacco, textile and clothing industries was 61 and that of chemicals, basic metals, metal products and machinery 18 per cent, but these figures leave out the oil industry; in Turkey the corresponding figures in 1963-65 were 49 and 30 per cent.[18]

Foreign Trade and Balance of Payments

The structure of the Middle East's foreign trade has changed in several important respects. First, in the 1960s the value of trade did not keep pace with the rise in GNP. If the oil producing countries of the Arabian Peninsula are excluded, it becomes evident that—with the partial exception of Iran and Israel—the trade of the region grew very slowly and that the ratio of both imports and exports to GNP has fallen appreciably. This shift is largely explained by the sluggishness of exports, which kept down the amount that could be imported, in spite of the large supplement provided by foreign aid. The very slow increase in exports is, in turn, attributable to the low rate of growth of agriculture—which still provides the bulk of exports other than oil—and to rising domestic consumption of certain export goods, such as foodstuffs and raw cotton. And although exports of manufactured goods have increased in some countries, *e.g.* Israel, Lebanon, UAR, Turkey, Syria and Iran, only in the first two do they amount to more than about 15 per cent of total exports.

On the import side, three main trends are clear. First, as already noted, there has been a marked growth in imports of grains and other foodstuffs because of the increase in population, the rise in living standards, the low rate of agricultural growth and the shift to cash crops. Secondly, thanks to the growth of local industry, there has been a sharp fall in imports of manufactured goods into

17. United Nations, *Industrial Development,* p. 78; in Iran, the share of local production was 70 per cent in 1965-67, and was scheduled to rise to 75 by 1972.

18. Iran, Ministry of Economy, *Industrial Guide to Iran* (Tehran, March 1968); OECD, *Turkey,* July 1967, p. 28.

the more advanced countries of the region; in the less advanced countries, however, rising incomes have attracted increasing quantities of foreign consumer goods. Lastly, the industrialization of the Middle East has necessitated a huge expansion of imports of machinery, spare parts and raw materials.

As regards the balance of payments, taken as a whole the region may have a small surplus on current account, but this is due entirely to the Arabian Peninsula oil producing countries. If oil exports are excluded, every single Middle Eastern country has an import surplus, and in almost all this is very large. In the Arabian Peninsula countries, the deficit on merchandise account is more than covered by the foreign exchange received from the oil sector, in the form of direct revenues to the government or local payments to workers and suppliers. In Iran and Iraq, oil receipts almost cover the deficit in merchandise and services. In Israel, Jordan, Lebanon, Turkey and the UAR, income from services covers part of the import surplus; in Lebanon this comes mainly from tourist expenditures, in Jordan from tourism and remittances sent by Palestinians working in the Persian Gulf area and elsewhere, in Israel from tourism and funds sent by overseas Jewish communities, in Turkey from remittances (about $200 million) sent by the more than 100,000 Turks working in Europe and, in the UAR, from the Suez Canal which, until its closure, brought in over $200 million a year. More generally, tourism is rapidly developing in all the countries bordering the Mediterranean, but it is still far from having fulfilled its great potential and the present annual expenditure of some $400 million may be expected to increase severalfold in the 1970s.

As mentioned earlier, however, income from services and private transfers fails to close the gap in the trade account, and—except for the Arabian Peninsula oil producers—every country in the region is now receiving substantial foreign aid (see above).[19]

Growth of Public Sector

The growth of the public sector is one of the most striking changes in the Middle East in the last ten or fifteen years. In the 1950s in all countries except Israel and the Arabian Peninsula oil producers, government expenditures were below 20 per cent of GNP, and in several they were closer to 10. By the mid 1960s, however, the ratio exceeded 40 per cent in Syria (41 in 1966), Israel (46 in 1967) and the UAR (55 in 1966), as well as in Saudi Arabia (40 in 1966) and Kuwayt (47 in 1966). To this list may be added Jordan (36 in 1967) and Iraq (29 in 1965). Only Iran and Turkey (18 and 19, respectively, in 1966) were below the 20 per cent limit, while Lebanon stood at 21 per cent

19. For a thorough study of this subject, with projections through the 1970s, see a paper presented by Michael Bruno at the same conference and published in the *Journal of International Affairs*, vol. XXIV, No. 2 (New York, 1970).

and Sudan at 23 per cent in 1965, but the rapid increase in Iran's expenditure has since raised its figure to well over 25 per cent.

This huge expansion of the public sector has several causes. In some countries such as the UAR, Iraq and Syria, the nationalization of most industrial, financial and large scale commercial establishments has swollen the public sector. The general increase of government services, such as education and health, and the proliferation of the administrative bureaucracy, have worked in the same direction. So has the huge rise in foreign aid, which accrues to the governments in the first instance. Rapidly expanding oil revenues have played a major part in the producing countries. And, as is noted below, defense expenditures have soared to very high levels.

The growth of the public sector has been accompanied by a great extension of government control over economic activity. In the UAR, Iraq and Syria, the government owns and operates most major activities outside agriculture, and the latter is also closely supervised. In Iran, Israel, Jordan, Kuwayt, Saudi Arabia, Sudan and Turkey, the government has not taken over any major enterprises, but it accounts for the greater part of investment. Only in Lebanon does the government still play a minor part in economic activity. And only in Lebanon and Saudi Arabia, as well as in some of the countries of the Arabian Peninsula, has no attempt been made to draw an overall plan for the economy. In the other countries, Four, Five and Seven Year Plans, of varying scope, elaboration and consistency, have been framed to guide the economy through the 1960s. However, in view of the paucity and unreliability of much of the data on which they are based, of the inexperience of the planning authorities, and of the lack of coordination between the private and public sectors, it is not surprising that performance has, generally speaking, failed to conform to plan.

Prospects for the 1970s

The above account shows that until 1967 the whole region—and since that date most of it—enjoyed rapid economic growth, accompanied by great social advance. In the process, its structure has been greatly modified, new sources of production have been opened and its human resources have been tapped far more deeply than ever before. It now remains to assess the prospects for continued growth in the 1970s, and to identify the major difficulties lying ahead.

The rapid advance of the 1960s has been attributed to three main factors: the development of human resources; the provision of infrastructure, and the large capital inflow through oil and foreign aid. If this analysis is correct, the chances of maintaining a high rate of growth would, on the face of it, seem to be excellent. For the Middle Eastern countries now dispose of a far larger stock of skills

both directions is likely to continue. All projections of oil output and revenues agree on a rapid and sustained rise at least through the 1970s. An increasing share of these oil revenues may be expected to accrue to Arab countries outside the Persian Gulf zone, partly because of increased production in the UAR and Syria but mainly in the form of grants and loans from Kuwayt, Saudi Arabia, Libya and, possibly, some of the Shaykhdoms. And although foreign aid to the region may somewhat diminish, it is unlikely to fall off too sharply in those countries that need it most: Israel, Jordan, Turkey and the UAR.

Nor is there any reason why the structural changes described above should not be maintained or pushed further. Growing incomes should continue to be accompanied by rising rates of saving and investment, higher levels of living, increased industrialization, intensified agriculture, and, possibly, greater balance in international accounts.

But this bright picture is greatly modified—and indeed transformed—by four elements. Of these, three may be expected to slow down the growth of the countries affected, and the fourth would constitute a serious problem even if rapid growth were maintained.

There is, first, the Arab-Israeli smoldering war. The fighting has already caused considerable economic dislocation—including the destruction of irrigation works, industrial plants and transport facilities—in Jordan, the UAR, Syria, Lebanon and Israel. Any intensification of hostilities would inflict further damage.

Secondly, even if actual shooting should stop, tension is likely to continue, and to lead to the diversion of increasing resources to defense. Military expenditures in the Middle East, already very high before 1967, have since soared. As a percentage of GNP, between 1965 and 1969 they rose as follows: Iran 4.4 to 5.9 per cent, Iraq 10.2 to 12.4, Israel 11.7 to 21.3, Jordan 12.9 to 25.2, Saudi Arabia 8.6 to 12.7, Syria 8.4 to 17.8 and UAR 8.6 to 14.6, while Turkey remained unchanged at 4.3. Considering that in 1968 the corresponding figures for Western Europe were between 1.0 (Luxembourg) and 6.2 (Portugal), for India 3.6, Indonesia 2.6, Japan 0.8 and even the United States 9.2, the staggering burden of military expenditure becomes evident.[20]

Of course these heavy defense expenditures have been made possible only by massive external aid—Soviet arms supplied to the Arab countries and Jewish funds to Israel. The actual burden on the Middle Eastern economies is far less. But the fact that, in recent years, in the countries directly or indirectly involved

20. Institute for Strategic Studies, *The Military Balance, 1969-1970* (London, 1969); these figures are, if anything, conservative. Thus President Nāṣir stated that the UAR's military budget was the equivalent of $1,100 million or about 20 per cent of its GNP—*New York Times*, November 7, 1969. No comparable figures are given for Africa and Latin America, but in both continents the level of military expenditure is relatively very low. It may be added that the existence of conscription in most Middle Eastern countries understates the real burden of defense, since soldiers receive very low pay.

in the Arab-Israeli war, the share of 'Government Consumption' has increase considerably and that of 'Investment' declined significantly shows that militar expenditures are beginning to cut into economic development, as well as pres ing on living standards.

Thirdly, there is the reduction of efficiency caused by the great extension o the public sector in some countries. This is not to deny that in a region at th economic level of the Middle East—and with its social structure and historica background—the government should play an active part. Indeed, given th resources accruing to the Middle Eastern governments from oil and foreign ai it is inevitable that they undertake a large share of investment. It is als desirable that they attempt to secure some consistency between the variou forces affecting the economy, by means of forecasts and overall indicativ development plans—though several of the plans drawn up so far have bee based on very shaky assumptions. But the evidence to date seems to indicat that the nationalization of large sectors of the economy has led to a marke decline in efficiency.[21] Nor is this surprising, in view of the inadequacy of th Middle Eastern bureaucracies, of the huge loads that have been piled on them and of the lack of information with which they have to work. And, in the immediate future, there is little reason to believe that matters will appreciably improve in this respect, and the experience of far more advanced countries i not encouraging.

Lastly, there are the related questions of population growth and urbanization. As mentioned before, for at least a decade or two the Middle Eastern population is likely to grow at three per cent a year, or more. Urbanization is increasing still faster, generally at around five per cent. The Middle East has always been a highly urbanized area: today the capital city alone usually accounts for 10 to 15 per cent of the total population, and five cities—Cairo, Alexandria, Tehran, Istanbul and Baghdad—have passed the million mark. The grave social problems posed by this population as well as urban explosion—the strain it puts on housing, municipal services, hygiene, education and the physical environment—can only be mentioned, not discussed here.

As regards the general population growth, only two remarks need be made. First, the necessity of actively promoting birth control and of providing incentives for the limitation of family size. Secondly, the need to use, as far as possible, labor intensive techniques, in order to find jobs for the additional millions of workers. Industrialization should of course be promoted as vigorously as possible, since it offers the hope of higher incomes. But recent experience has shown that its labor-absorptive capacity is small because existing techniques are capital-intensive and productivity per man is rising rapidly. In many developing coun-

21. For a careful and well documented study, see "Plan Implementation in Iraq, 1951-1967," in United Nations, *Studies, 1969;* there is also much similar evidence on Syria and the UAR, and on the public sectors of such

tries, industrial output has been doubled with little or no increase in employment. The service sector usually grows faster, but only because it contains an enormous amount of underemployment and disguised unemployment—often connected with mass migration to the towns. This means that much of the increment in population will have to be absorbed in agriculture. Fortunately, both the experience of Japan and Egypt and the possibilities opened by the 'Green Revolution' show that intensification of production can be obtained by greatly increasing labor inputs, together with certain capital inputs, like water, seeds and fertilizers. The aim of agricultural policy should therefore be, as far as possible, to raise output per acre rather than output per man, to use land-saving investments, rather than labor-saving devices like farm machinery and to concentrate on labor-absorptive, high value crops. In the words of a leading authority: "The agricultural revolution of our time is a laboratory revolution, not the engineers' revolution of forty years ago."[22]

Much of the recent growth of the Middle East is attributable to the oil industry—a sector with a very high capital-labor ratio and a very low labor-absorptive capacity. The capital and by-products generated in that industry are being used to promote development in general, and more particularly certain petrochemical industries which can greatly expand the region's manufacturing sector. It is also imperative that a substantial proportion be used for the intensification of agriculture, a process that could provide both food and work for the Middle East's growing millions.

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22. Warriner, *op. cit.,* p. 44.