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Chapter Author: Brent Hansen, Karim Nashashibi

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Chapter 4

The Devaluation of 1962

The devaluation of 1962 appeared as a small ripple on the surface of the Egyptian economy, hardly noticed by the general public. It was overshadowed by more spectacular and publicized measures—the five-year plan of 1960, which included projects like the Aswan High Dam, the nationalizations in July 1961, the proclamation of Arab socialism as the official policy of Egypt, and the extension of land reforms in 1961. Nevertheless, the devaluation was an important reminder of a basic weakness in Egyptian economic policy which was to make development grind to a complete halt only a few years later. Therefore it deserves to be looked at in some detail.

THE FOREIGN EXCHANGE CRISIS OF 1962

At the end of 1961 foreign exchange reserves were still comfortably large. Gross reserves were £E136 million and corresponded to half a year's imports plus government payments abroad. Half of the reserve, however, was the sacrosanct gold stock; net reserves had decreased to a mere £E16 million (Table 3-6). Moreover, in view of the cotton crop failure in 1961, a difficult year was known to lie ahead, and during 1962 the drain on the reserves was heavy. Apart from gold, almost no foreign exchange reserve was left at the end of 1962.

Several factors combined to create the foreign exchange crisis described in Chapter 2 (p. 50). Not even the very substantial increase in foreign aid (PL 480 and Soviet aid) that took place during these years could fill the

resulting balance of payments gap. The coincidence of the payments crisis with the nationalizations of 1961 was, however, a fortuitous circumstance.

The government asked for credits from the IMF, and in May 1962 a stabilization program was officially adopted. Credits to an amount of $\pounds E20$ million were extended by the IMF. Domestic interest rates were increased and some belt-tightening was announced. The exchange rate was to be unified and increased from 35.2 to 43.5 piasters per U.S. dollar for all transactions except Suez Canal tolls and students' scholarships abroad. At the same time, the government refused to change the official par rate, which was still unchanged at the 1949 level in the early seventies.

There is little doubt that the government, despite its commitments to the IMF, had no intention whatever to cut down domestic demand; at any rate, domestic demand continued to expand vigorously. The government refused to scale down its investment program; Arab socialism was taken to mean, in addition to the nationalization of big business, increasing wages (according to the interpretations of its ideologist, Ali Sabri), and on top of it all, there were the rapidly increasing defense expenditures related to the Yemen War. The figures in Tables 4-1, 1-3, and 3-5 illustrate the main developments during the years around 1962.

During 1962-63, the fiscal year following the devaluation, the balance of payments continued deteriorating, and during 1963-64 and 1964-65, the deficit on current account remained at a high level, around £E120 million. The driving force in the expansion of domestic demand was clearly public consumption (civil until 1962-63, military thereafter), but gross investments (entirely dominated by government investment projects) were also expanding until 1964-65. Private consumption as a proportion of GDP fell from 1957-58 to 1960-61, but then stayed until 1962-63 at a higher level than in 1960-61. The commodity shortages that began to appear in 1957, characteristic of suppressed inflation, became more and more general. In 1964 people in the big cities were queueing at times for elementary necessities such as rice, fat, and meat. Black markets, too, began to be important for many ordinary commodities. Effective measures to curb domestic demand were not taken until 1964-65; the expansion of investments was stopped, and private consumption started falling in relative as well as absolute terms. Money supply in the private sector shrank slightly in the first year after the devaluation, but, with the strong expansion in the public sector through nationalizations, this tells us little about total demand. Prices, by and large government-controlled, were kept stable through 1963. This constancy, while partly due to index inadequacies,¹ mainly reflects price control. Beginning with 1964, prices were increased at an average rate of around 10 percent per year as part of the government's demand-management policies.

The devaluation of 1962, followed by strongly expansionary domestic demand policies over the next two years, was doomed to be an empty gesture.

TABLE 4-1

Growth Rate of Gross Domestic Product and National Expenditure, 1957–58 to 1963–64

	GDP Growth	Expenditure as Percentage of GDP				
Fiscal Year (July– June)	Rate at Constant Prices (1)	Gross Invest- ment (2)	Public Consump- tion (3)	Private Consump- tion (4)	Total Expendi- ture ^a (5)	
1957–58	5.9	13.8	14.4	75.6	103.8	
1958–59	5.1	14.4	13.8	73.1	101.3	
1959-60	6.8	12.4	14.0	73.3	99.7	
196061	5.5	15.5	16.9	68.8	101.2	
1961-62	3.0 ^b	16.6	17.3	71.7	105.6	
Devaluation						
1962-63	8.0 ^b	17.8	18.9	69.5	106.2	
1963–64	6.4	19.8	22.0	65.5	107.3	

NOTE: Figures for 1957-58 and 1959-60 are not always comparable to later years, but incomparability is relatively insignificant and can be disregarded for the present purpose.

SOURCES: Col. (1): 1957-58 to 1959-60, B. Hansen and G. Marzouk, *Development* and Economic Policy in the U.A.R. (Egypt), 1965, p. 320; 1959-60 to 1963-64, B. Hansen in Vatikiotis, Egypt since the Revolution, p. 31. The figures for 1963-64 differ slightly from those on Table 1-2; they were obtained from a different source.

Cols. (2)-(5): 1957-58 and 1958-59, Hansen and Marzouk, op. cit., p. 322; 1959-60 to 1963-64, B. Hansen, "Economic Development of Egypt," in Charles A. Cooper and Sidney S. Alexander, *Economic Development and Population Growth in the Middle East*, Elsevier, New York, 1972, p. 59. The figures for 1963-64 differ slightly from those in Table 1-2, having been obtained from different sources.

a. The excess of total expenditure over 100 percent equals the foreign trade deficit.

b. The cotton crop failure in 1961 was followed by extraordinary bumper crops in 1962.

To a large extent it codified earlier de facto devaluation undertaken via the exchange premium system introduced in 1957,² but the unification of the exchange rates was a decisively new feature which by itself removed some of the protection enjoyed earlier by some industries highly dependent upon imported raw materials.

THE POSITION OF AGRICULTURE

That the devaluation of 1962 was partly a formal shift from premiums on foreign exchange to higher official rates is only one reason for its small impact on agriculture. More important was the fact that, despite the devalua-

tion, the government did not change the prices on its purchases from agriculture, and little happened to output prices ex farm from 1961 to 1963 and 1964, the years studied here. (The system of government intervention with agricultural prices is described in Chapter 6.)

On the input side developments were rather uneven. Fertilizer prices were, on balance, lowered somewhat, with a substantial price cut for nitrates and a price increase for superphosphate, both under government control. The price cut for nitrates was related to the expansion of domestic capacity, with production on a larger scale in more modern plants, while the increase for superphosphate was apparently in line with the devaluation. Prices for fuel were kept unchanged, and prices for other produced inputs tended to increase.

The result was that domestic value added (DVA^{dom}) —defined as outputs minus traded inputs, evaluated at actual ex-farm prices-on average remained almost unchanged at $\pounds E41$ per cropped feddan for fourteen field crops from 1961 to 1963 (see Table 4-2).³ An increase by about 16 percent from 1963 to 1964 (ten field crops) was mainly due to exceptionally high yields in 1964. For 1965 there was probably a substantial decline, but we do not have the data. DVA^{dom} includes some nontraded inputs, together with wages, rental of land, and returns to capital and management. Despite an increase in rural wages by about 13 percent from 1961 to 1963 and 44 percent from 1961 to 1964, with maximum land rentals, fixed by the government, unchanged, nominal returns to capital and management (on average £E13) almost remained the same from 1961 to 1963, but real returns, deflated by the wage index,⁴ declined somewhat, from £E13.03 in 1961 to £E11.50 in 1963. In 1964 nominal returns increased sharply but real returns remained unchanged. From data on agricultural output prices, input prices, sales proceeds, and costs for 1961, 1963, and 1964, it would be impossible to infer that a devaluation had taken place in 1962.

To analyze the balance of payments deficit, its underlying causes, and possible remedies, we must gauge the competitive position of agriculture in 1961, the year before the devaluation. After all, agriculture was directly responsible for over three quarters of total 1961 exports of commodities and competed with food imports, which amounted to more than 20 percent of total 1961 imports.

Table 4–2 gives the average domestic resource costs, DRC, in piasters per U.S. dollar, for fourteen field crops in 1961 and 1963 and for ten field crops in 1963 and 1964. Domestic resources are defined here as labor, land, capital, and management, and nontraded inputs minus nontraded outputs. Two sets of DRCs were calculated, one excluding and the other including domestic transport costs and trade margins between farm and port.

The remarkable result is that the average DRC for agriculture in 1961 was only slightly lower or higher than the official exchange rate—32.7 or 36.4

TABLE 4–2

Domestic Value Added (DVA), Effective Rate of Protection (ERP), and Domestic Resource Cost (DRC) in Agriculture, 1961, 1963, and 1964

	Fourteen	Field Crops	Ten Field Crops	
	1961	1963	1963	1964
DVA per feddan crop area,				
weighted average (£E)				
at actual ex farm prices,				
DVAdom	41.339	41.033	41.097	47.652
at imputed, international				
prices, DVA ^{int}	41.500	54.731	54.873	63.013
ERP, weighted average (%)	-0.4	-25.1	-25.2	-24.4
DRC, weighted average				
(piasters per U.S. dollar)			-	
excl. domestic trade and				
transport margins	32.9	32.2	32.5	32. 7
incl. domestic trade and				
transport margins	36.4	36.6	36.7	36.9
Official exchange rate				
(piasters per U.S. dollar)	35.2	43.5	43.5	43.5
Surplus to capital and management				
per feddan crop area,				
weighted average ($\pounds E$)				
at actual ex farm prices,				
wages, and official rents	13.028	12.993	12.839	16.029
deflated by rural				
wage index		11.498	11.362	11.131

NOTE: The four crops not included in 1964 are sesame, peanuts, lentils, and chickpeas. These are secondary crops with a combined acreage of about 3 percent of the total acreage for the fourteen crops included in 1961 and 1963. The fourteen crops with their individual ERPs and DRCs are listed in Table 6-4. Since there is no international price for cane, the calculations for sugar include the domestic sugar industry and thus really pertain to refined sugar and cane as an integrated industry. Hence, the field crops include what is usually called the sugar industry. This method of procedure, of course, affects the DVA, ERP, and DRC estimates. Surplus to capital and management in the last two rows, however, only includes surplus in cane cultivation.

SOURCE: Authors' calculations. See Hansen and Nashashibi, "Protection and Competitiveness in Egyptian Agriculture and Industry," NBER Working Paper No. 48, New York, 1975. piasters (depending on how trade and transport margins are treated) against 35.2 piasters per U.S. dollar. And in 1963 the DRC was almost unchanged, at 32.3 or 36.6 piasters alongside the rise in the official rate to 43.5 piasters per U.S. dollar. Thus, there should have been nothing in the agricultural cost situation in 1961 to require devaluation. Indeed, judging from agriculture's "shadow rate" of 32.9–36.4 piasters in 1961, the official rate of 35.2 looks much like an equilbrium rate. In 1964 the shadow rate still seems to have been at the level of the official rate of 35.2, but then yields were abnormally good that year.

We do not think that our estimates of the average DRC for agriculture contain anything (such as incomplete coverage, mainly regarding animal products, or misleading prices) that can explain away this result. (The estimates will be discussed in detail in Chapter 7.) Egyptian agriculture as a whole was a highly competitive industry which, despite some misallocations (Chapter 7), could have withstood the introduction of free trade in 1961 without any change in the official exchange rate; and after the devaluation, it would have been a splendid business in 1963 and 1964 under conditions of free trade.

We want to point out, however, that the choice of exchange rate is of limited importance for agriculture as a whole in a less developed country, where at least two major primary factors—land and labor, together responsible for more than 80 percent of value added—have prices that tend to adjust passively to output prices and marginal productivity values, so that agriculture tends to become "normally" profitable whatever the sales prices are. Carried to its logical conclusion this consideration implies that no exchange rate problem ever exists as far as primitive agriculture is concerned.

Table 4-2 also shows that the average effective rate of protection, ERP, was slightly negative, at -0.4, in 1961 and developed into a much more substantially negative number, -25.1, by 1963. In 1964 it was about the same as in 1963. The reason is partly the 1962 devaluation, combined with relatively constant domestic prices for traded outputs and inputs; but there were also very sizable world price increases for three important commodities—cotton, rice, and sugar—and, in 1964, very high yields. Despite the strong increase in negative protection, actual returns to capital and management remained a good deal above normal: £E13 per cropped feddan against a normal of perhaps about £E7 in 1961 and £E16 against about £E10 in 1964. Even with trade and transport margins included in the domestic farm price, returns to capital and management probably remained above normal, but tended to fall in real terms.

THE EFFECTS ON MANUFACTURING

After 1962 profits in manufacturing experienced a terrible squeeze between increasing raw materials costs (related to both the devaluation and the government's cotton price policies) and increasing wage costs, on the one hand, and the government's reluctance to increase controlled domestic prices, on the other. Table 4–3 reproduces the available facts.

Unfortunately, detailed information about manufacturing is only available at current prices. A comparison of gross domestic product in total manufacturing industry at constant 1959-60 prices and an index of labor input (hours) in establishments with over ten employees (row 1) points to largely unchanged labor (hourly) productivity (row 2) from 1960 to 1964-65. Assuming productivity per hour to have been approximately constant, indexes of output values and input values per hour tend to be price indexes for outputs and inputs. On this assumption, Table 4-3 (rows 3 to 7) shows the developments from 1960 to 1965-66 of output price, raw materials and fuel prices, gross value added, gross profits, and wage costs, all per unit of output and input. The table also gives the shares of raw materials and fuel costs, gross profits, and wages in output value, and the shares of gross profits and wages in gross value added. Until 1962 manufacturing industry was generally fairly profitable-at the actually ruling domestic prices and wages and given the protection it enjoyed. Productivity per hour seems to have increased by some 4 percent per year from 1952 to 1960,⁵ and 1961 does not show much of a departure from this trend. The share of profits in gross value added increased from 60 percent in 1952 to 68 percent in 1960, and inched up further during the next two years to reach a peak of 71 percent in 1962. The share of gross profits in output value reached a high of 26 percent in 1962, with the corresponding share of net profits at 22 percent. At a capital-to-gross output ratio of 3, this would result in a net profit of 7 to 8 percent on capital, which is a bit low, considering the costs of capital in the country, but compares well with many other less developed countries.

From 1962 to 1963-64, however, profitability declined radically. The share of gross profits in value added fell from 71 to 40 percent (measured on the basis of output value, from 26 to 9 percent). In terms of net profit on capital this development implies a fall from 7 or 8 to only 1 or 2 percent. Not until 1965-66 did profits begin to recover.

The decline in profits from 1962 to 1963-64 was the result of increases of 35 percent in raw materials and fuel prices (costs per hour) and of 42 percent in gross wage costs (per hour), accompanied by an only modest increase of 12 percent in output prices (output value per hour).

From 1957 to 1962 the prices of raw materials and fuel (costs per hour)

Outputs, Inputs, and Profits in Manufacturing Industry, **TABLE 4–3**

		1960 to 1965–66	965-66			
	1960	1961	1962	1963-64	1964-65	1965–66
Labor input						
(hours)	-					
(1960 = 100)	100	106	124	130	140ª	149ª
Labor productivity						
(output per hour)						
(1960 = 100)	100	103	96	105	102	n.a.
Output value						
(per hour)						
(1960 = 100)	100	105	108	121	125	140
Raw materials and fuel	100	101	100	135	140	154
Gross value added	100	114	129	89	92	109
Gross profits	100	117	133	. 53	52	72
Wages	100	107	119	169	178	187 、
Share of output value						
(percent)						
Raw materials and fuel	69	66	63	77	77	76
Gross profits	21	24	26	6	6	11
Wages	10	10	11	14	14	13
Share of gross value added						
(percent)						
Gross profits	68	70	71	40	38	45
Wages	32	30	29	60	62	55
Social security						
contribution	2-3	а С	3-5	10	12	15

. .

1960 to 1965-66

in 1960 and 10-17 percent in 1961 and 1962. The employer contribution was fixed by law at 10.1 percent as of NoTE: Data cover establishments with over ten workers. Wages seem to include social security contributions for all years, while profits probably include workers' share in profits after 1962. The percentage of social security contributions in total wages, actually paid, was 17 percent in 1963-64, 19 percent in 1964-65, and 28 percent in 1965-66. For years before 1963-64 no figures have been published, but they may have been around 5-10 percent 1959 and at 17 percent as of 1961, but before the nationalizations there was probably substantial evasion.

the figures in column 2. Apart from 1963-64 and 64-65, this series corresponds closely to the wage costs series in The following consideration corroborates the data given above. From special wage censuses the hourly earnings per week are known (see ILO, Yearbook). Adjusted for hours per week, the earnings per hour are as shown in col. 1 of the table below. Adjusting these figures for social security contributions with 5 percent for 1960, 10 percent for 1961, 17 percent for 1962 and 1963-64, 19 percent for 1964-65, and 28 percent for 1965-66, we obtain Table 4-3, row 7.

	Not Adjusted	Adjusted for Social Security Contributions
	(1960=100) (1)	(1960=100) (2)
1960	100	100
1961	101	103
1962	112	118
1963-64	124	. 140
1964–65	133	155
1965–66	152	184

Hourly Earnings in Manufacturing

Sources: ILO, Yearbook: hours per week; Economic Bulletin, No. 2, 1970: Number of employees, value of output, wages and raw materials; Bent Hansen, "Planning and Economic Growth in the U.A.R. (Egypt), 1960a. For 1965-66 there is a peculiar increase in hours per week which, considering legislation and development 65," in P. J. Vatikiotis, ed., Egypt since the Revolution, London, 1968: GDP at fixed 1959-60 prices, by industry.

of production, simply does not make sense. We have assumed unchanged hours per week from 1964-65 to 1965-66.

remained virtually unchanged, but from 1956 to 1957 they went up 19 percent. It would seem, therefore, that the premium system, described in Chapter 2, had its major impact on raw materials and fuel costs already in 1957. Profits at that time were not allowed to suffer; at a 14 percent increase in output value per hour (implying a 10 percent increase in output price per unit at a productivity increase of 4 percent), profits remained unchanged, practically speaking, from 1956 to 1957. From 1960 to 1962 there was a certain rise in output price (value per hour), exclusively reflecting increases in both gross wages and profits (particularly the latter) per unit.

Clearly, of the 35 percent increase (per man-hour) in raw materials and fuel costs from 1962 to 1963-64, only a minor part can be explained by the devaluation of 1962. If the total devaluation for imports from 1956 to 1962 was about 22 percent (see Table 3-3), and a 2 percent appreciation was accomplished by 1956, that makes about 25 percent from 1947 to 1962. Thus, if users of imported raw materials were not refunded *all* premiums, etcetera, it stands to reason that the devaluation may have meant a maximum rise in imported raw materials prices of about 20 percent, if all raw materials were imported. A large part of the 35 percent increase in raw materials and fuel costs must therefore be ascribed to higher prices for domestic raw materials and fuel. It would seem that the change in the government's cotton price policy (see Chapter 3, pp. 55 and 85)—from subsidizing (through export taxation) to taxing (through export premium) domestic cotton consumption—can explain much of the discrepancy.

The uptrend in wage costs was partly the outcome of the government's employment policy and partly the result of government-decreed increases in wage rates and social security contributions. The normal workweek in large enterprises was cut from 48 to 42 hours around 1962, and there was a drive for expanding employment in 1962 and 1963, which probably led to overstaffing. Since the reduction in hours was to leave weekly wages unaffected, it implied a rise in hourly wages by some 15 percent in the enterprises involved. At the same time, the statutory minimum wage for industry was increased, paid holidays, sick leave, and other fringe benefits were introduced, and a new system of wage grading brought a further increase in average wage rates. Social security contributions, to be paid by employers, were increased substantially. (They are included in wage costs in Table 4-3 and deducted from profits.) Since they were largely paid to social security funds and little was distributed as benefits, part of the wage rise and profit fall was only nominal (see note to Table 4-3) in the sense that both profits and social security contributions accrued to the public sector. But, even so, the increase in wages and the decline in profits were very substantial.

For a privately run industry these developments would, presumably, have led to a decline in both current production and investments. For a nationalized industry, however, such consequences do not follow automatically. As it happened, the main impact was on domestic savings. Public savings (including both nationalized business profits and social security fund accumulations) fell sharply; private savings must have increased, but it is impossible to trace their movements.

The information contained in Table 4–3 does not help in evaluating the competitiveness of manufacturing industry before and after the devaluation in terms of domestic resource costs, DRCs, or in any other absolute sense. But it certainly suggests a deterioration in the competitive position of industry during the year of devaluation. The detailed industry studies reported in Part Three, generally corroborate this impression, although individual industries exhibit widely divergent developments in regard to competitiveness. In Table 4–4 we have brought together the fragmentary information available about DRCs in selected manufacturing industries before and after the devaluation. (For details, see Part Three.) Note that Table 4–4 includes only a minor part of total manufacturing; for example, certain new high-cost industries are not included.

Three industries—phosphates, nitrates, and tires and tubes—show unchanged or even declining DRCs during the years straddling the devaluation. Note, however, that all three of them were characterized at that time by the introduction of important technological innovations sufficient to wipe out the adverse effects of cost inflation and unification of the exchange rate (the latter being particularly important for the tires and tubes industry, with its high import content). Although the cement industry experienced a slight rise in its DRC, it remained highly competitive even at the old official exchange rate. There were no major technological improvements in this industry, but capacity utilization increased substantially while wage increases were, for some reason, relatively modest.

The cement, phosphates, nitrates, and tires and tubes industries are exceptions, however; they contribute only a minor part of total value added in manufacturing industry. In the big old industries—sugar and cotton textiles—which are probably more representative of manufacturing as a whole, the picture is drab, corresponding to the impression given by Table 4–3. The sugar industry was particularly hard hit by wage increases, since wages in rural areas, where the sugar factories are situated, increased much faster than urban industrial wages during the period under consideration. It should be added that the sharp upturn in rural wages was not by government design, but reflected, rather, a strong demand for rural manpower for public works as well as military conscription. The textile industry also suffered badly from cost inflation, and there was little innovation in this industry to offset the effects of rising wages. In fact, during a period when most developed countries and some less developed countries reorganized and modernized their textile

TABLE 4-4

Domestic Resource Costs (DRCs) in Selected Manufacturing Industries . before and after the Devaluation of 1962

Industry	Before 1962	After 1962
Cement	28	31
Fertilizers		
Phosphates	36	33
Nitrates	61	52
Sugar	34	54
Tires and tubes	59	59
Cotton textiles		
on actual domestic raw materials base	56	80
on hypothetical foreign raw materials base	38	54
Weighted average	•	
on actual domestic raw materials base	46	58
on hypothetical foreign raw materials base	37	50
Official exchange rate	35.2	43.5
"Realistic" exchange rate suggested by IMF, 1966		61

(piasters per U.S. dollar)

NOTE: "Before" and "after" 1962 refers to the following years: cement, 1960 versus 1965-66; phosphates, 1957 versus 1964-65; nitrates, 1957 versus 1964-65; sugar, 1960 versus 1970 (based on long-term prices); tires, 1960 versus 1962-63; and textiles, 1960 versus 1970.

The averages were weighted by DVA at international prices for the years in question.

SOURCE: Authors' calculations; see Hansen and Nashashibi, NBER Working Paper No. 48, 1975, and Chapter 10 of this volume, Table 10-2. The rate of return on capital is assumed to be 10 percent.

industries, Egypt's first five-year plan seems to have positively neglected textiles—hence the strong increase in the DRC. The level of competitiveness of the textile industry depends, however, entirely upon the source of its primary raw material, cotton. Since 1916 the industry has been compelled to use domestic cotton as input, and imports of foreign cotton have been banned, which means producing fairly coarse yarns from relatively expensive medium staple cotton in lieu of cheap short staple cotton. With the actual domestic cotton input, the DRC was 56 piasters in 1960; with foreign cotton as input it would have been only 38 piasters. In the second half of the sixties the corresponding figures were 80 and 54 piasters, respectively.

As a consequence of showing two DRCs for textiles we also present two weighted averages of DRCs for the industries included in Table 4-4. On either basis, the increase in the average DRC exceeds the devaluation of 1962

so that, to break even at international prices, manufacturing industry was even more in need of protection or, alternatively, of devaluation after 1962 than before. It should be emphasized that our unrepresentative sample of industries probably gives too much weight to the "good" industries. Moreover, it should be recalled that in equilibrium it is not the average but the marginal industry that rules the roost. The equilibrium exchange rate must permit the least efficient industry that has to survive for the sake of full utilization of resources or maximization of production to do so. It is difficult to say which industries should actually survive in the long run, but let us assume that the industries included in Table 4-4 should, in fact, continue to exist. The implication would obviously be that before the devaluation of 1962, a "realistic" exchange rate would have been about 60 piasters per U.S. dollar, as compared with the official rate of 35.2. From the mid-sixties on, a "realistic" rate might even have exceeded 80 piasters, against an official rate of 43.5. And that was at a time when the IMF's suggestion of a rate of 61 put Nasser into paroxysms and made his cabinet resign.

Had the government been bold enough to shift the raw materials basis of the textile industry to cheap foreign cotton, the picture would have looked much better. Before 1962 a rate of about 60 piasters would still have been needed, not for the sake of textiles but to permit the nitrogenous fertilizer and tire industries to break even at international prices; and after 1962 the same rate would have sufficed to make all industries break even. Thus, with a sharper devaluation in 1962, combined with a shift in the raw materials basis of the textile industry, the government probably could have, in one stroke, put manufacturing industry on a permanently competitive footing despite the actual cost inflation and other factors detrimental to industrial efficiency.

GENERAL APPRAISAL OF THE DEVALUATION OF 1962

The devaluation of 1962 is an example of exceptionally badly designed and badly coordinated economic policies. Politically, this was the outcome of partly unrelated independent forces: the government's firm determination to carry through simultaneously both its investment programs and its military policies; the ideologists' determination to demonstrate to the workers the benefits of Arab socialism; and the IMF's equally firm determination to impose upon the country a stabilization program the execution of which the IMF could control only in its outward manifestations of a devaluation with unification of the exchange rates.

This is clearly a situation in which it makes sense to discuss costs and demand aspects separately, since higher wage costs were imposed upon the enterprises by decree and were not the result of endogenous forces in the econ-

omy. It is true that rural wages were pulled up strongly in 1963 and 1964 because of increasing public expenditure; but this happened largely after the devaluation of 1962 and could have been avoided had the devaluation been accompanied by adequate demand management.

Thus, the first question is whether a devaluation would have been required beyond the average level corresponding to the premiums introduced during the years 1957 to 1961, assuming that the cost inflation had been avoided and that export industries and those industries competing with imports should break even under free trade.

We answered this question to some extent in the preceding two sections. The general agricultural cost position in 1961 did not require further devaluation (see Table 4-2). From the more detailed analysis in Chapter 7 (see Table 7-1) it will be noted that the traditional export crops were heavily taxed but highly competitive at the official exchange rate of 35.2 piasters, while some important import-competing crops, particularly autumn corn, wheat, and beans, enjoyed substantial protection. But this is not really a problem. For if agriculture had been exposed to free trade at the official exchange rate at that time, one out of two possibilities would have materialized: Had substitution between crops been substantial, a shift in crop composition toward the more profitable export crops or other import-competing crops would have taken place, and that could only have improved the balance of payments situation. Had, on the other hand, rigidities in crop rotation made substitution between crops negligible, cultivation of wheat and beans would have largely continued, although income from these crops would have been low (Table 7-7). These crops are to some extent subsistence crops (particularly for those tenants who would experience losses in money terms). There is no reason to believe that land would be taken out of cultivation or left fallow during the winter season because of low profitability for these crops. And as for corn, a rapid shift was taking place from autumn corn to the more profitable summer corn at that time. In any case, the cost position of agriculture is of limited consequence because rural wages and land rentals (without controls) are highly flexible and tend to adjust to a competitive situation.

We have also seen that in manufacturing, even before the cost inflation had made itself felt, important industries were in need of a sizable devaluation if they were to break even at international prices. Even if the nitrogenous fertilizer industry and the tire industry were considered infant industries, and one assumed that the government had indeed been prepared to take the bold step of shifting the raw materials base of the textile industry, a devaluation on the order of the one that actually did take place in 1962 appears to have been a minimum necessity. The conclusion is inescapable that, to make a sufficient number of export industries, together with the import-competing industries, competitive before the advent of the cost inflation, a substantial devaluation would have been required, perhaps to the level of 50 piasters per

U.S. dollar. This is in line with our earlier contention (see Chapter 3, p. 68) that the Egyptian pound was overvalued since the inflation of World War II.

If a devaluation of that order of magnitude was needed to make the marginal industries break even before the cost inflation, it goes without saying that the actual devaluation of 1962 was entirely insufficient after the cost inflation. Our calculations in the preceding section pointed to an exchange rate of about 80 piasters as a realistic rate from the cost point of view (disregarding the possibilities of a shift in the raw materials base of the textile industry). At such rates, agriculture would have been extremely profitable, but an adjustment of agricultural output and input prices would have mainly served to bring rural wages and land rentals (if rent controls had been abolished) into line with the higher price level; real wages in both agriculture and industry would have returned by and large to their starting point in 1961. If the government, in the event of a further devaluation, had continued its policy of keeping agricultural output and input prices (ex farm) unchanged, a sizable shift would have taken place in the terms of trade between agricultural and industrial products in favor of the latter. Such a policy would have been in line with the exploitation of agriculture which was preached by some development economists, was practiced by the Soviet Union for long periods of timeand actually took place in Egypt to some extent during the years to follow. Quite apart from the question of the wisdom of this kind of policy, from both development and equity points of view, it is doubtful whether it would have proved at all feasible in the longer run. Wages in agriculture might sooner or later have been pulled up to the level of industrial wages, and, with a policy of keeping agriculture profitable, it would have been necessary to adjust the level of agricultural prices upward in line with the devaluation.

The cost situation, however, was only one aspect of the exchange rate problem. Macroeconomic effects via demand should, of course, be considered, too. It might be argued that in the complete absence at that time of rational demand management policies—defined as policies that keep total domestic demand within the limit set by domestic production *plus* whatever loans could and should be obtained from abroad—the question of the demand effects of the devaluation remains a rather academic issue. We shall discuss it, nevertheless, as part of the more general question, What is the place, if any, of exchange rate policies in a country where government controls and decisions predominate in production, investments, prices, and trade?

DEVALUATION IN A CONTROLLED ECONOMY

A completely controlled economy should, in principle, have no need for an exchange rate policy. An exchange rate must exist, of course, to translate foreign prices into domestic ones and vice versa. Production (and consump-

tion) commands could, however, be used (in principle) for achieving efficiency in the economy. And if a command economy were not thought feasible or desirable, controlled prices could (in principle) be manipulated so as to provide the necessary incentives or disincentives to production and consumption in the spirit of market socialism. The present Egyptian economic system, however, is a mixed one in all respects. Its command over prices is far from complete and effective. Politically, the government has never been sufficiently strong to lower industry wages and is probably not strong enough to let wages, rents, and profits fall significantly in agriculture, either, although factor prices in agriculture are certainly flexible downward. For political reasons, therefore, factor prices can be regulated downward only under very exceptional circumstances (such as the outbreak of the 1967 war, when salaries of civil servants were slashed ruthlessly). This means that, if reduction of domestic resource costs is felt to be necessary in relation to the price of foreign exchange, the latter will have to be adjusted upward. The political arithmetic of publicly administered prices is like that.

As already mentioned, the Egyptian government did not feel any need for devaluing in 1962. Whatever discrepancies did exist between foreign prices (at the old exchange rate adjusted for premia) and domestic prices were filled in by subsidies and taxes on exports and imports (including public enterprise and organization profit or loss margins). At completely unchanged domestic prices, these taxes and subsidies would have needed adjustment in. line with a devaluation, but that would have been purely a bookkeeping matter within the public sector. Any increase that the Central Bank might have charged import organizations (public enterprises) on their purchases of foreign exchange would have been paid back as a subsidy to the importer, while, correspondingly, exporters would have had their higher earnings in Egyptian pounds automatically taxed away. In this way a devaluation as such need have had no effects whatever on domestic demand and could have appeared a completely empty gesture.

In the 1962 devaluation, however, the government did take the opportunity to let the higher foreign exchange rate be passed on to some domestic prices.⁶ To the extent that import prices for consumer goods were passed on to consumers (which was actually the case for the few nonessentials that were still imported) and that higher prices for imported raw materials were passed on to domestic users (consumers or producers) via higher domestic prices for outputs from Egyptian manufacturing industry, government revenue would increase and a corresponding curb on domestic demand would be imposed. None of the higher export earnings in Egyptian pounds were passed on to agriculture, and for manufactured products and oil, increased profits would accrue to the public sector. For capital goods the devaluation probably did not mean any decline in demand. For all practical purposes, all investment

requiring imports of capital goods was public investment, which, once decided upon, always got the financing needed to cover costs; and there is nothing to indicate that the government was led to diminish the rate of investment because imported capital goods became more expensive in terms of Egyptian pounds.

It is not possible to assess the extent to which anti-inflationary demand restraint was actually accomplished through the devaluation and the subsequent rise in some prices. The simultaneous increase in industrial wages and squeeze on profits in manufacturing industry make it conceptually impossible to gauge how much of the approximately 15 percent price increase for manufactured output from 1961 to 1963-64 was due to higher prices of imported raw materials. But it is probably fair to say that the possible anti-inflationary impact must have been insignificant. The effects of the devaluation were, by and large, delayed till 1964 and 1965, when the government, faced with a severe foreign payments and credit crisis, finally began to take steps to rectify the domestic demand situation. The domestic price increases which were then decided upon, however, could just as well have been made without the devaluation-through diminished subsidies, increased taxes, higher sales prices from public enterprises, and higher purchasing prices for agricultural products. It would therefore seem that in a system like that of Egypt, the role of devaluation was mainly to reduce the tax increase that would otherwise have been necessary. It may have had a certain beneficial effect through simplifying the administration of such taxes, but from the more general point of view of resource allocation and productive efficiency it was of no consequence, since domestic prices and imports remained controlled by the government as before and income distribution effects continued to be its major consideration.

The inevitable conclusion is that, if a country is not prepared to let the price mechanism play a dominating role in the economy in general, foreign exchange rate policies cannot possibly have any important role to play, either; efforts from the outside—for example, from the IMF, the World Bank, or a consortium—to impose exchange rate adjustments upon the country make little sense without forcing the country to make more use of the price mechanism and market forces. Whether a change in this direction is good or bad for the country against the background of the authorities' ability to handle their controls, the possible imperfections of the market forces, and the whole setup of the policy makers' economic and social targets is a complex matter on which the following chapters will have more to say.

NOTES

1. Certain noncontrolled prices, not appearing in the indexes, did increase, and for some commodities black market prices were important.

2. In fairness to the IMF staff, it is understood that it had suggested at the time a higher devaluation to a rate of \$2 per Egyptian pound. The effective depreciation in May 1962 would have thus been 26 percent instead of the 6 percent actually attained.

3. For the sake of comparability, it has been assumed in the estimation that cotton yield for 1961 was the same as in 1960. Otherwise, the cotton failure of 1961 would have lowered the average for 1961 substantially.

4. Farm labor is the major alternative source of income for small peasants.

5. B. Hansen and G. A. Marzouk, *Development and Economic Policy in the U.A.R.* (*Egypt*), Amsterdam, 1965, p. 143. Unfortunately, the quality of data concerning manufacturing industry deteriorates rapidly as we go backward in time (partly due to more and more incomplete coverage).

6. In discussing the devaluation we include not only the effects of the formal devaluation but also that of the strong increase in the premium that took place shortly before the formal devaluation. See the discussion of foreign exchange policy targets in Chapter 3.