

Israel: economists in a new state

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I. *Historical Survey, or How Economists Came to be Employed in the Israel Government*

1. *Economists in the public sector before 1948*

Government economists are a fairly new species in Israel. The British administration which ruled the country before the establishment of the State of Israel in May 1948 pursued a rather passive economic policy. Government budgets were small, amounting to less than one tenth of national income, and were usually balanced.¹ The revenue system was based on customs, excises, and fees, and dictated the level of expenditure. The currency, pegged to the pound sterling, was fully convertible. In the absence of a central bank—currency was issued by a Currency Board situated in London—there was no place for monetary management. Most of the government's modest requirements for economic expertise were provided by the central colonial machinery of the British Empire and by an English bank which served as its financial agent. The few posts of economic management in the local administration were staffed mainly by Englishmen who were not necessarily economists. Even the more active policies required by World War II were to a great extent formulated by outside bodies, such as the Cairo-located Middle East Supply Center, and carried out with the help of personnel drafted from outside the country.

The governmental machinery of Israel evolved out of the Jewish communal institutions, which enjoyed a certain amount of semi-autonomy before 1948: the Jewish Agency, which represented the Zionist movement; the National Council of Palestinian Jews; and the centralistic labor union, the Histadrut. Though these bodies dealt with many economic matters, they did so mainly on the micro level. In the spheres where they fulfilled governmental functions, it was the relevant specialists—education, public-health, or agricultural experts—

1. For the economic role of the government under the Mandate, see A. L. Gaathon (Gruenbaum), *National Income and Outlay in Palestine, 1936* (Jerusalem, Bank of Israel, 1978). This is a reprint of the 1941 edition, with the addition of the originally unpublished parts and of critical comments. Also R. Nathan, O. Gass, and D. Creamer, *Palestine: Promise and Problem* (Washington, D.C., 1946).

rather than economists, whose opinions were sought. They employed economists for the preparation of macroeconomic forecasts and development plans, which, for the lack of executive powers, were used mainly to support political arguments and negotiations.²

The business sector, except for Histadrut-owned enterprises, consisted mainly of small, family-owned and -run firms. It followed from the government's non-interventionist attitude that insofar as this sector employed economists, their work was, again, on the micro, business-administration level.

As was then the case of all academic professions, most economists were immigrants who received their training abroad, mainly in continental Europe. At the Hebrew University of Jerusalem economics was taught only within the broader framework of Middle-East Social Studies; some evening courses, leading to a diploma, were offered by a 'School of Law and Economics,' the forerunner of Tel-Aviv University. Given this background it is not surprising that, with some notable exceptions, professional economists tended to represent the historical or institutional rather than the analytical approach to their subject. Furthermore, economics was not really a recognized profession, requiring a defined academic training. General experience in business and finance was considered to be not only a sufficient but even the preferable qualification for posts which would nowadays be occupied by trained economists.³

2. *The changed role of government and the demand for economists after independence*

The position of economists in government, and ultimately also in the private sector, underwent a rapid transformation with the establish-

2. E.g. the sections dealing with economic matters in the material submitted by the Jewish Agency for Palestine to the Anglo-American and the U.N. Committees nominated to inquire into the Palestine question: *The Jewish Case Before the Anglo-American Committee* (Jerusalem, 1946) and *The Jewish Plan for Palestine* (Jerusalem, 1947). As has been recently shown by Metzger, these institutions paid considerable attention to broad policy questions, such as that of the role of public versus private investment and ownership. J. Metzger, *National Capital for a National Home 1919-1921* (Hebrew; Jerusalem, 1979). But they viewed them, rightly, as first and foremost political decisions, to be settled on broad political principles rather than on technical economic considerations. On the role of economists in this period, see also A. L. Gaathon, "Problems of Development of an Economist," *Economic Quarterly* (Hebrew) 77 (April 1973): 58-68.

3. This was especially true of Histadrut-operated enterprises. The men who founded and ran them constituted a very special entrepreneurial-managerial type; they were neither capitalist entrepreneurs (in the sense that they were not profit-motivated) nor bureaucrats. See E. Kleiman, "From Cooperative to Industrial Empire," *Midstream* 1964, pp. 15-26; and "Solel-Boneh as Seen by Hillel Dan," *Economic Quarterly* (Hebrew), 1964, 41-42, pp. 170-83.

ment of the State. This was the outcome of a number of factors, operating on both the demand and supply sides of the market for economists. A whole government machinery had to be set up, not only to replace the local British administration, but also to deal with problems which used to lie outside the responsibility of the latter, like monetary management and exchange control. The absorption of the mass immigration which followed the declaration of independence—the population was doubled within three years—and the heavy defense burden imposed by the hostility of the neighboring states, required public spending on a scale hitherto unprecedented in the country. Relatively to national income, government expenditures rose rapidly to over 40 percent, three to four times as high as the expenditures of the British administration under the Mandate.⁴ Furthermore, the Israel government was committed from the beginning to a highly interventionist economic policy. This was, in part, made unavoidable by the strains which mass immigration imposed on the economy: the necessity of providing the immigrants with some minimal nutrition and housing, and the unavailability of foreign exchange to pay for the country's increased import requirements. But direct interventionism reflected also the ideology of the Labor Party, which was to rule the country for nearly three decades, regarding both the economic role of government and the choice of its policy instruments.⁵

Table 1 provides some indicators of the *quantitative* aspects of the government's role in the Israel economy in its early years. Government expenditures, measured in real terms, increased nearly fivefold within the first ten years, doubling again in the following five. By 1964 they were ten times as high as in 1949. In the main, this reflected the rapid growth of the economy, made possible by a high rate of investment. Investment amounted to nearly a quarter of the GNP in the decade 1950–1959, more than half of it being financed by the public sector. Coupled with the *qualitative* changes—the increase in responsibilities with sovereignty, and the government's predilection for direct inter-

4. In the absence of reliable GNP or national income data for 1948–49, the figure quoted in the text is the average of the annual ratios in 1950–53, expressed relatively to national income for comparability with pre-1948 figures. The latter do not include the expenditures of the Jewish institutions, which supplemented the government in education, health, and development. However, it has been estimated that the ratio of all 'governmental' outlays to income in the Jewish sector of Palestine rarely exceeded 20 percent. N. Gross and J. Metzger, "Public Finance in the Jewish Economy in Interwar Palestine," *Research in Economic History*, III, pp. 87–159. On the other hand, some of the costs of the absorption of the mass immigration after 1948 was borne by non-governmental agencies, such as the Jewish Agency.

5. For a critical description of the interventionist policies pursued in Israel in the State's first decade, see A. Rubner, *The Economy of Israel: A Critical Account of the First Ten Years* (London, 1960).

Table 1. The growth of government activity, 1950–1964

Year	Govt. outlays in real terms ^a (1949 = 100)	Govt. outlays as % of GNP	Net investment as % of GNP	Govt. share of fixed investment ^b
	(1)	(2)	(3)	(4)
1950	165	30.5	27.3	42 ^c
1952	166	26.6	27.5	49
1954	307	40.0	21.3	81
1956	366	36.2	20.6	52
1958	476	38.9	21.3	53
1960	597	39.6	19.6	53
1962	822	45.3	23.7	41
1964	1,008		23.8	39

^a Based on estimates of total government revenues from all sources, valued in constant 1955 prices.

^b Investment financed by central government, local authorities, and the 'national institutions,' and by corporations they owned or controlled.

^c Direct government investment only.

Sources: Columns (1) and (2)—Morag, *Government Finance in Israel*, Tables B-3 and B-4. The 1964 figures are calculated from Bank of Israel, *Annual Report 1964*, Table VII-3. Columns (3) and (4)—Halevi and Klinov-Malul, *The Economic Development of Israel*, Tables 32 and 70.

vention—these developments necessitated economic decisionmaking on a completely different scale from that required of both the Mandatory administration and the Jewish communal institutions in pre-independence days.

To staff the young State's civil service, the government had to draw upon all available sources of administrative experience: officials of the Jewish institutions and of the former administration, functionaries of political parties, managers of financial institutions and of trade union enterprises, and members of the private business community. Given the emergency conditions under which the whole governmental machinery was set up, and the accompanying enthusiasm, it is not surprising that the whole process resembled in many respects that experienced in some other countries in the early days of World War II. Service for the new government carried with it initially considerable social prestige as well as opportunities for political and personal patronage.⁶ Nevertheless, in the economic sphere at least, there was a considerable lack of suitable personnel. Pre-independence Palestine

6. A popular song of the period told of the man "who had a cousin in the Kirya (seat of government offices then) and, nevertheless, behaved like any other ordinary man."

abounded in holders of university degrees who had to abandon their former occupations upon immigration. Many of them were drafted into the new civil service.⁷ But theirs was usually a legal or general arts education, and few of them were economists.

Under these circumstances, the government tried to unburden itself of some of its functions by farming them out to existing financial institutions. It entrusted the issuing of currency to a commercial bank.⁸ It tried to use the services of existing investment banks in allocating investment funds from its development budget. But the government's interventionist attitude resulted in the function of such outside bodies becoming very soon restricted to the purely technical carrying out of governmental orders.

In its search for economic expertise the government turned also to seek advice abroad. The list of foreign economists consulted included such luminaries as M. Kalecki, J. Mossak and H. D. White, but their opinions were often disregarded as not suiting local conditions. More successful was the establishment, in 1952, of an Economic Advisory Staff outside the regular governmental bureaucracy. Headed by Oscar Gass, formerly the Jewish Agency's economic adviser in the United States, the E.A.S. managed to recruit some top level experts from abroad, and included among its members Abba P. Lerner and M. M. Clawson, the well-known agricultural expert, as well as A. L. Gaathon, the doyen of Israel economists. A number of young economists, either newly migrated from Western countries or recently graduating in Israel, served their apprenticeships on its supporting staff. The E.A.S. had considerable influence both on current decisions and on professional standards. (Its most lasting effect, perhaps, was in the sphere of investment project evaluation, where it seems to have foreshadowed some later theoretical developments in the field.) But the government found the E.A.S.'s independence inconvenient and did not renew its contract after 1955. In the meantime, however, changes on the supply side started to be felt in the government employment of economists.

7. Out of the 75 top Treasury officials listed in the *Israel Government Yearbook* for the year 5711 (1950–51), no fewer than 19 had 'Dr.' displayed before their names. In the Ministry of Trade and Industry the proportion was even higher—18 out of 35! This reflected both the continental addition to titles and the custom of many continental universities of not granting any degree lower than the Ph.D.

8. This bank was, however, a semi-public institution. Founded by the Zionist Organization at the turn of the century, it was by far the biggest bank in the country, and was widely expected at the time to become Israel's Central Bank after independence. The Bank of Israel was not established until late in 1954. See E. Kleiman, "The Anglo-Palestine Bank and the Establishment of Israel's Monetary System," Part III, in N. Gross, N. Halevi, E. Kleiman, and M. Sarnat, *Banker to a Renascent National* (Hebrew; Tel-Aviv, 1977), pp. 203–93; and N. Halevi et al., *Banker to an Emerging Nation*.

3. *The supply side*

The termination of the period of strife culminating in the 1948 War of Independence gave a great impetus to the development of tertiary education in Israel. Until then, undertakings of high national priority—military service in World War II, underground activity, and agricultural settlement—attracted considerable numbers of high school graduates. Released from service, the national goals now seemingly attained with independence, many of them turned to higher studies. The combined result of this pent-up supply and of the increased demand for university graduates reflected itself in a rapid increase in the number of university students. Between the spring of 1949, when hostilities ended and studies at the University were resumed, and the end of 1952 the number of students more than doubled. By 1957/58, when other universities started operation, the number of students at the Hebrew University was more than four and a half times as high as in 1949—nearly twice the growth rate of the country's population as a whole. Both the number of students and that of degrees granted nearly doubled again in the next three years.⁹

The University responded to this increased demand by introducing a three-year bachelor's degree, turning the master's degree to which students until then used to proceed directly into a two-year second degree, and by a rapid expansion of faculty and the introduction of new fields of study. Many of the new staff were recruited abroad, among Zionists to whom the establishment of the state added a further stimulus for immigration to Israel. Among them was a 27-year-old former Assistant Professor at the University of Chicago, who initiated a study program in economics along the lines accepted in English-speaking countries. The intellectual elegance and nearly mathematical precision of the new subject held considerable appeal for the day's students, who had the war veteran's abhorrence of highfalutin phrases and fuzzy thinking. An outstanding teacher, the new lecturer soon attracted a strong group of students, who upon their entrance into government service came to be known as the 'Patinkin boys.'

9. The following data on graduates from the Hebrew University in Jerusalem are derived from the *Israel Statistical Abstract* and the files of the University's Economics Department:

	Total	Economics
1950–51	46	2
1955–56	152	29
1960–61	591	49

The 1960–61 figures include graduates from the Tel-Aviv School of Law and Economics.

4. *The 'new economists' enter the government*

To finance the absorption of mass immigration, the government resorted initially to the printing press. But price controls, and the elaborate system of rationing set up to sustain them, could not withstand for long the mounting inflationary pressures. Under the 'New Economic Policy' announced early in 1952, inflationary financing was curtailed, prices were raised to wipe out the public's excess purchasing power, and—as implied by the allusion to Lenin's N.E.P.—the economy was to be gradually liberalized. This reversal of policy required a much tighter control of government budgets, and consequently also a more thorough budgetary planning, than was the case until then. In autumn 1952 a separate budgets department was established in the Ministry of Finance, which took over the preparation of the budget from the office of the Accountant General. To head the new department, soon to be elevated into one of the ministry's four major divisions,¹⁰ the government chose a Dutch-trained economist who came to the country shortly before Independence and who had gained some budgeting experience in the immediate postwar reconstruction period in the Netherlands. Dr. Yaakov Arnon, who started his government service in Israel in the office of the controller of the diamond industry, was to become with the years one of the country's foremost civil servants. Successively head of the budgets division and, from 1956 to 1970, director general of the Ministry of Finance, he was the man chiefly instrumental in introducing economists into government service in Israel.

The budgets department was established at almost exactly the same time at which the first class of economics students graduated from the Hebrew University. It was thus able from its beginning to recruit for its staff some of the most promising of the 'new' economists, which it continued to do also in the following years. This fusion of what were then for Israel a new function and a novel model of thought, turned out to be most successful. The Budgets Division's analytical approach to economic problems ensured it a rapid ascendancy in the governmental decisionmaking hierarchy; while the atmosphere of intellectual give and take and the openness to new ideas which characterized it, and the opportunity it afforded of applying theoretical tools to real-world problems, caused it to become highly regarded in the growing community of Israeli economists. For years to come newly graduating economists

were to consider work with the division as offering perhaps the best professional apprenticeship available, and it was able to attract some of the best brains of successive graduating classes.¹¹

The transition from the system of direct controls to that of general policy measures required a better understanding of economic processes on the part of policymakers and officials concerned. It resulted in the new economists graduating from the Hebrew University being hired in growing numbers also by other departments in the Ministry of Finance, in particular by the Foreign Exchange Division. But it was the creation of the Budgets Division, and the eminent position it soon acquired, which had, probably, the most far-reaching implications on the government's demand for economists. Each ministry had now to submit its expenditure proposals to the critical examination of the corresponding referendary in the Budgets Division. Senior civil servants, who considered themselves experts in their respective fields, found themselves cross-examined, and often browbeaten, by young men who, though lacking the formers' technical knowledge and experience, were nevertheless trained to ask the right, often embarrassing questions. Either because they genuinely realized the advantages of such training or, not less likely, because they felt that the Budgets Division's boys could only be dealt with by someone talking the same language, other ministries also hired economists. The process was then repeated, to a varying degree, within individual ministries. It was in this pattern, with supply creating demand, and vice versa, that the employment of economists spread from the Ministry of Finance, first to other ministries, then to the various agencies and government corporations associated with them and, ultimately, to the private sector.

In Table 2, we compare the increase in the number of economists employed by the government with the general development of the Israel civil service in the years 1956–1961. The total number of government employees (exclusive of manual workers) increased by one third during this period. But this expansion differed from the rapid growth of the bureaucracy which followed the establishment of the State. Table 2 distinguishes between general administrators and clerical personnel and personnel on the various 'professional' salary scales—i.e. physicians, engineers, lawyers, etc.¹² Four out of each five persons added to

10. The other three being the Revenue Directorate, the Exchange Control Division, and the Office of the Accountant General. The last-mentioned division controls actual disbursement of funds allocated through the budget, as well as the handing out of government credits and raising of State Loans.

11. Partly because of scarcity of suitable personnel, and partly because it could employ them at a relatively low cost, the Budgets Division used to employ students as technical assistants, some of whom later joined it upon graduation. This practice was (and still is) followed also by other government offices and agencies in Israel.

12. Teachers, though paid out of the State budget, are considered in Israel to be the employees of local authorities, and are not included. Initially, professional salary scales were provided mainly for personnel with certain types of academic education, consid-

Table 2. The growth of Israel civil service, 1955–1961

Year ^a	Total ^b	Admin. and clerical	Profes- sional ^c	Economists ^d		
				Total	Trea- sury	Others
1955	22,020	18,289	3,731	48	20	28
1956	22,908	18,803	4,105	84	35	49
1957	23,592	19,138	4,454	95	35	60
1958	24,949	19,990	4,969	107	31	75
1959	26,850	19,849 ^e	7,001 ^e	154	53	101
1960	27,811	19,637	8,174	198	62	136
1961	29,227	20,412	8,815	217	70	147
1955–58 (1955 = 100)	113	109	133	262	155	271
1955–61 (1955 = 100)	133	112	237	452	350	525

^a March 31 of each year.^b Exclusive of manual workers. (Teachers and members of the armed forces are not included in civil service.)^c Personnel on special pay scales reserved for certain groups with distinct academic or vocational training—physicians, engineers, qualified hospital nurses, etc.^d Including statisticians.^e A new professional scale was added in May 1958, resulting in a reclassification of persons already employed in the civil service.Source: Israel Civil Service Commission, *Annual Reports*, 5 through 11.

the service in this period belonged to the latter group, its total size more than doubling between 1955 and 1961. The rise in the employment of economists was thus part of the growing general professionalization of the civil service. But it outstripped the latter by far, the relative increase in the number of economists being twice as high as that in the total number of all professional personnel employed by the government.¹³ The last two columns of Table 2 reflect the diffusion

ered to constitute a distinctive profession from the point of view either of the government's requirements or of the labor market. It is, therefore, by itself significant that a separate salary scale for economists (including statisticians) was not established until 1954. (Since 1962, on the other hand, this scale has applied also to other 'social science and arts graduates'.) Over the years professional scales came to be provided also for other groups with specific vocational training, such as nurses, X-ray technicians, etc.

13. The sudden increase in the number of professional staff between 1958 and 1959 partly reflects changes in classification rather than real increases in the number of professionals employed. There was considerable pressure on the Civil Service Commission in the years 1957–60 to transfer employees from the Administrative to the professional scales, because of the higher pay in the latter in this period. See Israel Civil Service Commission, *Annual Report No. 9* (Hebrew), p. 90. But, as shown in the table, the change in the number of economists, relatively to all professional staff, was about the same between 1955 and 1958 as in the period covered as a whole.

Table 3. The growth of higher education, 1954/55–1975/76 ^a

	1954/55	1959/60	1964/65	1969/70	1975/76
Students:					
Total	4,545	9,275	18,368	36,239	52,510
Social sciences	— ^b	—	3,225	8,680	13,144
Degrees granted:					
Total	880	1,372	2,491	5,566	9,665
Social sciences	— ^b	—	391	980	2,262
Share of Social Sciences:					
Students	— ^b	—	0.18	0.24	0.25
Degrees	— ^b	—	0.16	0.18	0.23

^a Covering all institutions accredited by the Israel Council for Higher Education. Exclusive of special programs' students. Data for 1954/55 and 1959/60 exclusive of the Tel-Aviv School of Law and Economics, which did not grant degrees.^b Unavailable before 1964/65.Source: C.B.S., *Israel Statistical Abstract*.

process described earlier. Between March 1955 and March 1961, the number of qualified economists employed by the government on a regular basis increased by 169 persons. The biggest absolute addition, 50, occurred in the Ministry of Finance. But much greater, in relative terms, was the addition of 33 economists in the Ministry of Commerce and Industry and the Ministry of Agriculture: these two ministries employed between them no more than eight economists in the base year. We may regard the 38 economists added to the Prime Minister's Office to have been primarily statisticians employed at the Central Bureau of Statistics. The number of economists employed in all other government offices rose nearly sevenfold, from 10 in 1955 to 68 in 1961.

5. Later developments

The quantitative analysis of the spread of economists in government service after the period of their initial breakthrough is hampered by lack of data. No separate figures are available for the number of economists employed in government, nor for the total number of economists graduating from the universities, after 1961. Generally speaking, the demand for university-trained personnel continued to expand in the 1960s and 1970s. The low educational standards of the mass immigration—which trebled the country's population in the early 1950s—increased the relative scarcity of trained manpower, as did probably also the increase in the overall capital-labor ratio: relative to the average wage, the salaries of lawyers rose by 20 percent, those of engineers and of physicians by 56 and 84 percent respectively, and

those of accountants by as much as 116 percent, between 1950 and 1957.¹⁴ As a result of the rise in returns to higher education on the one hand, and of the growth of population and of incomes on the other hand, the number of students enrolled at the institutions of higher learning, shown in Table 3, doubled itself within each of the three successive five-year periods after 1954/55. It is only recently that the growth rate has started to show signs of slackening, and even so, the number of students rose by nearly one-half between 1969/70 and 1975/76.

The proportion of students taking up social sciences has increased from 18 percent of all students in 1964/65, the earliest year for which separate data on them are available, to 25 percent in 1975/76. The correspondingly lagging increase in their share of degrees granted suggests that the expansion in the social sciences started later, and continued longer, than that of higher education in general. Though part of the growth of the social sciences reflects the introduction of new fields of study, the growth in the number of graduating economists seems to have followed roughly the same trend. Thus, of the 2,870 economists 'produced' by the Hebrew University between 1949 and 1974, as many as 1,319 graduated from 1970 onwards.¹⁵

The vagaries of the Israel Civil Service scales make it difficult to assess the increase in the number of economists employed by it. Over the years there occurred many changes in the coverage of the 'professional' scales—new scales were created, other scales abolished and sometimes reestablished later. In particular, the separate scale for economists came to be progressively applied to other professional groups as well, until it was ultimately incorporated in a general scale encompassing most social science and arts graduates. The total numbers employed on professional scales, shown in Table 4, were adjusted, as far as possible, to conform to the same classification throughout the whole period.¹⁶ The adjusted figures indicate that after the rapid initial expansion described earlier, the increase in the number of professionals slowed down until the end of the 1960s. This, how-

14. Adapted from R. Klinov-Malul, *The Profitability of Investment in Education in Israel* (Jerusalem, Falk Institute for Economic Research, 1966), Table D-3.

15. Inclusive of temporarily affiliated institutions, such as the Haifa University College or the H.U.'s extensions in Tel-Aviv (which later formed the nucleus of the social sciences faculty of Tel-Aviv University). Data from the Economics Department at the Hebrew University.

16. Thus the adjusted figures exclude nurses, who were incorporated into the general scale between 1966 and 1973; technicians, for whom a separate scale was introduced only in 1959; as well as some smaller groups whose classification changed over the years, such as other than university-trained social workers, or who are now outside the control of the Civil Service Commission, such as Justices.

Table 4. Professionals in the Israel civil service—selected years, 1955–1975^a

Years	Professional scales		Social sciences and arts graduates		
	Total	Adjusted ^b	Total	Economists ^c	Ministry of Finance
1955	3,731	2,058	70	48	20
1960	8,174	3,750	247	198	62
1961	8,815	4,034	—	217	70
1962	10,804	4,393	370	294	77
1963	10,527	4,821	464	374	111
1964	11,274	5,047	509	—	102 ^d
1965	12,061	5,107	613	—	92 ^d
1970	10,809	6,432	1,366	—	127
1975	21,417	10,861	2,913	—	298
Relative growth, selected periods					
1955–1960		1.82	3.53	4.13	3.10
1960–1965		1.36	2.48	1.89 ^e	1.79 ^e
1965–1970		1.26	2.23	—	1.38
1970–1975		1.69	2.13	—	2.35
1955–63		2.34	6.63	7.79	5.55
1963–75		2.25	6.27	—	2.68

^a March 31 of each year.

^b Exclusive throughout of nurses, research workers, technicians, justices and one-half of the social workers employed on the social workers' scale.

^c And statisticians. Years 1962 and 1963 include a small number of other professionals n.e.s.

^d Reduction due to changes in the responsibilities of the Ministry of Finance (Economic Planning Authority transferred to Prime Minister's Office, etc.).

^e 1960–1963.

Source: C.B.S., *Statistical Abstract of Israel*, and C.S.C., *Annual Report*.

ever, partly reflects a growing tendency to transfer government activities to government corporations and statutory agencies. The more rapid increase in the number of professionals between 1970 and 1975, on the other hand, was due in part to the extension of the professional scales, not all of which was netted out in the 'adjusted' column of the table. In particular there was a movement of university graduates from the general scale to the 'Social Sciences and Arts' scale.¹⁷ Nevertheless, Table 4 suggests that the great expansion in the latter group, which includes economists, was coming to an end by the mid 1970s: despite the extension of coverage, its rate of growth between 1970 and

17. See Israel Civil Service Commission, *Annual Report No. 21* (Jerusalem, 1971), p. 24.

1975 was only one quarter higher than that of all the professional scales considered here, after being nearly twice as high in each of the three preceding five-year periods.

Separate figures on economists and statisticians are available for only part of the first of the two decades covered by Table 4.¹⁸ It can be seen that in the early 1960s they constituted the overwhelming majority of the 'social sciences and arts,' or as it was then called, the 'miscellaneous graduates' group. Of all the social sciences, theirs were the first to be recognized as definite disciplines, insofar as employment in government was concerned. A significant demand for manpower trained in other behavioral sciences or in the arts, such as psychologists, sociologists, or orientalists, developed only later. The relative growth of these professions in the later part of the period considered here can be expected, therefore, to have outstripped that of economists. A comparison of the total number of social science and arts graduates with that employed in the Ministry of Finance, suggests that this was indeed the case. In Finance most of them are economists. Their rate of growth there was more or less equal to that of all such personnel in the civil service, until the mid 1960s, but dropped to only half of the latter between 1963–1965 and 1975.¹⁹ Assuming total government employment of economists to have grown at the same rate as in the Ministry of Finance, their number in 1975 would be estimated at just over 1,000. However, as the Ministry of Finance preceded other government offices in employing economists, this may be a rather conservative estimate. An almost identical estimate is obtained by a rough rule of thumb classification of ministries into three groups, with economists constituting 100, 30, and 10 percent respectively of all social science and arts graduates employed by them.²⁰ As, with some exceptions, it was precisely the business character of certain government functions which accounted for their being gradually 'hived off,' the employment figures for all social science and arts graduates, on which our alternative estimate is based, may also be downward biased.

18. With the exception of a small number specializing in mathematical statistics, most statisticians would also have had some training in economics. Except at the Central Bureau of Statistics, most of those employed in government would be working on economic statistics.

19. The decline in the number of social science and arts graduates at the Finance Ministry between 1963 and 1965 is due to the removal from it to the Prime Minister's Office of the Economic Planning Authority and of the Civil Service Commission. The rate of growth mentioned in the text is a rough average of those calculated on the bases of these two years.

20. Included in the first group were the ministries of Agriculture, of Trade and Industry, and of Transportation, and the Central Bureau of Statistics and the head office of the Ministry of Finance; in the second group, the ministries of Housing, of Tourism and Communications, and the Internal Revenue and Customs departments of the Ministry of Finance.

The demand for economists having appeared earlier, its expansion may have subsequently lagged behind that for other social scientists. Nevertheless, the great absolute increase in their number occurred with the great expansion in the output of the social science faculties in the late 1960s and early 1970s. It has already been mentioned that until 1974 nearly half of the economists trained at the Hebrew University graduated after 1969. In the younger universities, which quantitatively have become significant only in the last decade, these recent vintages account for almost all the output. No official figures are available on the number of economists graduating from these universities in this period. But in view of their shares in enrolment and in degrees granted, it may be expected to have been between 1 and 1½ times as big as that of the Hebrew University.²¹ Thus, the total number of graduates in the first half of the 1970s can be estimated at about 3,000. On our earlier assumption regarding the rate of growth in the number of economists in the civil service, the government absorbed the equivalent of one fifth of the graduating classes in this period, as compared with an average of between a third and a quarter in all preceding periods taken together, and as much as three quarters in the 1950s.²² This supports the qualitative impression that, once the initial barriers were breached, the growth in the number of economists employed in government was for a long time restricted mainly by conditions of supply. It is only since the mid-1960s, if not later, that the expansion of the universities' output came to exceed significantly that of the government's demand for economists. By that time, however, the diffusion process described earlier generated considerable demand for them in the business sector, which began to absorb a growing proportion of economics graduates.

The expansion of supply made it possible for the government to

21. Based on the number of students and of first degrees granted in all other academic institutions, excluding the Weitzman Institute at Rehovoth, where economics is not taught, and the Haifa Technion which does not offer first degrees in economics. Informal data obtained by the courtesy of the Economics Departments at the Tel-Aviv and Bar-Ilan Universities put the number of graduates there at a figure only slightly exceeding that of those graduating at the Hebrew University, suggesting a total of 2,800 graduates in this period.

22. The continuous exit of economists from the government to the business sector, discussed in a later section, means that the proportions of new graduates entering government were higher than those cited in the text, which are net figures. Thus, for example, of all economics and statistics graduates who received their degrees in the years 1964–66, as much as 86 percent were found in 1967 to work in Jerusalem, which we may regard as nearly synonymous with being employed in government. See Israel Manpower Planning Authority, *Longitudinal Study of University Graduates, 1964–1966* (Hebrew; Jerusalem, 1971). We ignored here mortality, which in view of the age structure was probably low, and emigration, which was implicitly assumed to have been offset by the immigration of economists trained abroad.

satisfy its demand for economists, insofar as sheer numbers are concerned. But unlike in the earlier years, it now had to compete for their services with the private sector. Coupled with the fact that employment in government could no longer offer the same challenges and opportunities it did when economists were few, the higher emoluments offered by business firms must have had an adverse effect on the quality of those now entering government service.

II. *The Professionalization Process*

1. *Opposition and acceptance*

The rapid advancement of economists in the Israeli civil service, described in the preceding sections, did not go unopposed. In a carry-over from the voluntary self-government frameworks of the pre-Independence period, the typical high government official in Israel's early days was, more often than not, an 'emissary' of some political party or organization.²³ Dedicated and highly motivated as such men may have been, they were nevertheless amateurs, to whom the seemingly cold, calculating approach of the economist was virtually anathema. Moreover, the whole history of the Jewish renaissance in Palestine until then was one of the triumph of vision and enthusiasm over economic considerations. These were roughly identified with private profitability. Indeed, the experience that many nation-building projects would never have been undertaken on profitability grounds alone generated the view that private profitability was in some way harmful to the national interest. As in many other newly sovereign developing countries, the political leadership viewed development mainly in physical terms. Querying the wisdom of some physically feasible but economically dubious projects was thus tantamount to putting a spanner in the wheels of progress. Finally, economists trained in the spirit of neoclassical economics tend to trust, to a considerable degree, in the efficacy of market forces. But in the early 1950s the Israeli Labor movement, like its counterparts abroad, regarded markets as essentially capitalist and therefore socially undesirable phenomena.

These attitudes towards economic considerations were reflected in the arguments raised against economists and the advice they offered, at the time their influence on the government's economic decisions was beginning to be felt. The most sweeping one was that "economics is

23. It is noteworthy that a number of future members of Israeli governments, including three of its first four finance ministers, served as civil servants in the first years after independence. Theirs was not the case, as might have been the case in later years, of bright civil servants being co-opted by political parties, but of political figures staffing important administrative positions.

not a science," implying the opinion of economists to be one among many of equal virtue.²⁴ Alternatively, it was argued that economic laws, even if valid elsewhere, "did not apply" to the peculiar conditions of the country. Most of the young economists may be said to have shared the left-of-center sentiments of their generation. But, as is often the case in Labor-governed countries, their views on economic policy tended to be on the right of the government's, giving rise to accusations of political partisanship. On a different, rather acrimonious level, the fact that, as related earlier, instruction in modern economic analysis was personified by a man who was the product of an American university was used to charge that the economics taught by him were alien to the spirit and the needs of Israel.

Despite this opposition, which on a diminished scale continued into the 1960s, the influence of government economists grew steadily. This can be ascribed to a number of factors. In the decade between the Sinai Campaign of 1956 and the Six Day War of 1967 defense problems were less acute than either before or after, so that more attention came to be paid to economic issues. In particular the country's main economic problem, namely its big import surplus, was realized to be not the transitory teething pain of its first years, but a chronic deficiency requiring constant and skilled attention. At the same time, economic problems became also more intricate than before. If economics concerns the allocation of restricted means among competing ends, then the scope for it in Israel was initially limited. The priority of certain ends, e.g. that of providing immigrants with a roof over their heads, was clear. The question was really more one of technological feasibility than of economics—what form of housing satisfying minimal standards of physical adequacy could be erected in the shortest possible time. In other words, the ends were few, their social rankings on the whole obvious, and the alternative ways of achieving them severely limited.²⁵ Gradually, as needs became less pressing and resources more plentiful, the pattern of effective allocation became less self-evident. Thus, paradox-

24. This reflected the 'there are no economic laws' stance of the Young Historical School of German economics at the turn of the century, to which many of Israel's founding fathers were exposed in their formative years. See E. Kleiman, "An Early Modern Hebrew Textbook of Economics," *History of Political Economy* 5 (1973): 339-58.

25. This should by no means be taken to imply that the decisions taken under these circumstances were inevitably the right ones, or that they could not have been improved by the application of economic analysis. But the main restriction on the economy, that of the lack of foreign exchange, was of a magnitude which no economic policy could have rectified within the time span in which the more pressing problems had to be solved, and thus had to be taken as given. An economically more rational approach, however, could have prevented some of the waste engendered by the divergence between the private and the social costs of foreign exchange.

ically enough, the easing of the economic situation generated demand for the more sophisticated economic analysis which only trained economists could provide.

A factor which contributed much to establishing the position of economists in government was the uniformity of their education and outlook. The common cultural and social background of pre-Independence society, from which most of them then stemmed, was in their case augmented by sharing the same discipline, acquired at the same university from the same teachers. They shared a common mode of thinking and used a language which, especially when they chose to employ technical terms, was virtually incomprehensible to the uninitiated.²⁶ Coupled with this unanimity was their broad agreement as to what the country's main economic problems were and how they should be solved, which was not shattered until the beginning of the 1970s.

This consensus was only partly the result of a common orthodoxy. Any differences of opinion which may have existed among economists paled when compared with those which separated economists from the political decisionmakers. Economists tended to emphasize the strength of market forces and the limited efficacy, and misallocative outcome, of administrative interference in the market process. They would point out that restrictions imposed on the use of certain credits would be voided by their substitution for the borrowers' own funds, which could then be used for other purposes. They also (though here their attitude became less uniform in later years) pushed the cause of efficiency as against equity, in the form in which the latter was then perceived by the political level. Arguing that the government should subsidize people, not goods, they advocated the use of direct transfer payments instead of the food subsidies then in use. More generally, it may be said that economists took a broader, macro view of the economy, as compared with that of the politicians. The latter tended to regard economic phenomena from what was, basically, a microeconomic viewpoint. Typical of this attitude was their persistence in viewing inflation as due purely to cost push, despite the fact that for most of the period before 1973, it was primarily the result of government deficits and of expansionary monetary policy. Thus successive Finance ministers refrained from raising the interest rate for fear of hiking up prices. Econ-

26. Quite literally so: the establishment of government machinery and the introduction of economics in the curriculum of the Hebrew University required, and were followed by, the development of a Hebrew economic terminology with which only economists were initially familiar. In latter years some 'economese' came into wide parlance. An extreme example is that of the Hebrew word for 'distortion,' which is now widely used to describe any unsatisfactory state of affairs.

omists, on the other hand, regarded as dominant the interest rate's effects on aggregate demand and on the efficient use of capital. A similar divergence existed for many years in attitudes towards devaluation. Thinking in general equilibrium terms, economists were more conscious than policymakers of the indirect effects of policy steps, and more aware of the time lags between cause and effect, which the latter tended to disregard.²⁷

The unanimity which characterized government economists in earlier years has lately shown signs of crumbling. To some extent this reflects the growing controversy within the profession at large concerning the outstanding economic phenomena of the 1970s, stagflation and the breakdown of the fixed-exchange regime system. In Israel, this was aggravated by the weakening of the public consensus on general national goals in the wake of the October 1973 war. The diversification of the government economists' opinions may in part also be the outcome of the growth in their number and their rapid advancement in the past. Today, the more senior ones among them are older and have been in government service for much longer than their counterparts of twenty or of even ten years ago. The constant exposure to everyday practical affairs, and the dealing with a great number of special cases, took their toll in a growing tendency of at least some of them to commit the fallacy of composition through viewing economic problems and processes from the angle of the individual enterprise. Finally, with each ministry and government agency employing its own economists, their conflicting particular interests came to be reflected in correspondingly partisan opinions of the economists they employed.

The decline in unanimity must ultimately weaken the economists' position in government and lessen reliance on their judgment. Recently there has been some revival of the opposition to their influence. This comes now from social and community workers who object to economists dominating the welfare budgets, which grew very rapidly as a result of the transition to direct transfer payments, which economists had so strongly advocated in the past.

2. *Rising in the corridors of power*

The growth, surveyed earlier, in the number of economists employed by the government reveals only one aspect of their ascendancy

27. As late as in the autumn of 1978 the then deputy finance minister argued that the acceleration of inflation could not be ascribed to government deficit, "as in the same month in which prices rose so sharply the government was a net absorber of purchasing power from the public." For surveys of economic policy discussions in Israel, see N. Halevi, "Economic Policy Discussions and Research in Israel," *American Economic Review* 59, Part 2, suppl. (Sept. 1969); and "The Exchange Rate in Israel: Policy and Opinion," *Revue Economique*, 30 (Jan. 1979): 10-30.

in the civil service. Another one is their rise in the hierarchy. The Israel Civil Service Commission does not publish a Civil List on the U.K. lines. Though the *Israel Government Yearbook* lists the names of the top postholders in the various ministries, it does not provide biographical information, and the cut-off point for the posts included varies from one edition to another. It is thus impossible to state precisely how many of a given list of posts, or even of the posts listed in a given year, are occupied by economists. Nevertheless, the information contained in the *Yearbook* (augmented by *Who Is Who in Israel*) can be used to trace the progress of economists towards the pinnacles of the civil service.

In Table 5 we present some figures on the number of top civil service posts occupied by economists in different periods. The first group of posts examined is that of directors general of ministries. Though a civil servant, a director general in Israel is not the 'permanent head' in the U.K. sense. An incoming minister has the right to appoint his own nominee to this post, though lately this has been exercised less often than in the past.²⁸ And all appointments of directors general have to be approved by the Cabinet. Though the number of government ministries has varied over the years, the number of such posts was fairly stable, usually totaling 19 until the mid 1960s, and 21 since then.²⁹ As can be seen from the table, from 1955 onwards there was a steady increase in the number held by economists. In 1976 they headed the ministries of Finance, Defense, Trade and Industry, Housing, and Transportation as well as the National Insurance Institute. If we consider that in Israel the directors of certain ministries have, by convention, to be members of corresponding professions—e.g., a physician in the Ministry of Health and a lawyer in that of Justice—the recent proportion of economists among their total seems very high indeed. When the comparison is restricted to the 'new' economists, i.e., those who graduated after the establishment of the State and who were trained in what may be termed the Anglo-American school, the rise in hierarchy is seen to have been even more rapid.

An individual's qualifications as an economist need not necessarily

28. In particular, the new 'Likud' government established after the defeat, after nearly thirty years in power, of the Labor Party in the elections of 1977, refrained initially from any sudden mass removal of top officials nominated by its predecessors. Though some new nominations have taken place since then, it is significant that the whole upper echelon of the Ministry of Finance which began to serve before 1977, were still at their posts in 1979. (At the time of going to press, however, this is no longer true.)

29. Included in the list are also the director general of the State Comptroller's Office and that of the National Insurance Institute, whose status is that of directors general of ministries. The special case of the Bank of Israel is discussed below.

Table 5. Senior civil service posts occupied by economists, 1950–1976

Period ^a	A Directors general of ministries ^b			B Five other senior posts ^c
	Total economists	'New' economists	Additional qualifications	
1950–51	2	—	2 ^d	—
1952–55	—	—	—	1
1956–61	1	—	—	1
1962–66	3	2	2 ^e	2
1967	4	3	1 ^e	2
1968–74	5	5	2 ^e	4
1975–76	6	6	1 ^f	4

^a Division into periods according to changes in the first column of the table.

^b Including the director general of the National Insurance Institute. Figures show maximum number simultaneously at such posts at any given moment of time in each period.

^c Heads of Budgets, Revenue, Accountants' General, and Foreign Exchange divisions at the Ministry of Finance, and the Banks' Comptroller at the Bank of Israel.

^d Semi-political public figures.

^e Retired senior army officers holding a degree in economics.

^f Academic economist on leave of absence from his university.

Source: Israel, *Government Yearbooks*, and *Who Is Who in Israel*.

constitute the main consideration in his appointment as a director general, though they may be an advantage. The two economists who served in such posts in 1950–51 were nominated to them in virtue of their being semi-political public figures of pre-Independence days. In later years, a potential source of nominees for high government posts was senior army officers, who are retired from active service at a fairly low age.³⁰ Quite a number of them took a degree in economics before embarking upon a second career in government or in business. That they felt such training advantageous is, in itself, significant. But their nominations to top civil service posts should be ascribed first and foremost to their general administrative and leadership abilities. The last column of Table 5, Panel A, provides figures on the number of occupants whose nomination seems to have been dominated by factors other than an economics education. It can be seen that the rise of the 'new' economists cannot be explained in this way.

In addition to directors general, there are a number of other senior posts the staffing of which is subject to approval by the Cabinet and

30. The successive chiefs of staff of the Israel Defense Forces were in their thirties or forties when appointed to this post.

whose occupants may be regarded as policymaking officials.³¹ Again, some of these posts require specific qualifications in fields other than economics, e.g. the attorney general must be a lawyer. In Panel B of Table 5 we provide data on five such posts, concerned with economic matters: those of the accountant general, the heads of the Budgets, Revenue, and Foreign Exchange divisions at the Ministry of Finance, and the comptroller of banks at the Bank of Israel. These posts came gradually to be reserved for economists: that of the Budgets Division's head since its establishment in 1953; the office of the accountant general since 1962; that of the comptroller of Foreign Exchange since 1967, and the Banks' comptroller since 1969. Of the 21 holders of these posts in the period covered in the table, 15 were economists. A similar process could be observed were we to examine changes in the staffing of lower echelons, for example of the division headships in the Ministry of Trade and Industry. It is however, noteworthy that the Revenue Division was never entrusted to economists. While the deputy head has lately usually been an economist (more often than not in charge of research), its head and the heads of its main departments of Internal Revenue and of Customs and Excise have always been general administrators, accountants, or lawyers.

The rise of economists to the governorship of the Bank of Israel deserves separate mention. According to the Bank of Israel Law passed in 1954, the governor of the Bank is also the government's economic adviser. The late Mr. David Horowitz, who occupied this post from its inception till his retirement in 1971, was certainly *sui generis* among Israeli officials. Self-educated, of considerable intellectual powers, and an early convert to Keynesianism, he was the first director general of the Ministry of Finance.³² Fond of quoting that "the future has no constituency," Horowitz served for many years as the economic conscience of the country. The personal prestige he brought to the governorship, and his concept of the office, contributed much to the Bank's public stature as the watchdog of economic policy. The Bank's annual report is regarded as the most important critical survey of economic developments published in Israel, and the governor's pronouncements on economic policy, though often unheeded, are treated with considerable respect by both the government and the general public. The second governor was a university-trained economist who had

31. The policymaking character of these posts is acknowledged also in the pension rights attached to them. These are double the regular ones per year of service, reflecting the presumption of a shorter 'life in office' expectancy.

32. An interesting vignette of Horowitz in his role as one of the spokesmen of the Jewish community in pre-independence days is provided in Richard Crossman, *Palestine Mission* (London, 1946), pp. 48-49.

served *inter alia* as the head of the Budgets Division. But he seems to have owed his appointment mainly to his success as a 'generalist' in government service.³³ That the government did not as yet regard the post as the exclusive preserve of professional economists was demonstrated by its intention to succeed him by a financier-politician, the then head of the Trade Unions' Sick Fund. However, when the disclosure of some financial irregularities caused this candidature to be dropped, and the government had to play it safe, it nominated as the third governor a professional economist who has been, successively, head of the Budgets Division and director general of the Ministry of Finance. At the same time the government also nominated two economists from the Bank's staff to the posts of vice-governors, which until then had been held vacant.

3. *Where are the economists and what do they do?*

As has been explained earlier, economists in the Israel civil service are lumped together for salary purposes with some other 'social sciences and arts' graduates. Though the formal requirements demanded for many posts include a degree in economics, there exist no data on the total number of such posts or on their distribution by ministries. The following survey is, therefore, to a great extent impressionistic. Our earlier rough estimate of the number of economists in the civil service implies that only part of them can be holding policy-influencing positions. The majority of the rank and file are occupied with routine technical work. Because of the high share of total resources, and of capital formation in particular, channeled through the government in Israel, much of their activity would consist of examining investment projects, both governmental and private, and of the costing of activities of local authorities and of non-profit institutions supported by the government. At the other end of the scale there is the relatively small number entrusted with policy responsibilities. In addition to the group of top officials surveyed in the preceding section, this includes heads of other divisions and departments in ministries dealing with economic matters, such as the Ministry of Trade and Industry or that of Agriculture. In between these two groups there is a fairly large medium echelon who, though lacking authority either to determine or implement policy, have considerable influence on its formulation. Broadly speaking, this echelon consists of:

33. As well as to his close association with the very powerful finance minister of the moment. Office maketh the man. Despite their past cooperation, the new governor soon became an outspoken critic of the finance minister's policies which he himself helped earlier to promulgate.

- (i) a small number of big teams, of which the Budgets Division and the Bank of Israel's Research Department are the outstanding examples;³⁴
- (ii) a large number of smaller teams, such as the economic research or advisory staffs which exist in many ministries;
- (iii) individual economic advisers and personal economic assistants to ministers and directors general of ministries.

The work of these economists may take different forms. They staff various departmental and interdepartmental committees charged with providing answers to questions set them by political or by higher civil-service levels. They prepare forecasts of future or hypothetical developments and examine the budgetary cost and economic implications of policy proposals raised in the Cabinet or in its Committee on Economic Affairs. They provide their chiefs with economic arguments to support the latter's political stances. They also produce—sometimes in response to demands of higher echelons and sometimes on their own initiative—the flow of memoranda, research, and position papers which often contain the nuclei of ideas which may ultimately be translated into actual policies.

It is difficult to estimate the role of this group in the formulation of policies, and it is easy to underrate it. Only occasionally does a policy proposal become widely identified with the name of its originator, mainly through its becoming attached to the committee he chaired or the memorandum prepared by him, or to his being designated by his office to expound it in the media. My own impression, however, is that it is through such channels that many fresh ideas, often raised by relatively junior economists, permeate to the top.³⁵ The relative success of this group as originators of new policies may be attributed to two causes: their freedom, relative to the more senior group, from time- and energy-consuming departmental responsibilities, and their age—most of them are in their twenties and their thirties.

The main economic 'think-tanks,' however, are the two large teams mentioned earlier—Budgets Division and the Research Department of the Bank of Israel. The former employed 44 full-time econo-

34. Employees of the Bank of Israel, which is an independent statutory agency, are not included in the civil service figures presented earlier.

35. The percolation process may take quite some time: see, for example, N. Halevi, "The Exchange Rate in Israel: Policy and Opinion," *supra* n.27, on the introduction of the crawling-peg (mini-devaluation) exchange rate regime, which was first suggested in 1966, but which was not adopted until 1975. The extent to which relatively junior levels can thus affect policy may be illustrated by the fact that the recent (1977-78) interdepartmental debate on abolishing high-school fees was conducted at the same time in a graduate seminar at the Hebrew University, of which two of the officials most directly involved were then members.

mists in 1974/75, nearly as many as did all government offices taken together twenty years earlier. Its main concern is, so to speak, *ex ante*—the raising and examination of policy proposals which will affect forthcoming government budgets. The Research Department, with an equal number of economists, is partly engaged in drawing policy conclusions *ex post*, from its evaluation of past performance in the Bank's *Annual Report*, which it prepares. However, the Department serves also as the governor's staff in his capacity of chief economic adviser to the government. Unlike their counterparts in the various ministries, its economists are not in constant conflict with the Ministry of Finance over their budgets, and they are unencumbered by any executive or administrative responsibility. For these reasons, as well as for the professional prestige they enjoy, the Ministry of Finance tends to include the Research Department senior members in the discussions leading to major policy decisions. It was partly in recognition of these services that, as mentioned earlier, the joint heads of the Research Department were lately elevated to vice-governorships in the Bank.

4. Professional training and advancement

The minimal formal training qualification required of a government economist is a bachelor's degree in economics.³⁶ This is, on the whole, also the maximum requirement. Tenders for some higher posts—unless, as is sometimes the case, especially tailored for a particular candidate—may ask for applicants with a master's degree "or, as an alternative, with two-years' work experience." As this is equal to the minimal formal period of study for the master's degree (in practice, the average is longer), the premium on it is actually negative. Apart from very few posts, e.g. an economic adviser to a minister, the holder of a Ph.D. would be regarded as overqualified.

Undergraduate studies in economics are much more specialized in Israel than, say, in the United States. Until recently, only about one third of the economics class at the Hebrew University used to combine it with another subject.³⁷ The rest majored in economics only, and studies are very much theory-oriented. As a result, the freshly graduated economist often complains of finding himself unprepared for government service.

One of the reasons for the relatively high specialization in undergraduate studies is, no doubt, the universities' concept of their role; an-

36. Most Israeli universities do not offer first degrees in Business Administration.

37. This proportion was even lower in the 1960s. Recently it has risen, due in part to the introduction of Accounting as a minor subject, and the higher standards now required of students wishing to major in economics only.

other is the students' age. With compulsory military service of three years for men and two years for women, the Israeli undergraduate arrives at the university considerably older and more mature than his counterpart in western Europe or the United States, and is 24 or 25 years old by the time he graduates. During his studies he will also often be called up for reserve duty. He has, therefore, on the whole, little patience for courses which are not closely associated with his main subject. The higher age of university entrants is also reflected, of course, in the age of graduates entering government service. Furthermore, it also means that many students are married and have to support families.

At the Hebrew University from which, because of its location in the capital, most economics recruits to the civil service are drawn, many second- and third-year students find employment, full- or part-time, in government offices. (Some, like the Ministry of Finance, are conveniently located just across the road from the University's main campus.) Working as technical assistants, often in the type of department which may employ them on graduation, they thus receive some of the on-the-job training which the University is both unable and unwilling to provide.

Nevertheless, most graduates on first starting in the government find it difficult to bridge the chasm between the models taught in class and the facts of the real world. Some abandon the struggle and retrogress, forgetting much of what they have learned. Others, ignoring or belittling reality's divergence from the postulates of classroom models, err into oversimplification. It requires not only some intellectual subtlety but also experience and, perhaps most important of all, the right tutelage provided by certain work milieus, for some of the latter group to strike the right balance.³⁸

This importance of on-the-job training also means that in the lower rungs of the civil service, advancement is facilitated by knowledge of the department or office considered. The fresh graduate responding to the Civil Service Commission's tender for a post as an economist in some government office will, unless exceptionally and evidently gifted, find himself severely handicapped competing with someone who was employed in that office, if only as a temporary, part-time technical assistant. Grades attained at the university play only a marginal role. The importance of inside experience is officially acknowledged in the ad-

vancement process applied to the middle and medium-high ranks. There, partly in response to the pressure of the State Employees' Union, vacated or newly created posts are put to a 'closed tender.' This means that applications are solicited first only from persons employed in the same office. Only if no suitable candidates emerge is the tender opened to other members of the civil service and ultimately to the general public. Formally, this procedure applies also to the higher echelons, except in the case of posts requiring Cabinet approval, mentioned earlier. In practice, however, the tenders for these posts are tailored to fit the measures of the candidate chosen for advancement by the department concerned.

In the highest post the factors determining advancement vary, and may be influenced by considerations of political or personal allegiance. Nevertheless, some general pattern can be discerned. Of the thirteen economists who staffed the positions considered in Panel A of Table 5 in the five-year period 1971-1976, five made their careers in the Budgets Division (three of whom headed ministries other than Finance); three were outsiders, with previous experience in the army or the academy; three others, as well as one of the outsiders, served immediately before that as heads of the advisory or research staffs of the ministries of which they became directors general; only in the Ministry of Trade and Industry did its two successive heads in this period reach the top through a progression of jobs within that ministry, and even they started their careers as personal assistants to a director general and a minister respectively. The predominance of Budgets Division's economists in this group may be ascribed both to Finance being the senior economic ministry and to the general overview of the economy which work in the Division provides. The main alternative inside path to the top seems to have been through the posts of economic adviser, or of personal economic assistant to a minister, which tends to support the impression, reported in the preceding section, of the importance of these posts in formulating policy.

These data demonstrate also the relative shortness of top official careers. Of the thirteen no more than six were in office at one and the same time between 1971 and 1976, and only five were still in office in 1978. This rapid turnover can be ascribed partly to Cabinet changes and partly to the strain of life at the top. Once retired, the holders of these, as well as of somewhat lower economic posts like that of the accountant general, can easily find comfortable slots in the private sector, where their experience and government connections constitute a considerable asset. Not unknown is also the practice by which a retiring official prepares for himself a job in a government corporation,

38. It has been sometimes said of government economists that the only analytical tools they have to apply are those of the introductory economics course; but that it takes a lot of brains and ten years' experience to apply them correctly.

or a statutory agency, connected with the department in which he previously held office.³⁹

The rapid turnover at the top has, of course, ramifications further down the hierarchy. Coupled with the general expansion of the civil service and with the growth in the share of its posts reserved for economists, it provides a degree of mobility which would otherwise have been impossible. While it entails a cost in terms of expertise lost, it also permits the rise of new men and saves economic thinking in the government from ossification.

5. *Academy and government*

The relationship between academic economists and government in Israel has been, on the whole, an informal one. There has been hardly any in-and-out movement of economists between the universities and regular government employment. Members of the economic departments of Israeli universities did on occasion serve in various advisory capacities. But except for basically academically oriented activities, such as the supervision of research, their direct involvement was rather limited. Any influence they may have had on policy was mainly exerted either through informal consultations or through the effect which their public *ex cathedra* pronouncements had on public opinion. Their services were occasionally utilized in public inquiry committees of varying importance and effectiveness. In particular, two important committees, nominated in 1975 to recommend reforms in, respectively, the direct tax system and the salary structure in the public sector, were both chaired by economists from the universities, and had others serving on them. But there were only few cases of academic economists taking up short-term and none at all of them taking up long-term appointments in government service.

Though neither side would have openly admitted it, both had good reasons for shying away from closer cooperation. Economists in universities were no doubt reluctant to soil their hands, or rather their consciences, by the compromises required of the practitioner. No less important, probably, was their age and career structure, which reflected the rapid expansion of the student body, discussed earlier. Like their counterparts in the civil service, academic economists were relatively young. Until fairly recently, the typical university lecturer considered for a senior post in governmental service would have been in his thirties. Having chosen not to enter it in the first instance, his intellectual interest would, at this stage, still be in academic, mainly theo-

39. See P. J. Wiles, *Economic Institutions Compared* (Oxford, 1977) for the term *pantouflage*, by which this practice is known in France.

retical research. And his academic career could not but be hindered by the inevitable decline in his scientific output.⁴⁰ On a number of occasions when university economists were offered civil service appointments, even temporary ones, they were ready to accept them on a part-time basis only. The government, on the other hand, regarded this attitude as indicating lack of commitment and was generally reluctant to employ part-timers in other than consultative jobs. Regular civil servants may also have been expected to resent having outsiders, however eminent professionally, 'parachuted' on them from above. And both they and the political level may have been apprehensive of the prestige and independence which such temporary civil servants would have enjoyed.

Whether because of the worsening economic situation or to improve the government's public image, some university economists were drafted into government service in the late 1970s. With the notable exception of one such nominee, who went on to become the director general at the Defense Ministry, these experiments were short-lived and seem to have reinforced the prejudices with which academics and government view each other.⁴¹

III. *Some Further Problems*

1. *Ethics and value judgments*

A fundamental problem facing economists in government is that of making value judgments. Despite some recent soul searching, the separation of analytical from ethical considerations remains a basic principle of Western economics education. As a student, the future government economist has been trained to identify the most efficient means of achieving a given goal. As a practitioner, however, he soon finds that where government is concerned there is no single dimension by which effectiveness may be measured. What constitutes an optimal solution in terms of, say, forgone consumption, need not be such in terms of employment or of the balance of payments, not to mention in those of overall income inequality or specific distribution of income among competing groups. Assigning these considerations their relative weights involves value judgments. The political level, which is sup-

40. Furthermore, unlike in the case of the U.S. or the U.K., research based on his experience in government would be of little interest to his peers in the academic community abroad.

41. It would be beyond the scope of this study to speculate why the experience of economists differed significantly from that of other academic staff who were drafted into government service at about the same time, e.g. the two jurists who became successive attorneys general, and the political scientist who became the director general of the Ministry of Foreign Affairs.

posed to make such judgments, should presumably be provided by its economists with the whole 'menu' of alternatives to choose from. This amounts to nothing less than presenting it with the marginal rates of substitution between whatever the target variable and all other economic and social magnitudes to which the government may be sensitive. Politicians are busy men, and an economist attempting to play this game will probably have a chance to do so, if at all, only once.⁴² He will, therefore, refrain from pointing out (i.e., he will assign zero weights to) the more exotic alternatives and probably also those which, in his judgment, are politically unfeasible.

Thus government economists cannot escape making not only value judgments, but also political judgments. In the upper echelons the situation is aggravated by the fact that civil servants in Israel cannot hide behind the cloak of ministerial responsibility. High-ranking and sometimes even middle-ranking government officials are expected to defend governmental policy in public, especially if they have been involved in its formulation. While some government economists may enjoy their sharing of the politicians' prerogative, and others may not be conscious of it, there is evidence that some of them, at least, are aware of the moral dilemmas entailed.⁴³ Their behavior under these circumstances, and the set of values implied by it, merit further investigation.

2. *What good did the economists do?*

The present survey inevitably raises the question of the attainments of economists in government from the point of view of the society in which they operate. There exists, however, no accepted yardstick by which their performance can be evaluated. At most, we might have tried to trace the influence of economists on decisions relating to selected policy issues. Unfortunately, no documentation is available to allow even such a limited evaluation of their role, except in the most general terms. There seems to be little doubt that, given their terms of reference, economists have greatly improved the process of governmental decisionmaking on the micro level. This, however, raises the question of whether, if the overall policy itself is wrong, it is better for it to be carried out efficiently or inefficiently. As an economist, I can-

42. To quote R. Turvey's apt words for such a situation, "the economist will lose his job if he merely spouts highbrow agnosticism for more than the minimum period of time necessary to preserve self-respect." R. Turvey, "Present Values Versus Internal Rate of Return," *Economic Journal*, March 1963, p. 96.

43. See, for example, the statement by Beeri Hazak in the symposium "On the Role of the Economist," in N. Halevi and Y. Kopp, eds., *Issues in the Economy of Israel* (Jerusalem: Falk Institute, 1974). The author of this statement, who was at the time the Budgets Division referendary for education budgets, was killed while on active service in the October War.

not but answer this question, "Efficiently." Most broad policies are adopted by government for a wide variety of reasons. Without undue cynicism it may be assumed, therefore, that many economically 'bad' policies—say, that of excessive tariff protection—would have been pursued anyway. (Indeed, as has been shown earlier, they were pursued in Israel before economists came to be widely employed by the government.) By promoting the correct decisions (in this case, the equalization of the effective protection rates) within what is by itself, a wrong framework, economists helped to minimize its damage. And the explication of the underlying assumptions and reasoning which this required has often led to the questioning and ultimately even the revision of the basic policy.

Unlike on the micro level, where decisions—as in the evaluation of investment projects—are frequently of the yes-or-no category, on the macro level they relate more often to the degree to which a policy is to be pursued. Economists' influence on them is therefore more difficult to ascertain. Indeed, it may be questioned whether any major shifts in the Israel government's economic policies were directly initiated by its economists.⁴⁴ Once such shifts had been contemplated, however, the economists were called in not only to suggest ways and means by which they could be carried out, but also to comment upon them and point out their implications. Their effectiveness should, thus, be measured not only in terms of the policies they persuaded the government to adopt but also in terms of those which they dissuaded it from pursuing. Deliberations leading to the rejection of a policy proposal are, generally, less well documented and less publicized than those leading to its acceptance. It may well be that, as has sometimes been claimed, the government economists' most worthwhile contribution has been to have averted some of the failures which would have resulted from the decisionmakers' faulty understanding of economic processes.

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44. Of what, in a historical perspective, may be viewed as the major policy shifts in Israel's economic history, only the 1962 devaluation may be regarded as being initiated by economists. Of the others, the 1952 N.E.P., referred to earlier, predated their ascendancy in government; the 1966–67 recession originated in a confrontation between the government and the trade unions; and the 1977 liberalization of the exchange rate regime was a quarter-of-a-century-old commitment of the political party which came to hold the Finance portfolio after the elections earlier that year.

Bibliography

- Crossman, R. *Palestine Mission*. London, 1946.
- Gaathon (Gruenbaum) A. L. *National Income and Outlay in Palestine*, 1936, Jerusalem, Bank of Israel, 1978. This is a reprint of the 1941 edition, with the addition of the originally unpublished parts and of critical comments.
- . "Problems of Development of an Economist," *Economic Quarterly* (Hebrew) 77 (April 1974): 58–68.
- Gross, N., and J. Metzger, "Public Finance in the Jewish Economy in Inter-war Palestine," *Research in Economic History* 3 (1978): 87–159.
- Halevi, N., and R. Klinov-Malul. *The Economic Development of Israel*. New York, 1968.
- Halevi, N. "Economic Policy Discussion and Research in Israel." *American Economic Review*, 59, suppl. (Sept. 1969): 74–118.
- . "The Exchange Rate in Israel: Policy and Opinion." *Revue Economique* 30, no. 1 (Jan. 1979): 10–30.
- , and Y. Kopp, eds. *Issues in the Israeli Economy*. Jerusalem, Falk Institute for Economic Research, 1974.
- , et. al. *Banker to an Emerging Nation: The History of Bank Leumi Le-Israel*. Haifa, 1981.
- Israel Central Bureau of Statistics. *Statistical Abstract of Israel*.
- Israel Civil Service Commission. *Annual Report* (Hebrew).
- Israel, Government, *Israel Government Yearbook*.
- Israel, Ministry of Labor, Manpower Planning Authority. "Longitudinal Survey of University Graduates 1964–1966" (Hebrew). 1971.
- Jewish Agency for Palestine. *The Jewish Case Before the Anglo-American Committee*. Jerusalem, 1946.
- . *The Jewish Plan for Palestine*. Jerusalem, 1947.
- Kleiman, E. "From Cooperative to Industrial Empire." *Midstream*, 1963, pp. 15–26.
- . "Solel-Boneh as Seen by Hillel Dan." *Economic Quarterly* (Hebrew) 41–42 (May 1964): 170–83.
- . "An Early Modern Hebrew Textbook of Economics." *History of Political Economy* 5 (1973): 339–58.
- . "The Anglo-Palestine Bank and the Establishment of Israel's Monetary System," Part III. In N. Gross, N. Halevi, E. Kleiman, and M. Sarnat, *Banker to a Renascent National* (Hebrew; Tel-Aviv, Massada, 1977), pp. 203–93.
- Klinov-Malul, R. *The Profitability of Investment in Education in Israel*. Jerusalem, Falk Institute for Economic Research, 1966.
- Metzger, J. "The Concept of National Capital in Zionist Thought, 1918–1921." *Asian and African Studies* 11 (1977): 305–36.
- . *National Capital for a National Home 1919–1921* (Hebrew). Jerusalem, 1979.
- Morag, A. *Government Finance in Israel* (Hebrew). Jerusalem, 1966.
- Nathan, R., O. Gass, and D. Creamer. *Palestine: Promise and Problem*. Washington, D.C., 1946.
- Rubner, A. *The Economy of Israel: A Critical Account of the First Ten Years*. London, 1960.

- Turvey, R. "Present Values Versus Internal Rate of Return: An Essay on the Theory of the Third Best." *Economic Journal* 73 (March 1963): 93–98.
- Wiles, P. J. *Economic Institutions Compared*. Oxford, 1977.