

PERSONAL INCIDENCE AND RESOURCE  
TRANSFER BETWEEN ENVOI AND  
APRIL IN AMBASSADOR PALESTINE

AND OSMETZER

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# FISCAL INCIDENCE AND RESOURCE TRANSFER BETWEEN JEWS AND ARABS IN MANDATORY PALESTINE

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## ABSTRACT

This study estimates and analyzes the incidence of the government taxes and expenditures on Jews and Arabs in the dual economy of interwar Palestine. The incidence estimates are used to calculate the fiscally determined net resource transfer from Jews and Arabs. It evaluates its importance in their overall economic relations and to assess its political implications in nationally-divided Mandatory Palestine.

## 1. INTRODUCTORY REMARKS

A most prominent characteristic of mandatory Palestine was the binational Jewish-Arab dualism. In the political sphere it was manifested in the diametrically opposed political objectives of the two people. The

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Zionist objective was to build an autonomous Jewish national home and, with expectations for a continuous flow of Jewish immigration, to become a majority that would eventually establish an independent Jewish state in Palestine. In it an autonomous Arab community was expected to be accommodated. The Arab objective, on the other hand, was to maintain an Arab majority (which in fact existed in Palestine until the end of the mandatory period) by restricting Jewish immigration and land purchases, and to transform Palestine into an Arab state in which the Jews would have individual rights but neither collective recognition nor autonomy (Metzger, 1978; *Zionism and the Arab Question*, 1979). These conflicting aims led to social segregation and to the creation by each national community of political and administrative institutions for running internal affairs, dealing with the mandatory government, and promoting national goals.

In the economic sphere, national dualism was reflected in the existence of two essentially separate national economies, Arab and Jewish, with some economic interaction in the form of trade in factors of production and final goods and services. This economic dualism had two distinct components. One was political and was expressed in the national-ideological pressure to limit intersectoral economic relations, on the one hand, and in the provision of public services and investments to the Jewish community by an autonomous Zionist public sector, on the other (Gross and Metzger, 1978; Metzger, 1977). The second component was general and had to do with the attributes of the typical developing dual economy as found in mandatory Palestine. The reference here is to the coexistence of a low-income, relatively traditional and mainly rural sector (the Arab community) and a modern, high-income, primarily urban sector (the Jewish community) which led the entire economy in its growth and development into a modernizing market economy during the mandatory period (Horowitz and Hinden, 1938; Abramowich and Ghelfat, 1944).

I shall elaborate later on the characteristics of Palestine's economic dualism; here I would like only to emphasize the income differential between the two communities. In 1936 Jewish per capita income was £P49 while Arab per capita income was no more than £P17 (Gaathon, 1978, p. 34; Szereszewski, 1968, p. 50). However, in mandatory Palestine it was the Jewish population that, because of immigration, grew much faster than the Arab population, unlike in the typical dual economy in which the traditional sector experiences a higher rate of population growth. Thus, in the early 1920s, the Jews constituted about 10 percent of the total; by 1939, on the eve of the World War II, they were 28 percent (Gross and Metzger, 1978, p. 153).

In this complex political and socioeconomic dual structure, government policy, and particularly the fiscal incidence (i.e., the incidence of taxes

and expenditure) along national lines, was highly important. We have here a case history of the distributional effects of the public sector on the traditional and modern sectors of a colonial dual economy; but the fiscal incidence on Jews and Arabs also had serious implications for the country's political economy at the time and reflected the government's approach to Palestine as a political entity composed of rival national communities—an approach which, from the contemporary point of view, would affect the country's political future after the British mandate was terminated. And indeed, as will be shown below, the redistributional aspects of the government budget were a major source of disagreement between Jews and Arabs about the evaluation of government policies and the Jewish contribution to Arab material welfare generated by them.

Important as the fiscal incidence may have been as a polemical issue, the debates concerning it were based only on very partial and inaccurate empirical foundations. The main purpose of this study is therefore to estimate, as accurately as possible, the incidence and the amount of resources transferred between the two national sectors through the fiscal system.<sup>1</sup> On the basis of these estimates I shall evaluate, and confront with contemporary assessments, the government's economic policy toward the Jewish and the Arab communities, in general, and its redistributive effects within the framework of a developing dual economy. In addition, the weight of the fiscally generated transfer in the overall economic relationship between Jews and Arabs will be examined in order to provide some insight into the nature of these relationships under the constraints of national rivalry.

Given the changes that took place in the Jewish community's share of Palestine's population and economy, on the one hand, and in the composition of government taxes and expenditures, on the other, one would ideally want to estimate a continuous annual series of the government fiscal incidence for the entire mandate period, or at least for the interwar years. This was precluded by data constraints; the analysis is therefore limited to two benchmark years, one representing the early period of the British civil regime, and the other, the later interwar period.

The years chosen for the investigation were the fiscal years dating from April 1, 1926, to March 31, 1927, and from April 1, 1935, to March 31, 1936. These particular years have a number of advantages: First, they were nonviolent years as far as Jewish-Arab relations were concerned; thus government expenditure on defense and internal security were not extraordinarily high.<sup>2</sup> Second, they differed in the composition of taxes and government expenditures in a way which seems a priori related to the changes in fiscal incidence in a dual economy. I refer here primarily to the share of transaction and expenditure taxes in total revenue (Morag, 1967,

pp. 8-9), which was 76 percent in 1926/27 and 91 percent in 1935/36, and to the percentage of outlays on infrastructure and other economic services, which increased from 20 percent of all government expenditure in 1926/27 to 33 percent in 1935/36 (Treasurer Reports 1926/27, 1935/36). The third, not unconnected, advantage is that the 2 years selected highlight the changes in the weight of the Jewish community in Palestine. The Jewish population share, which was 16.5 percent in 1926/27, reached 26 percent in 1935/36 (*Vital Statistics*, 1947; Bachi, 1974, pp. 399-400). We know much less about the Jewish sector's economic weight: 1936 is the only interwar year for which direct estimates of Palestine's product by national origin are available. According to the pioneer input-output tables constructed by Gaathon (1978, pp. 19-35) and revised by Szereszewski (1968, pp. 27-69), the 1936 Jewish net domestic product was about 55 percent of the net domestic product of the entire economy. For the rest of the interwar period the only available annual figures are for Jewish net domestic product as estimated by Szereszewski for the years 1922-1947. In order to estimate the net domestic product of the entire economy and its Jewish-Arab distribution in 1926/27, I have assumed that real income per capita in the entire economy rose at the same rate as in the Jewish sector between 1926/27 and 1936 (9.7 percent annually on the average). On this assumption, the Jewish share of Palestine's net domestic product was 33 percent in 1926/27 and 52.5 percent in 1935/36.<sup>3</sup>

In addition, the years selected also have some technical advantages. For example, there are some detailed tax incidence studies for 1930 (see below) from which we know that in that year the Jewish population and product shares were the same as in 1926/27. And in 1935/36, the Public Works Department, which was responsible for about a third of all government expenditures in the mid-1930s, published its most detailed report of the entire interwar period. Another advantage of 1935/36 was that I was able to draw on the rich data base contained in Gaathon's (1978) comprehensive study of the economy of Palestine in 1936.

The study is divided into four sections: In the first, Palestine's tax structure, it changes, and the tax incidence estimates are presented and discussed. The second section is devoted to the estimation and analysis of the incidence of expenditure (a detailed discussion of the composition of government expenditures is to be found in Gross and Metzger, 1978). The net fiscal incidence is derived in the third section, and its implications for the distribution of income and resources and for the overall intersectoral transfer between Jews and Arabs are analyzed. The last section sums up the study by discussing the links between the government fiscal system and various aspects of Jewish-Arab national politics in mandatory Palestine.

## II. THE STRUCTURE AND INCIDENCE OF TAXATION

As already stated, mandatory Palestine was a developing economy, in transition from tradition to modernity and market-oriented economic activity. Closely related to this process were the changes in the country's tax structure during the period.

The relationships between economic development and changes in tax structure have often been dealt with in the literature. A useful typological classification and generalization of these relationships has been provided by Hinrichs (1966). Hinrichs distinguishes between three basic tax categories: 1) traditional direct taxes typically consisting of taxes on land, livestock, gross agricultural output, etc.; 2) modern direct income and property taxes; and 3) indirect taxes. The last category is further subdivided into foreign trade and internal taxes.

Utilizing a wide range of empirical observations, Hinrichs was able to show that, along with modernization, the tax structure of the typical developing country undergoes significant changes that can be summarized as follows. In the premodern traditional stage, government tax revenue is derived primarily from traditional direct taxes, while the much less important indirect taxes are dominated by duties on foreign trade. When the economy embarks on a developmental path, the weight of the traditional direct taxes starts to diminish and that of the indirect taxes, both internal and external, rises, so that they become the major source of tax revenue. As the internal market grows and economic activity becomes diversified, one usually observes gradual substitution of modern direct taxes for the traditional ones, while in the indirect tax category the weight of the foreign trade taxes declines. These trends continue until the economy reaches an advanced stage of modernity in which direct taxes once again become the prime source of tax revenue. But they now consist of personal and business income tax and modern property taxes, with traditional taxes virtually eliminated.

Thus in terms of the direct/indirect tax ratio, the change in the tax structure that occurs with economic development has a U-shaped pattern. The ratio is high in the traditional period and in the late stages of development, reaching a low point during the transition.

The general trend of change of Palestine's tax structure in the mandatory period follows this pattern very closely. In Table I, which employs the tax classification suggested by Hinrichs, it can be seen that the most prominent changes in the country's tax structure were the gradual replacement of traditional direct taxes on output (the *tithe*) and on real estate (the *werko*) by modern property and income taxes; the eventual de-

Table 1. Composition of Taxation (Percent)

	1921/22 - 1932/33	1933/34 - 1940/41	1941/42 - 1946/47
<i>Direct Taxes</i>			
Output and Property Taxes:			
Tithe	11.2	0.7	0.1
Werko	10.5	1.0	—
Rural Property Tax	—	2.1	2.8
Urban Property Tax	—	6.8	5.2
Livestock Tax	2.5	0.7	1.0
Total Output and Property Taxes	24.2	11.4	9.1
Income Tax	—	—	18.7
All Direct Taxes	24.2	11.4	27.8
<i>Indirect Taxes</i>			
Transaction Taxes	20.2	21.7	20.8
Expenditure Taxes:	47.4	57.4	38.9
Customs	9.5	9.5	12.4
Excise Taxes	55.7	66.9	51.4
Total Expenditure Taxes	75.8	88.6	72.2
All Indirect Taxes	100.0	100.0	100.0
All Taxes: Percent	1751.8	3737.4	11536.9
Annual Average (FP thousand)			

Sources: Granovsky (1933) pp. 14-18; Morag (1967) pp. 8-9; Blue Books (1927-1937); Treasurer Reports (1937/38-1946/47).

cline in the weight of customs duties, which were the largest single source of tax revenue during the entire period; and the fall and subsequent rise of the direct/indirect tax ratio. This is not to say that all of these changes were induced by general economic development. Some, such as the decline in customs during World War II, were certainly exogenous, but most of them were endogenous. This refers primarily to the increase in revenue from those taxes which were highly correlated with the growth of marketed output such as transaction and expenditure taxes and to the government tax reforms which generated the principal changes in Palestine's tax structure.<sup>4</sup>

The most far-reaching reforms had to do with the modification and ultimate elimination of the agricultural output tax—the tithe. This was a traditional tax used by the Ottoman regime as its major source of revenue and was originally collected in kind as a given proportion of gross output. The first modification of the tithe introduced by the British (in 1918) was to replace the payments in kind by money payments.

The main drawback of the tithe was that it was levied at a fixed rate in terms of gross output. This meant that it was inversely correlated with the share of value added in gross output; it therefore discriminated against low-value-added producers, and its real burden rose when crop yields de-

clined. Constant pressure from farmers and the increase in alternative sources of tax revenue induced by economic growth led the government first to revise the structure of the tithe (in 1928) and then gradually to eliminate it: by the mid-1930s, it had declined to less than 1 percent of all tax revenue, as compared with an average of 11 percent in the 1920s and early 1930s.

Another important tax reform produced a series of changes in the structure of property taxes. In the 1920s, the only property tax was the land and buildings tax (*werko*), also inherited from the Ottoman regime. It was levied on the basis of a property assessment carried out in the early 1890s, except in the case of property which had changed hands since then and had been assessed at the time of the transaction. Since real estate values rose substantially during the mandatory period, as a result of immigration, capital import, and growth, the real tax rates were quite arbitrarily distributed according to whether and when the taxed property changed ownership. The first step to correct this distortion was taken in 1929, when the government introduced a new urban property tax based on updated value assessments.

The next action came in 1930 with the appointment of the Johnson-Crosbie committee by the High Commissioner for Palestine. Its mandate was to examine the economic condition of farmers and to recommend fiscal measures that would increase equity within the agricultural sector and between it and the rest of the economy. The committee's principal recommendation was to introduce a progressive income tax. It also recommended the introduction of a new agricultural property tax which was to be based on the updated market value of rural property and would allow for higher taxes on cultivated land. The income tax recommendation had to wait until 1941, primarily because of Jewish objections, before it was finally acted on,<sup>5</sup> but the new rural property tax was introduced in 1935.

The output and property tax reforms coupled with a substantial increase in revenue from customs duties caused the tax structure of the 1930s to differ from the 1920s in two major respects (see Table 1): one was that the weight of direct taxes in total revenue declined from 24.2 to 11.4 percent, and the second was the change in the internal composition of direct taxes. In the 1920s they were dominated by taxes on agricultural property and output, whereas in the 1930s the major item was the urban property tax.

The last reform was the introduction of progressive income tax in 1941. Its precise timing was very much determined by the war-induced decline in customs revenue and by the sharp rise in domestic incomes, primarily due to the British demand for supplies and services during the war. But, as indicated above, the government had already accepted the income tax proposal in 1930. The economy was ripe for it, and it was only because of

the political conflict between Arabs and Jews (to be discussed below) that the introduction of the income tax was postponed until the war.

We have so far shown that the mandatory tax structure largely reflected the country's developmental path and the government's response to it. As indicated in Section I, this path had distinctly dualistic characteristics, in which the comparatively advanced Jewish sector was the leader in Palestine's modernization and growth. One would thus expect to observe some association between the relative weights of the two national sectors in the economy and the tax structure. This would in turn affect the distribution of the tax burden between Jews and Arabs—the major issue of this section, to which we now turn.

The empirical basis for the analysis of tax incidence is the estimates of Jewish and Arab shares in government revenue prepared by David Gurevich, head statistician of the Jewish Agency, for 1930 and 1934/35 (Gurevich, 1932, 1936). He conducted his investigation in order to provide quantitative evidence on what was believed to be the relatively large Jewish contribution to government revenue. In spite of his particularistic motives, neither his procedure nor the quantitative parameters he used were unduly biased. Moreover, his findings were confirmed by an independent government study which arrived at very similar results for 1930 ("Memo-randum by the Treasurer . . .," 1932).

In estimating the tax incidence, Gurevich adopted the conventional assumptions regarding tax shifting, namely, that direct taxes are not shifted at all whereas indirect taxes are shifted all the way to the ultimate consumer. On these assumptions, he divided tax payments between Jews and Arabs according to parameters such as their shares in Palestine's rural and urban population, real estate, the relevant types of capital, wage income, and various output aggregates.

Although the empirical validity of the conventional assumptions about the nature of tax shifting and the underlying demand and supply elasticities have been seriously questioned in the modern public-finance literature (see De Wulf, 1975), they seem to be quite legitimate in the context of the dual economy of mandatory Palestine, where the two national sectors were highly segregated and where excise taxes on domestically traded goods were limited to three commodities: matches, tobacco, and alcoholic beverages. On these grounds, the use of Gurevich's estimates for our purposes seems to be both methodologically and empirically justified.

What I did was to allocate the 1926/27 and 1935/36 revenue between Jews and Arabs according to Gurevich's distributive shares for 1930 and 1935/36, respectively, with the calculation being done for each tax separately. The direct application of the relative incidence coefficients for 1930 to the taxes of 1926/27 is justified by the fact that the Jewish-Arab income and population distributions were the same in both years. Simi-

larly, one can justify the application of the 1934/35 coefficients to the 1935/36 tax structure on the grounds that there were no noticeable changes between these two consecutive fiscal years which would have significantly altered the distribution of the tax burden.

The incidence estimates by tax group are presented in Tables 2 (current prices) and 3 (percentages). The composition of taxes in 1926/27 and 1935/36 is also reported in these tables, and it is immediately evident that the two years differed substantially in their tax structure: in 1926/27, direct taxes (consisting almost entirely of the traditional tithe and *werke* taxes) produced one-quarter of the total tax revenue, in marked contrast with 1935/36, when they produced less than one-tenth and when the traditional taxes had been largely replaced by the new urban and rural property taxes.

The principal finding to emerge from the incidence analysis is the large increase in Jewish compared with Arab tax payments between the two years. The revenue derived from the Jewish sector grew more than five and a half times—from £P672,000, or 38 percent of total tax revenue in 1926/27, to £P3.1 million, or 69.1 percent of the total in 1935/36. The Ar

Table 2. The Incidence of Taxation 1926/27, 1935/36  
(£P Thousand Current Prices)

	1926/27		1935/36	
	Jews	Arabs	Jews	Arabs
<i>Agricultural Output and Property Taxes</i>				
Tithe	27.4	183.0	3.3	22.2
Werke	64.9	115.4	13.4	23.9
Rural Property Tax	—	—	28.1	72.4
Urban Property Tax	—	—	166.3	74.7
Livestock Tax	0.4	39.5	0.4	39.0
Total Output and Property Taxes	92.7	337.9	211.6	232.2
<i>Transaction Taxes:</i>				
Stamps Tax	30.7	37.6	67.2	57.3
Licenses and Fees	108.0	132.6	465.8	244.8
Land Registration Tax	95.4	31.9	307.1	91.7
Total Transaction Taxes	177.0	202.1	840.2	393.8
<i>Expenditure Taxes</i>				
Customs	337.5	466.2	1,810.3	940.9
Excise Taxes	65.2	101.0	195.5	162.6
Total Expenditure Taxes	402.7	567.2	2,005.8	1,103.5
All Taxes	672.4	1,107.2	3,057.6	1,729.5

Sources: Gurevich (1932, 1936).

Table 3. Composition and Incidence of Taxation 1926/27, 1935/36 (Percent)

	1926/27				1935/36			
	Tax Composition	Tax Incidence			Tax Composition	Tax Incidence		
		Jews	Arabs	Total		Jews	Arabs	Total
<i>Agricultural Output and Property Taxes</i>								
Tithe	11.8	13.0	87.0	100.0	0.5	13.0	87.0	100.0
Werko	10.1	36.0	64.0	100.0	0.8	36.0	64.0	100.0
Rural Property Tax	—	—	—	—	2.1	28.0	72.0	100.0
Urban Property Tax	—	—	—	—	5.0	69.0	31.0	100.0
Livestock Tax	2.2	1.0	99.0	100.0	0.5	1.0	99.0	100.0
Total Output and Property Tax	24.2	21.5	78.5	100.0	9.2	47.7	52.3	100.0
<i>Transaction Taxes</i>								
Stamps Tax	3.8	45.0	55.0	100.0	2.6	54.0	46.0	100.0
Licenses and Fees	13.5	44.9	55.1	100.0	14.9	65.6	34.4	100.0
Land Registration Tax	3.9	54.5	45.4	100.0	8.3	77.0	23.0	100.0
Total Transaction Taxes	21.3	46.7	53.3	100.0	25.8	68.1	31.9	100.0
<i>Expenditure Taxes</i>								
Customs	45.2	42.0	58.0	100.0	57.5	65.8	34.2	100.0
Excise Taxes	9.3	39.0	60.8	100.0	7.5	54.6	45.4	100.0
Total Expenditure Taxes	54.5	41.5	58.5	100.0	65.0	64.5	35.5	100.0
All Taxes	100.0	37.8	62.2	100.0	100.0	63.9	36.1	100.0

Source: Table 2.

Fiscal Incidence and Resource Transfer in Palestine

contribution, on the other hand, rose by only 50 percent, from £P1.1 million to £P1.7 million.

In both years the Jewish percentage contribution to tax revenue exceeded the Jewish share of population and income: the population share rose from 16.5 percent in 1926/27 to 26 percent in 1935/36, the income share rising from 33 to 52.5 percent in the same period. It is interesting to note that the increase in Jewish tax payments was spread over *all* tax categories; only about 12 percent of it can be attributed to changes in the tax structure such as the decline in output taxes, in which the Jewish share was the lowest. These findings are consistent with the fact that Palestine was a dual economy, as well as with the specific conditions, tax characteristics, and policies prevailing at the time.

The economic dualism of Arab and Jewish sector had both inter- and intraindustry aspects. At the interindustry level one finds a feature similar to what is commonly found in developing dual economies, namely, that the economic activity of the more advanced and prosperous sector is concentrated in nonagricultural pursuits. About 86 percent of the Jewish population was urban in 1936, compared with only 36 percent of the Arab population (Gaathon, 1978, p. 20). Similarly, as we can see from Table 4, in 1936 agriculture employed only 19 percent of the Jewish labor force and generated only 9.5 percent of Jewish income, the corresponding figures for the Arab sector being 62 and 25 percent.

The most interesting feature of Jewish-Arab dualism was, however, the intraindustry differences in income between the two sectors. Table 4 presents the Jewish-Arab ratios of per capita and per earner income in 1936. It can be seen that income, both per capita and per earner, was in almost every industry higher in the Jewish than in the Arab sector, the largest differential being in agriculture and construction. In other words, although the modernity of the Jewish economy is generally identified with the high proportion of nonagricultural output and employment, it was in agriculture that the Jewish economic advantage was most prominent. This phenomenon was connected primarily with the fact that Palestine's dualism reflected the coexistence of two separate *economies* and not just two—modern industrial and traditional agricultural—socioeconomic sectors.

For ideological and political reasons the Jewish community invested a considerable amount of capital and R&D (research and development) resources—particularly through its public-finance channels—as well as manpower in modern agriculture. Similarly, the reliance of the Jewish economy on unskilled and semiskilled Arab labor was also quite moderate owing to the national and social ideology and to the rapid growth of Jewish immigration and population during the mandatory period (Metzer, 1977, 1978).

Table 4. Product and Employment Distribution by Industry 1936

	Net Domestic Product (Percent)		Employment (Percent)		Jewish/Arab Ratio	
	Jews (1)	Arabs (2)	Jews (3)	Arabs (4)	Income per Earner (5)	Income per Capita (6)
Agriculture	9.0	25.0	21.0	62.0	2.2	5.0
Manufacturing	22.0	13.0	20.0	9.0	1.5	1.8
Construction	9.0	2.0	9.0	3.0	2.8	3.4
Services	60.0	60.0	50.0	26.0	1.0	1.3
Total	100.0	100.0	100.0	100.0	1.9	3.0

Sources:

Szarezweski (1968) p. 38, for columns (1) and (3); Gaathon (1978) pp. 24, 28, 32 for columns (2), (4), (5), (6).

The association between the interindustry characteristics of Palestine's dualism and the incidence of taxation is clearly reflected in the figures for the sectoral contributions to each kind of tax: the highest Arab contribution (78.5 and 52.3 percent in 1926/27 and 1935/36, respectively) was to agricultural output and property taxes; the highest Jewish contributions were in transaction taxes (46.7 and 68.5 percent) and expenditure taxes (41.5 and 69.5 percent), with output and property taxes a good way behind (21.5 and 47.7 percent). The revenue from expenditure and transaction taxes was positively associated with the degree of economic development and the level of income. However, it was another specific factor that produced the exceptionally large Jewish share in the land-registration tax (a major source of revenue) and its rapid rate of increase between 1926/27 and 1935/36. This was the nationally motivated land-purchase drive by Jewish public institutions and private persons, which increased in volume and intensity during the mandatory period.

The incidence pattern of output and property taxes reflects, more than any other tax category, the effects of intraindustry dualism and the government's collection procedures and policies, effects which did not necessarily work in the same direction. In 1926/27 the interesting feature of the incidence of these taxes was the difference between the tithes and the *werko*, the Jewish share being much lower in the first (13 percent) than in the second (36 percent). Since a large part of the *werko* was levied on urban real estate, this difference was certainly associated with the fact that the Jewish community was primarily urban. To some extent, however, it may have reflected the fact that the administration of the *werko*, according to which only the value of newly purchased real estate was reassessed, in practice discriminated against the Jews, since most of their

property was newly acquired. On the other hand, the structure of the tithes and its implied bias in favor of more efficient production may have worked to the benefit of Jewish agriculture.

Between 1926/27 and 1935/36 the government, as indicated above, replaced the tithes and the *werko* by the new rural and urban property taxes. The most noticeable change in their incidence was the very large increase in the Jewish relative contribution to the purely rural taxes: compare the 13 percent share in the tithes in 1926/27 with the 28 percent share in the rural property tax in 1935/36. This may have reflected the increase in Jewish agricultural capital stock (including land) and output, on the one hand, and the increase in the relative efficiency of Jewish agriculture, on the other. These developments may have more than offset the effect of the reassessment of agricultural real estate accompanying the tax reform of the mid-1930s, which, other things being equal, should have lowered the Jewish contribution to property taxes.

To sum up, we see that as the weight of the more modern Jewish sector rose, output and property taxes produced a declining share of total tax revenue. At the same time, the Jewish sector rapidly increased its relative contribution to these taxes, more than doubling it between the two benchmark years, while the corresponding increase for transaction and expenditure taxes was no more than 50 percent. The Arab sector continued to make its highest relative contribution to output and property taxes: in absolute terms, however, its payments in this category declined by about 31 percent between the two years under review, while its transaction and expenditure tax payments rose by about 95 percent.

This suggests that, in addition to the contributory factors mentioned above, the Arab sector may have been modernizing its structure faster than the Jewish sector, and this in turn may have reflected the former's more underdeveloped condition at the beginning of the period and its attempts to catch up in the later years. However, until more comparative socioeconomic research is done on the two national communities in Palestine, this possibility remains conjectural.

When we move from aggregate to per capita taxes, as reported in Table 5, we see that, due to population growth, they increased much more slowly in both national communities. It is interesting to note, though, that the rise in aggregate Jewish tax payments was high enough to offset the effect of the very rapid absolute and relative growth of Jewish population; consequently, the Jewish/Arab per capita tax ratio rose from 3 in 1926/27 to 5 in 1935/36.

On the other hand, when the economic tax burden is compared for the two communities, the picture changes significantly. The share of taxes in the Jewish and Arab net domestic product is presented in the upper panel of Table 6. It is seen that the ratio of taxes to Jewish income increased



Table 5. Population and Taxes per Capita 1926/27, 1935/36

	1926/27		1935/36			
	Jews (1)	Arabs (2)	Jewish/Arab Ratio (3) = (1)/(2)	Jews (4)	Arabs (5)	Jewish/Arab Ratio (6) = (4)/(5)
Population (thousands)	149.6	755.3	0.2	334.2	947.1	0.3
Taxes per Capita (EP)						
Output and Property Taxes	0.6	0.4	1.4	0.6	0.2	2.5
Transaction Taxes	1.2	0.3	4.1	2.5	0.4	6.0
Expenditure Taxes	2.7	0.7	3.6	6.0	1.2	5.2
All Taxes	4.5	1.5	3.0	9.1	1.8	5.0

Sources: Vital Statistics (1947), Bacht (1974) p. 399, for the population data; Table 1 for the tax incidence.

only moderately (compared with the increase in per capita taxes), from 15 percent in 1926/27 to 16.8 percent in 1935/36, while in the Arab sector the tax burden even declined between the two years, from 12.2 to 10.5 percent.

In the particular case of mandatory Palestine, however, it is useful to look also at an alternative measure of the tax burden, the proportion of

Table 6. Net Domestic Product, Resources and Tax Shares

	1926/27			1935/36		
	Jews (1)	Arabs (2)	Jewish/Arab Ratio (3) = (1)/(2)	Jews (4)	Arabs (5)	Jewish/Arab Ratio (6) = (4)/(5)
Net Domestic Product	4,486.5	9,102.1	0.5	18,180.5	16,453.0	1.1
Net Resources (EP thousand)	9,685.1	9,102.1	1.1	29,449.7	16,453.0	1.8
Tax Shares in Net Product (Percent)						
Output and Property Taxes	2.1	3.7	0.6	1.2	1.4	0.8
Transaction Taxes	3.9	2.2	1.7	4.6	2.4	1.9
Expenditure Taxes	9.0	6.2	1.4	11.0	6.7	1.7
All Taxes	15.0	12.2	1.2	16.8	10.5	1.6
Tax Share in Net Resources (Percent)						
All Taxes	6.9	12.2	0.6	10.4	10.5	1.0

Sources: Szarezewski (1968) p. 56, Garton (1978) pp. 23-24, Gross and Metzger (1978), p. 153 for the product and resource figures; Table 1 for the tax incidence.

taxes in total annual resources, which is reported in the lower panel of Table 6. This is a revealing measure: because of the very substantial Jewish net capital import, primarily in the form of unilateral transfers by immigrants and by the diaspora-based fund-raising institutions, net domestic product strongly understates the amount of resources at the disposal of the Jewish community, and between 1922 and 1939 net domestic product averaged only 58 percent of the total annual flow of Jewish resources (Gross and Metzger, 1978, p. 153). Thus, in terms of the percentage of taxes in total resources (resource-based burden), the Jewish community's tax burden was obviously smaller than in terms of the percentage of income (income-based burden). However, the resource-based burden increased faster because Jewish capital imports grew more slowly than net domestic product between 1926/27 and 1935/36.

The tax burden comparison enables us to characterize the Palestine tax system in terms of its Jewish-Arab redistributive effects. Given the direction of the income and resource differential between the two sectors, the Jewish/Arab tax-burden ratio may be viewed essentially as an index of tax progressivity [see Table 6, columns (3) and (6)]. Thus, a smaller-than-unity tax-burden ratio would imply a regressive tax system (in terms of the Jewish-Arab dichotomy), and a greater-than-unity ratio would imply a progressive system. A ratio of unity would obviously mean that the system had no redistributive effects at all. It can be seen that with respect to income the overall tax system was progressive in both 1926/27 and 1935/36 and its progressivity increased over time.

The picture is somewhat different when the share of taxes in resources is used as a proxy for the Jewish tax burden. In this case it is found that the system was regressive in 1926/27, when the burden ratio was 0.6, and proportional in 1935/36, with a ratio of close to unity. Nevertheless, the general trend of increasing progressivity (or declining regressivity) is shown by the resource-related measure as well.

Thus, although none of the existing taxes was intentionally progressive (and there was no income tax at the time), the reformed tax structure of the 1930s had more progressive attributes than the traditional tax structure of 1926/27. This was due primarily to the declining weight of the *tithe* and the *wetko* and to what appears to be a greater-than-unity income elasticity of demand for the taxed transactions and expenditures.

### III. THE INCIDENCE OF GOVERNMENT EXPENDITURES

The analysis of tax incidence in the preceding section drew heavily on contemporary studies; in order to analyze the incidence of expenditures, however, new and independent estimates had to be derived, since no comparable studies have been conducted for the expenditure side of the

budget. This is so because contemporaries, especially the Jews, were much more concerned with the distribution of government employment between the two national communities—a concern connected mainly with immigration-related problems of absorption and provision of employment. It was only in the specific areas of health, education, and transport infrastructure that attention was focused on the distribution of benefits from total expenditure; the incidence of general expenditures (particularly those of the Public Works Department) was considered of only secondary importance, presumably because these expenditures were mostly on public goods and were in any case not earmarked for one or the other national community.<sup>6</sup>

Consequently, most of the contemporary attempts to quantify the incidence of public expenditures either completely ignored the outlays on public works and other non earmarked services or evaluated them only as employment-generating activities. There has been only one attempt to construct a complete estimate of the incidence of government expenditure, i.e., that of Gaathon (1978) in his comprehensive quantitative study of the economy of Palestine in 1936. Gaathon divided all government expenditure not directly aimed at one of the national sectors on an equal per capita basis. Since the share of nationally earmarked expenditures was small in the government budget of the mid-1930s, Gaathon arrived at a percentage distribution of benefits which was quite similar to the distribution of Palestine's population between Arabs and Jews. Although one can use the assumption of uniform per capita distribution as a first approximation,<sup>7</sup> on closer scrutiny it becomes clear, as will be shown below, that this understates the Jewish share in government services quite substantially, so that the use of Gaathon's findings as a basis for the present investigation is ruled out.

Before we embark on the main discussion, some methodological remarks are called for. Apart from the conceptual and empirical difficulties of using the government's expenditures as a proxy for its output (the procedure adopted here) and of separating the value-added and intermediate components of the output, the allocation of government services between their beneficiaries encounters additional problems, the most important of which are connected with the incidence of general expenditures and services, primarily public goods, and with the incidence of investment outlays.<sup>8</sup>

As regards general and public goods expenditure, the major issue is how to distribute the benefits from these non earmarked and often indivisible services. Economic theory provides no practical guidance, and students of public economics have applied a wide range of empirical allocative devices. The most widely used are population and income shares and the percentage distribution of all other expenditures among the groups

concerned (De Wulf, 1975). The approach I have adopted is a mixed one which has recourse to all three devices according to the nature of the expenditures involved: the sectoral shares of population were used to distribute expenditure on such items as defense and general public health income shares were employed for the distribution of the government's judiciary and internal security services; and expenditures on general administration and interest on the public debt were distributed by the incidence rates of all other expenditures (see the Appendix).

The rationale of this selection is that the spread of benefits from general defense or public health services may be best approximated by a uniform per capita distribution, while the incidence of law-and-order services would seem to be more closely associated with the distribution of income and wealth. This general reasoning is reinforced in the case of Palestine by the fact that, because of the national conflict and the balance of power between Jews and Arabs at the time, a large proportion—certainly much larger than the Jewish population share—of government expenditure or internal security was devoted to the protection of Jewish life and property.<sup>9</sup> The justification for distributing expenditures on general and intra departmental administration by the relative incidence rates of all other expenditure is that these outlays can be perceived as the running costs of the provision of government services.

As far as government investments are concerned, the main question is how good their current incidence is as a proxy of their benefits when realized. The answer to this question depends essentially on the validity of the implicit assumption that the distributive shares of the investment outlays remain stable during their gestation period. In view of the high proportion of the sectorally earmarked public investments in Palestine, and of the large extent of Jewish-Arab socioeconomic segregation, this assumption seems to be a plausible one in our case. Thus included in the incidence analysis are public investments as well as expenditures on current account.

In addition to these remarks, I should mention two more distributive devices which I have used (see the Appendix for more details). One is direct identification of sectoral incidence not only for nationally earmarked expenditures such as health and education grants, but also for expenditures of a more general nature, whose benefits could be identified along Jewish-Arab lines. Examples are the construction and maintenance of roads and the operation of agricultural stations in nationally homogeneous regions.

The second device was to allocate certain government expenditures between Jews and Arabs according to the sectoral shares in related aggregates. For example, I used the sectoral shares in Palestine's international trade in order to derive the incidence of public expenditures on construc-

tion and maintenance of port facilities and their feeder roads. Similarly I have divided hospital construction, maintenance, and hospitalization costs between the two communities by the proportion of their members in the hospital population.

For purposes of the quantitative analysis all government expenditures (except railroads and postal services, which are sold to users) were classified into four major functional categories: administration, internal security and defense, economic services, and welfare services. The economic services category was further subdivided into transport, agriculture, and other (mainly the generation and distribution of electricity, water supply, and land surveys). Welfare services were similarly subdivided into health and education. The figures are also classified by administrative origin, either the Public Works Department or the department concerned (the columns or lines labeled "Department" in the tables that follow). The cross-classification by function and origin is shown in Table 7.

The Public Works Department administered all expenditures on capital account, from infrastructure investment such as the construction of roads and harbors to the acquisition of office equipment for all government departments and institutions. In addition, the Public Works Department was responsible for the maintenance of all public infrastructure and government facilities. It can be seen that the proportion of public works in total expenditure was much higher in 1935/36 than in 1926/27 (33 percent compared with 20 percent). As can be seen in Table 7, this was due mainly to the rise in the weight of economic services and of investment expenditure originating in the Public Works Department (in both the economic and welfare services categories).

The incidence estimates are reported in Tables 8 (current £P) and 9 (percentages). The pattern that emerges is quite similar to the one observed on the revenue side, namely, that the absolute benefits to both Jews and Arabs rose with the 154 percent increase in government expenditure between 1926/27 and 1935/36, but that the total benefit to the Jews rose much faster (by 344 percent compared with 93 percent for the Arabs), so that the Jewish share of total budgetary expenditures rose from 25 percent in 1926/27 to 42 percent in 1935/36.

Although the change in the composition of expenditures was in the direction that favored the Jewish sector—chiefly through the rise in the weight of economic services—the Jewish share increased in every one of the expenditure categories, and it is this that is responsible for their increased share of the total rather than any change in composition. Particularly impressive was the ninefold increase in absolute benefits from government economic services, compared with the much more moderate figure of only about three and a half times in the other services (administration, defense, and welfare). By way of comparison, the absolute Arab

Table 7. Composition of Government Expenditures 1926/27, 1935/36

	1926/27							1935/36						
	£P Thousand			Percent			All Expenditures	£P Thousand			Percent			All Expenditures
	Department	Public Works	Total	Department	Public Works	Total		Department	Public Works	Total	Department	Public Works	Total	
Administration	385.4	39.2	424.6	90.8	9.2	100.0	27.9	968.4	105.3	1,073.7	91.2	9.8	100.0	27.8
Internal Security and Defense	497.7	61.3	559.0	89.0	11.0	100.0	36.8	863.5	104.2	967.7	89.2	10.8	100.0	25.1
Economic Services:														
Agriculture	65.3	16.4	81.7	79.9	20.1	100.0	5.4	181.0	35.5	216.5	73.6	16.4	100.0	5.6
Transportation	—	148.4	148.4	—	100.0	100.0	9.7	—	655.1	655.1	—	100.0	100.0	17.0
Others	51.6	3.0	54.6	94.5	5.5	100.0	3.6	124.1	249.7	373.8	32.2	66.8	100.0	9.7
Total Economic Services	116.9	167.8	284.7	41.4	59.9	100.0	18.7	305.1	940.3	1,245.4	24.5	75.5	100.0	32.3
Welfare Services:														
Education	126.3	13.1	139.4	90.6	9.4	100.0	9.4	239.4	108.8	348.2	68.8	31.2	100.0	9.0
Health	91.7	21.7	113.4	80.9	19.1	100.0	7.4	194.6	28.0	222.6	87.4	12.6	100.0	5.8
Total Welfare Services	218.0	34.8	252.8	86.2	13.8	100.0	16.6	434.0	136.8	570.8	76.0	24.0	100.0	14.8
All Expenditures	1,218.0	303.1	1,521.1	80.1	19.9	100.0	100.0	2,571.0	1,286.6	3,857.6	66.6	33.4	100.0	100.0

Sources: Treasurer's Report 1938/39; Annual Reports of the Departments of Agriculture, Education, Health and Public Works for 1926/27 and 1935/36.

Table 8. Incidence of Government Expenditures, 1926/27, 1935/36 (£P Thousand)

	1926/27						1935/36					
	Department		Public Works		Total		Department		Public Works		Total	
	Jews	Arabs	Jews	Arabs	Jews	Arabs	Jews	Arabs	Jews	Arabs	Jews	Arabs
Administration	89.7	295.7	9.9	29.3	99.6	325.0	428.5	539.9	47.7	57.6	476.2	597.5
Internal Security and Defense	150.2	347.5	19.3	42.0	169.5	389.5	392.2	471.3	54.3	49.9	446.5	521.2
Economic Services:												
Agriculture	4.0	61.3	0.4	16.0	4.4	77.3	37.4	143.6	9.2	26.3	46.6	169.9
Transportation	—	—	42.6	105.8	42.6	105.8	—	—	362.3	292.8	362.3	292.8
Others	17.0	34.6	0.1	2.9	17.1	37.5	65.2	58.9	121.0	128.7	186.2	187.6
Total Economic Services	21.0	95.9	43.1	124.7	64.1	220.6	102.6	202.5	492.5	447.8	595.1	650.3
Welfare Services:												
Education	15.0	111.3	0.5	12.6	15.5	123.9	45.7	193.7	4.8	104.0	50.5	297.7
Health	15.8	75.9	3.6	18.1	19.4	94.0	58.6	136.0	6.5	21.5	65.1	157.5
Total Welfare Services	30.8	187.2	4.1	30.7	34.9	217.9	104.3	329.7	11.3	125.5	115.6	455.2
All Expenditures	291.7	926.3	76.4	226.7	368.1	1,153.0	1,027.6	1,543.4	605.8	680.8	1,773.8 <sup>a</sup>	2,083.8 <sup>a</sup>
					468.8 <sup>a</sup>	1,632.3 <sup>a</sup>						

Note: <sup>a</sup> Overall incidence estimated on the basis of the resource distribution between Arabs and Jews.  
Sources: Table 7 and Appendix.

Table 9. Incidence of Government Expenditures 1926/27, 1935/36 (Percent)

	1926/27									1935/36								
	Department			Public Works			Total			Department			Public Works			Total		
	Jews	Arabs	Total	Jews	Arabs	Total	Jews	Arabs	Total	Jews	Arabs	Total	Jews	Arabs	Total	Jews	Arabs	Total
Administration	23.3	76.7	100.0	25.4	74.6	100.0	23.5	76.5	100.0	44.2	55.8	100.0	45.3	54.7	100.0	44.4	55.6	100.0
Internal Security and Defense	30.2	69.8	100.0	31.5	68.5	100.0	30.3	69.7	100.0	45.4	54.6	100.0	52.1	47.9	100.0	46.1	53.9	100.0
Economic Services:																		
Agriculture	6.1	93.9	100.0	2.2	97.8	100.0	5.3	94.7	100.0	20.6	79.4	100.0	25.8	74.2	100.0	21.5	78.5	100.0
Transportation	—	—	—	28.7	71.3	100.0	28.7	71.3	100.0	—	—	—	55.3	44.7	100.0	55.3	44.7	100.0
Others	33.0	67.0	100.0	1.7	98.3	100.0	31.3	68.7	100.0	52.5	47.5	100.0	48.5	51.5	100.0	49.8	50.2	100.0
Total Economic Services	18.0	82.0	100.0	25.6	74.4	100.0	22.5	77.5	100.0	33.6	66.4	100.0	52.4	47.6	100.0	47.8	52.2	100.0
Welfare Services:																		
Education	11.9	88.1	100.0	3.7	96.3	100.0	11.1	88.9	100.0	19.1	80.9	100.0	4.4	95.6	100.0	14.5	85.5	100.0
Health	17.2	82.8	100.0	16.4	83.6	100.0	17.0	83.0	100.0	30.1	69.9	100.0	23.4	76.6	100.0	29.2	70.8	100.0
Total Welfare Services	14.1	85.9	100.0	11.6	88.4	100.0	13.8	86.2	100.0	24.0	76.0	100.0	8.3	91.7	100.0	20.3	79.7	100.0
All Expenditures	23.9	76.1	100.0	25.2	74.8	100.0	24.2	75.8	100.0	40.0	60.0	100.0	47.1	52.9	100.0	42.3	57.7	100.0
							30.8 <sup>a</sup>	69.2 <sup>a</sup>	100.0							46.0 <sup>a</sup>	54.0 <sup>a</sup>	

Note: <sup>a</sup> Relative incidence estimated on the basis of the resource distribution between Arabs and Jews.  
Source: Table 8.

benefits from economic services barely tripled and the benefits from other services rose by only 69 percent.

The striking absolute and relative growth of Jewish benefits from government economic services can be explained by two principal factors. One was the growing weight of the Jewish sector in the Palestinian economy, a pattern which enabled the Jews to benefit from a growing portion of the government's nonrearmarked economic services. This was true both at the aggregate level, where it applied to general government investments in economic infrastructure, and at the more disaggregated industry level; for instance, the relative increase in Jewish agricultural production was reflected in a rising proportion of Jewish benefits from the agricultural services provided by the government. Moreover, since the Jewish sector played a leading role in Palestine's economic development, one can view the government's response to the needs of the modernizing economy by increasing the proportion of total expenditures going to economic services as a response, at least indirectly, to Jewish demand for these services.

The second explanatory factor is connected with the increase in the density of Jewish settlement and with its geographic expansion during the period. These patterns had a very strong effect on the sectoral allocation of transport services—the major item in the economic category. This is demonstrated by the internal breakdown of direct transport outlays (i.e., excluding the general Public Works Department item in line 11 of Appendix Table A3): regionally defined services received by the Jewish sector rose from 3.5 percent in 1926/27 to 12 percent in 1935/36, the corresponding Arab figures declining from 23.5 to 14.8 percent; the remaining transport services (line 9 in Table A3, services whose sectoral distribution was estimated by the distribution of income and international trade) came to 73 percent of direct transport outlays in both years. These developments reflect both the regional expansion of Jewish settlement and the government's direct response to Jewish demand for an increase in road density in the newly settled regions, a demand which was backed up by Jewish participation in the financing of their construction.

As far as government per capita expenditures are concerned, the picture on the expenditure side is again similar to the one revealed by the tax-incidence analysis, namely, that the Jewish per capita outlays were larger than the Arab outlays (see Table 10) and that in terms of the Jewish-Arab ratio the gap was widening. Thus the Jews received more benefits per head from government services as well as paying more taxes per head. As can be seen in Table 10, this holds in every category except welfare services, where Jewish per capita benefits (£P) were 0.2 and 0.3 in 1926/27 and 1935/36, respectively, compared with 0.3 and 0.5 for the Arab sector. Note, however, that the gap in per capita welfare services resulted entirely from the intersectoral allocation of education expenditures,

Table 10. Government Expenditures per Capita 1926/27, 1935/36 (£ P)

	1926/27			1935/36		
	Jews (1)	Arabs (2)	Jewish/Arab Ratio (3) = (1)/(2)	Jews (4)	Arabs (5)	Jewish/Arab Ratio (6) = (4)/(5)
Administration	0.7	0.4	1.5	1.4	0.6	2.3
Internal Security and Defense	1.1	0.5	2.2	1.3	0.6	2.4
Economic Services	0.4	0.3	1.5	1.8	0.7	2.6
Welfare Services	0.2	0.3	0.8	0.3	0.5	0.7
Total Expenditures	2.5	1.5	1.6	4.9	2.3	2.1
	3.1 <sup>a</sup>	1.4 <sup>a</sup>	2.2 <sup>a</sup>	5.3 <sup>a</sup>	2.2 <sup>a</sup>	2.4 <sup>a</sup>

Note: <sup>a</sup> Figures based on the Jewish/Arab resource distribution.  
Sources: Tables 5, 8.

whereas the Jewish sector benefited from health services at a somewhat higher rate than warranted by its share of the population.

The provision of educational services was completely segregated along Arab-Jewish lines, more than any other government service. The Jews maintained autonomous school systems, generally under government supervision and assisted by government grants. The Arab community, on the other hand, was—except for a few religious schools—served by public schools constructed, maintained, and operated by the government (see Gross and Metzger, 1978; *Survey of Palestine*, 1946, Vol. III, pp. 635–669). The different nature of government support and involvement in the two school systems is well illustrated by the difference between the incidence of the educational outlays of the Public Works Department and those of the Department of Education.

The Public Works Department concentrated on the construction and maintenance of government schools and on providing them with the facilities and materials needed for their current educational activities. Since the overwhelming majority of students in government schools were non-Jewish, it is not surprising that the Jewish share was no more than 4 percent of the Public Works Department's educational expenditure in both 1926/27 or 1935/36.

The most important items in the Department of Education's expenditures, on the other hand, were wages and salaries to employees of government schools and grants to nongovernment (primarily Jewish) schools.<sup>10</sup> These grants were sufficiently large for the Jewish share in the Department's expenditure to be 12 percent in 1926/27 and 19 percent in 1935/36. In fact, 1926/27 was the first year in which the Jewish school systems received significant financial assistance from the government, most of it as a lump-sum grant of £P9,990 to the schools belonging to or affiliated

with the Zionist Organization. Another small grant of £P998 was given to independent (mostly religious) Jewish schools. The latter sum was calculated on the basis of a fixed per-pupil subsidy which the government paid to nongovernment schools, Jewish and non-Jewish alike.

In 1930 the government introduced a new criterion for allocating the *whote* of the Department of Education's outlays between Jews and Arabs, namely, their shares in the 5-15 age group. In 1935/36, the percentage distribution of the department's expenditures (19.6 percent to the Jews and 80.4 percent to the Arabs) did indeed conform with the proportion of Jews and Arabs in this age group, 19.2 and 80.9 percent, respectively, whereas the proportion of Jews in the entire population (26 percent) was much higher.

Since the Jewish elementary-school attendance rate was virtually 100 percent of the school-age population, while the Arab rate did not exceed 31 percent, the allocation of educational funds by age-group proportions caused the Department of Education's per-pupil expenditure to be lower in the Jewish than in the Arab sector. The gap was even wider for total educational outlays (i.e., including those of the Public Works Department).

The picture changes substantially, however, when Zionist educational expenditures are added to provide an inclusive comparison of the per-pupil outlay in the two national communities. Assuming that attendance rates were about the same in 1926/27 as in 1935/36, it is found that total educational expenditure per pupil in the Jewish sector (including that of the Zionist Organization, the Public Works Department, and the Department of Education) was more than double the corresponding figure for the Arab sector in 1926/27 and about the same in 1935/36—~~it~~ should be noted that the decline in the gap between the two years was caused by the slow growth of Zionist educational expenditure and not by cuts in the rate of government assistance granted to Jewish schools (see Gross and Metzger, 1978).

On the basis of these observations it can be inferred that, in allocating educational resources between the two sectors, the government to a large extent viewed Zionist expenditure—both investment and current outlays—as a substitute for its own expenditure.

In contrast to the segregation of educational services by both allocation and use, government health services were much more integrated between the two sectors.<sup>11</sup> This was in the first place due to the fact that part of these services—chiefly in the area of public health—were of a public-goods type whose benefits certainly crossed national lines. The proportion of government health expenditures (other than departmental administration<sup>12</sup>) of this type was by no means negligible, no less than 22 percent in 1926/27 and 24 percent in 1935/36, and they are thus allocated between

Jews and Arabs by the respective population shares. Second, and in contrast with government schools, Jews made extensive use of the services provided by government hospitals and clinics. Thus in 1926/27, the Jewish community accounted for about 18 percent of the total number of hospital days, a percentage that was somewhat higher than the Jewish share of the population, 16.5 percent, in that year. This relatively high rate of utilization of government health services may have been generated by the concentration of these services in urban areas, on the one hand, and by a high (probably above unity) income elasticity of demand for them. This demand could only be partly satisfied by the limited capacity of the Jewish health services at the time.

In 1935/36, the Jewish hospitalization share was about 20 percent of total hospital days, an order of magnitude quite similar to that of 1926/27. That the proportion remained more or less constant in spite of the fast relative growth of both Jewish population and income was due to the increase in the volume of services provided by the autonomous public institutions of the Jewish community and to the increase in Arab utilization of government health facilities. The latter trend may have reflected an increasing income effect on the demand side—and on the supply side an increase in government investment in health facilities in rural, primarily Arab-populated, districts.

The supply shifts are well-illustrated by the widening gap between the sectoral shares in the health expenditures of the Health Department and the Public Works Department. In 1926/27, the two departments had pretty much the same relative expenditure incidence, but in 1935/36 the 77.1 percent Arab share in the Public Works Department's health outlays (which were primarily for the construction and maintenance of health facilities) was about 7 percentage points above the Arab share in the outlays of the Health Department.

The hospital- and clinic-related expenditures (which are distributed between sectors by the sectoral hospitalization rates) came to 72.9 percent of administrative health expenditures in 1926/27 but only 39 percent in 1935/36 (see Table A4). In the latter years, an equally important item was the sectorally earmarked services and subsidies, which also came to about 39 percent of total nonadministrative health expenditure. About two-thirds of the total earmarked outlay of £P29,304 went to the Jewish sector in the form of a grant to Jewish hospitals. The remaining third consisted of health services provided exclusively for or used mainly by the Arab community.

To summarize, the difference between the incidence of health and education services could, as indicated above, be in part attributed to the different degree of national segregation in their provision and utilization. Another contributory factor, which is not entirely independent, may have

Table 11. The Share of Government Expenditures in Net Product and Resources 1926/27, 1935/36 (Percent)

Expenditure Shares in Net Product	1926/27		1935/36			
	Jews (1)	Arabs (2)	Jewish/Arab Ratio (3) = (1)/(2)	Jews (4)	Arabs (5)	Jewish/Arab Ratio (6) = (4)/(5)
Administration and Internal Security	2.2	3.6	0.6	2.6	3.6	0.7
Defense	3.8	4.3	0.9	2.5	3.2	0.8
Economic Services	1.4	2.4	0.6	3.3	4.0	0.8
Welfare Services	0.8	2.4	0.3	0.6	2.8	0.2
All Expenditures	8.2	12.7	0.6	9.0	13.5	0.7
Expenditure Shares in Net Resources	4.8	11.6	0.4	6.0	12.7	0.5

Sources: Tables 6, 8.

been the fact that the Zionist Organization spent much more on education than on health (see Gross and Metzger, 1978). This was by itself likely to make the potential substitution between government and Jewish public services much more effective in the area of education than in the area of health.

As in the case of taxes, government expenditure was found to be progressive with respect to income. This is revealed by the smaller-than-unity Jewish/Arab benefit-in-income ratio (see Table 11). Unlike in the case of taxes, however, the degree of expenditure progressivity changed very little between 1926/27 and 1935/36, and this was true of both income-based and resource-based progressivity. In order to determine the net redistributive effects of the government's fiscal system, the tax and expenditure incidences have to be combined; this is done in the next section.

#### IV. NET FISCAL INCIDENCE AND JEWISH-ARAB INTERSECTORAL RESOURCE FLOW

Net fiscal incidence is a measure of the combined effect of taxes and public expenditure on income distribution. It is derived by subtracting the taxes each group pays from the government services it gets. The net incidence will be positive for sectors which are net beneficiaries of govern-

ment resources, negative for those who are net contributors to government resources.<sup>13</sup>

Under conditions of balanced domestic budgets, the sum of the positive net incidences will obviously equal the sum of the negative ones. In a two-sector setup the net sectoral fiscal incidence will thus provide a direct measure of the unilateral transfer of resources from the contributing to the beneficiary sector.

In Palestine, however, the government generated large budgetary surpluses in both 1926/27 and 1935/36 (EP258,500 and EP929,400, respectively). The result was that while the Jewish sector was a substantial net contributor to the government budget, the Arab net benefits from it were quite modest. The net fiscal incidence figures (excluding surplus) are reported in Table 12. It may be seen that the net Jewish contribution to the budget (for the income-based estimates of the expenditure incidence) increased significantly from £304,500 in 1926/27 to EP1,424,300 in 1935/36. However, owing to the fast income growth enjoyed by the Jewish community during that period, the burden generated by the negative net incidence rose only slightly, from 6.8 percent of Jewish income in 1926/27 to 7.8 percent in 1935/36. The resource-based net incidence burden (EP203,600 and EP1,238,300 in 1926/27 and 1935/36, respectively) was both absolutely and relatively lower; but since Jewish resources grew more slowly than income, the resource-based relative burden rose faster (from 2.1 to 4.4 percent) than the income-based burden.

The small order of magnitude of the benefits to the Arab sector is particularly evident in 1926/27, when they came to no more than EP46,000 or 0.5 percent of income. Moreover, when the benefits are calculated on the basis of the resource distribution, the Arab sector becomes a net contributor (EP54,800 or 0.6 percent of income) in 1926/27. In 1935/36, the Arab net incidence was substantially greater both absolutely (EP494,900 and EP354,400 for the income-based and resource-based estimates, respectively) and relatively, even though the relative figures are still no more than 3 percent of income and 2.2 percent of resources.

The redistributive effects of the fiscal system are reflected in the income and resource distributions and in the Gini inequality coefficients presented in Table 13. The immediate inference that can be drawn from them is that the government's fiscal activities did not lead to much reduction in inequality in either the income or the resource distribution between Jews and Arabs. This had to do primarily with the small proportion of both taxes and expenditures in the economic aggregates of the two sectors.

Although small, the budget's inequality-reducing effects were much more noticeable in 1935/36 than in 1926/27, entirely a result of the rising progressivity of the tax system. The progressivity of government expenditures, on the other hand, remained essentially the same between the two

Table 12. Net Fiscal Incidence 1926/27, 1935/36<sup>a</sup>

	1926/27				1935/36			
	Net of Budgetary Surplus		Including Budgetary Surplus		Net of Budgetary Surplus		Including Budgetary Surplus	
	Jews	Arabs	Jews	Arabs	Jews	Arabs	Jews	Arabs
Net Income-based Estimates (EP Thousand)	(-) 304.5	(+) 46.0	(-) 241.9	(+) 241.9	(-) 1,424.3	(+) 494.9	(-) 1,031.2	(+) 1,031.2
Resource-Based Estimates (EP Thousand)	(-) 203.6	(-) 54.8	(-) 124.0	(+) 124.0	(-) 1,283.8	(+) 354.4	(-) 856.3	(+) 856.3
Share of Fiscal Incidence in Net Product (Percent)	(-) 6.8	(+) 0.5	(-) 5.4	(+) 2.7	(-) 7.8	(+) 3.0	(-) 5.7	(+) 6.3
Share of Fiscal Incidence in Resources (Percent)	(-) 2.1	(-) 0.6	(-) 1.3	(+) 1.4	(-) 4.4	(+) 2.2	(-) 2.9	(+) 5.2

Note: <sup>a</sup> Net contribution (-), net benefit (+).

Sources: Tables 2, 6, 8.

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Table 13. The Effects of Government Taxes and Expenditures on the Distribution of Income and Resources

1926/27, 1935/36

	1926/27				1935/36			
	Income		Resources		Income		Resources	
	Income Distribution (Percent)	Gini Coefficient	Resource Distribution (Percent)	Gini Coefficient	Income Distribution (Percent)	Gini Coefficient	Resource Distribution (Percent)	Gini Coefficient
Net of Government Revenue and Expenditure	33.0	0.165	51.6	0.351	32.5	0.264	64.2	0.381
Tax Effect Only	32.3	0.158	53.0	0.365	50.7	0.246	64.2	0.381
Net Fiscal Incidence (Tax and Expenditure) Effects:								
Net of Budgetary Surplus	31.4	0.149	51.2	0.347	49.7	0.236	62.6	0.365
Including Budgetary Surplus	31.2	0.147	50.9	0.344	49.5	0.234	62.3	0.362

Sources: Tables 2, 5, 7 and 12.

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years. This can be inferred from the virtually constant differences between the inequality coefficients pertaining to disposable income or resources (which represent the tax redistributive effects) and those related to the total, net fiscal incidence effects.

As noted above, in a balanced budget economy, the net fiscal incidence would also measure the intersectoral resource transfer generated by the government fiscal system. In order to derive an estimate of such a transfer in our case, some assumptions about the ultimate use of budgetary surpluses in mandatory Palestine have to be made. However, two relevant historical facts should first be mentioned. One is that the mandatory government was not permitted, nor did it have the necessary monetary facilities, to conduct an independent monetary policy. The Palestine money supply was determined solely by the amount of pounds sterling at the disposal of the government and the residents of Palestine and converted by them to Palestine pounds. Thus fiscal deficits could not be financed by domestic monetary expansion, and the only legitimate nontax source of government finance was domestic or foreign loans. The second relevant fact is that over the entire mandate period accumulated tax revenue covered about 94 percent of government's accumulated domestic expenditures.

Based on these facts, it seems reasonable to assume that budgetary surpluses were used by the Palestine government to finance deficits in years when they occurred. In addition, I have assumed that in 1926/27 and 1935/36, the surpluses were distributed between the two sectors according to the sectoral expenditure incidence in the two years. The shares of the surplus thus allocated to the Jewish and Arab sectors (obviously both positive) were then added to their respective net fiscal incidence as calculated above. The resulting income-based figures of £P241,900 in 1926/27 and £P1,031,200 in 1935/36 can be interpreted as the combined effect of government taxes and expenditure on each sector, where expenditure includes also the subsequent expenditure out of deficits assumed to have been financed by the 1926/27 and 1935/36 surpluses. According to this view, the additional expenditures are similar to investment outlays whose benefits are expected to be realized at a later period.

The figures of the overall fiscal effects (including surplus) are obviously also a measure of the amount of resources transferred from the Jewish to the Arab sector via the government in 1926/27 and 1935/36. The redistributive effects of these transfers were about the same as those of the net-of-surplus fiscal incidence (see Table 13). However, as a percentage of income, the Jewish burden, including the surplus, remained essentially the same in both years (5.4 percent in 1926/27 and 5.7 percent in 1935/36), increasing from 1.3 percent to 2.9 percent only in terms of resources. Relative Arab benefits from the transfer rose appreciably, however, from 2.7 to 6.3 percent of income (from 1.4 to 5.2 percent of resources), owing to

the slower growth rate of the Arab economy during the period. Nevertheless, the effects on each sector's absolute and relative income were quite small.

The large weight of fiscally initiated resource transfer in the overall economic relations between Jews and Arabs in Palestine, as reflected in the intersectoral balance of payments, stands in sharp contrast to these small effects.

Gaathon's estimated Jewish-Arab balance of payments for 1936 is presented in Table 14. In that year, Jews purchased goods and services (including land) from Arabs amounting to £P1,639,000, while Arab purchases from the Jewish sector came to £P796,000. Total intersectoral trade thus came to £P2,435,000 in 1936, and the income-related fiscal transfer is no less than 42.3 percent of this. When calculated on the basis of the resource distribution (£P856,300) the percentage of the transfer in total Jewish-Arab trade was somewhat lower, 35.2 percent, but still substantial.

An alternative way of examining the figures is by looking at the weight of the fiscal transfer in the total flow of income from the Jewish to the Arab sector (including both payments for goods and services purchased and unilateral transfers). This was 38.6 and 39.3 percent for the income-based and resource-based transfers, respectively. Assuming that the relative order of magnitude was not significantly different in the other interwar years (for which we unfortunately have no balance-of-payments estimates), it can be conjectured that the finding that the fiscal transfer had a substantial weight in Jewish-Arab economic relations in the mid-1930s is representative of most of the interwar period. If this is so, it reflects the

Table 14. Balance of Payments Between the Jewish and the Arab Sector, 1936 (£ P Thousand)

A. Purchases by Jews from Arabs:		
Land		139
Goods:		600
Agricultural products for consumption		76
Organic fertilizer		200
Building material		300
Payment of rent by Jews to Arab landlords		150
Payment of wages for Arab labor in agriculture		154
Payment of wages at the ports		
Total		1,639
B. Purchases by Arabs from Jews:		
Industrial products including electric current		771
Services of liberal professions and of qualified workers		25
Total		796
C. Excess of A over B		843

Source: Gaathon (1978), p. 19.

low level of economic interaction between the two national sectors in comparison with their overall economic activity; moreover, it indicates that a major component of the interaction was involuntary and brought about by a third party—the mandatory Government of Palestine.

### V. SUMMING UP: THE POLITICAL ECONOMY OF FISCAL INCIDENCE IN MANDATORY PALESTINE

The analysis in the preceding sections has dealt with the major redistributive characteristics of the Palestine fiscal system. It was shown that the government brought about a net transfer of resources from the high-income (and high-resource) Jewish sector to the low-income Arab sector. This, obviously, implies that the fiscal system as a whole was progressive between the two national communities. This is true for the expenditure incidence taken separately as well. Government expenditure was progressive with respect to the distribution of both income and resources, but the degree of progressivity as measured by the Gini coefficients did not change between 1926/27 and 1935/36. As regards tax incidence, the picture is mixed. It was progressive with respect to the distribution of income but regressive in 1926/27 and proportional in 1935/36 with respect to the resource distribution. Unlike the expenditure incidence, however, the inequality-reducing effects of the tax incidence increased between the two years.

These findings are consistent with the government-induced modernization of the tax structure, on the one hand, and with the socio-economic dualism (coinciding with the national dualism) of Palestine's developing economy, on the other. The former made for greater reliance on the "ability to pay" in the country's tax structure, while the latter enabled the relatively modern and fast growing Jewish sector to benefit from a rising share of the government's economic services, thereby offsetting the decline in the percentage of administrative and welfare services in Jewish income and resources between 1926/27 and 1935/36.

It was also shown that although the fiscally generated resource transfer was a major component in Jewish-Arab economic relations, its weight in each sector's aggregate economic activity and resources was quite modest. Nevertheless, the political (or what may have been viewed as political) implications of the redistributive characteristics of the system were regarded by contemporaries as highly significant. For the historian, the views of the parties concerned with respect to the fiscal incidence are particularly important because they reflect the attitude of each side toward the binational structure and destiny of Palestine.

On the basis of the findings of this study, two different—though interre-

lated—questions should be asked with regard to the political economy of Palestine's fiscal system. One is a positive question: how do our findings square with contemporary assessments of the intersectoral tax and expenditure distribution? The second question is normative: how did the Jews, the Arabs, and the government evaluate the fiscal system in view of their different political objectives and convictions?

As regards the factual-positive aspect, contemporaries had quite a good idea of the order of magnitude of the tax incidence. There may have been some dispute about the incidence of particular taxes, such as the Arab claim that tariffs benefited the Jewish sector because of the industrial protection they give, but the aggregate finding that Jews contributed about 40 percent of all government tax revenue in the late 1920s and early 1930s was generally accepted by all the parties.

No similar agreement existed, however, with respect to the incidence of expenditures. The Jews regarded the issue as empirically relevant only to the nationally earmarked expenditures in the areas of health, education, and transport (i.e., government-built roads in Jewish vs. Arab regions) and to the national distribution of employment in governmental public works.

General expenditures in administration, internal security, defense infrastructure, and other economic services were either excluded from distributive considerations or assumed to be uniformly distributed among all the inhabitants of Palestine. Based on these notions, the usual assessment of contemporary Jewish publicists, politicians, and scholars was that the Jews did not benefit from government services in excess of their population share and that a net resource transfer from the Jewish to the Arab sector was thus created by the government fiscal system (see Hoofien, 1930; Margalit, 1931; Gathon, 1978). The general conclusion about the existence of such a transfer was evidently correct in view of our findings; but its implied order of magnitude, based on the erroneous assertion of equal per capita expenditure for both Jews and Arabs, was significantly overstated.<sup>14</sup>

The Arabs, on the other hand, had a different perception of the expenditure incidence. They viewed a good part of the non earmarked governmental outlays as Jewish by their very nature. This position is best summarized by Abcarian in his book *Palestine Through the Fog of Propaganda* (1947), in which he claims that a significant part of the government expenditures was done as a result of either Jewish pressure, such as unemployment reducing public works, or security problems generated by "the National Home" policy laid down by Great Britain at the request of the Jews.<sup>15</sup> Making these assertions Abcarian goes on to ask with respect to the implied fiscal transfer: "Should not any larger contribution by Jews to public revenue, whether assumed or factual, be set off against

such additional expenditure, unnecessary but for the [National Home] policy pursued?" (Abcarius, 1947, p. 184).

Abcarius did not support his views with any quantitative evidence and thus made no explicit claims about the size of the net intersectoral resource transfer; however, the order of magnitude which he seems to have had in mind was most probably much lower than the transfer estimated above. This inference is based first on the fact that Jewish employment in government public works never exceeded the Jewish population share and second on the evidence that the percentage of public security in total expenditures was (in the mid-1930s) significantly lower in Palestine than in the other British-controlled countries in the Middle-East, Iraq and Trans-Jordan (see Jewish Agency, 1936, pp. 263-267). Thus serious doubts are raised about the validity of Abcarius' classification of Jewish expenditures and its implications for the intersectoral transfers.

Significant as they may have been, however, the differences between the parties with regard to the facts of the government's fiscal incidence were minor in extent and importance compared with the normative disagreement with respect to the redistributive features of the system.

The general Jewish attitude towards the government's public finance was based on the notion that the Jewish community was a separate political and socioeconomic entity segregated from the non-Jewish inhabitants of Palestine (Meitzer, 1978). This fundamental Zionist notion, which was accepted by the British government in its 1917 Balfour Declaration, was later incorporated in the League of Nations Covenant when Britain was granted the mandate for Palestine in 1922. Article 2 of the mandate explicitly "vested in the Mandatory the responsibility for placing the country under such political administrative and economic conditions as will secure the establishment of the Jewish National Home, as laid down in the preamble, and the development of self-governing institutions, and also for safeguarding the civil and religious rights of all the inhabitants of Palestine, irrespective of race and religion" (Government of Palestine, 1947, p. 2).

The separatist notion, coupled with international and British recognition of a Jewish body politic in the making, implied—from a Zionist point of view—that the fiscal responsibility of the government was to provide public services to the Jews at a level comparable with the taxes collected from them; or, to put it differently, that the Jewish tax incidence should be based on the "benefit principle" of public finance (see Hooftien, 1930; Sitchin, 1945; Morag, 1967, pp. 10-11).

Since government expenditures were assumed to be uniformly distributed on an equal per capita basis among all the inhabitants of Palestine, Jewish public opinion viewed the population percentage of the Jews to be also their appropriate and fair percentage share in government tax reve-

nue. This not being the case, as was well recognized in contemporary tax incidence studies, the Jews focused on the expenditure side. They constantly demanded a larger share of employment in public works, as well as an increase in their share of nationally earmarked public services and grants (Etingen, 1929; Von Weisel, 1926). The purpose of these demands was to close, or at least to narrow, the gap between Jewish relative tax incidence, and (what they considered to be) relative expenditure incidence.

In the introduction to his tax-incidence study for 1934/35 Gurevich states that:

while agreeing with the view that the burden of taxation borne by every individual should be in relation to his ability to pay, the Jewish Agency is of the opinion that the amounts contributed by the Jewish community as a whole should be taken in consideration with respect to some, or all of the items of the government expenditure. Under the present system the Jewish Agency and the Jewish Yishuv [the organized Jewish community in Palestine] are called to perform certain functions which are true government functions and are so carried out by the government with respect to the Arab population such as health and education services (Gurevich, 1936, p. 3; Italics in source).

The interesting point in Gurtvich's argument is that he accepts the equity-oriented principle of the "ability to pay" in allocating the tax burden at the individual and intrasectoral levels but he rejects it as a tax-distributing criterion at the Jewish-Arab intersectoral level. He does so on the basis of the existence of an autonomous Jewish public sector, which was one of the practical implications of the Zionist separatist approach to the binational structure of Palestine.

Based on this approach, Jewish public opinion referred to the actual fiscally generated transfer of resources to the Arab sector as a justification for demanding changes in government budgetary incidence, on the one hand, and, on the other, as an indication of the Jewish contribution to Arab economic development and material welfare which was forcefully claimed in contemporary Jewish publicist writings (see Hooftien, 1930; Horowitz and Hinden, 1938).

The Arabs' position with regard to the tax distribution was completely different, and they unequivocally supported the ability to pay principle, as Abcarius states explicitly:

Now assuming that it can be established beyond any doubt that the Jews are contributing to public revenue more than the Arabs, what would this imply? Simply this: that the Jews are better off materially, . . . that their earnings are greater than those of the Arabs, and consequently they are better able to pay taxes. But the indubitable fact remains that they are not contributing a bear more than their *due share*. . . . So long as taxes are equitably distributed it matters not in the least who pays more. The

wealthier classes in any well-ordered community pay more in taxes than their less fortunate counterparts, while governmental expenditure is so directed as to produce the greatest possible degree of well-being among the population as a whole. In the process, governmental expenditure achieves, in effect, a certain redistribution of the national wealth in favor of the poorer classes (Abcarius, 1947, pp. 183-184; italics in original).

This position was obviously based on a nonseparatist approach to the relations between the government and the inhabitants of Palestine both as individuals and as members of two distinct national communities.

As for the government, its basic fiscal principles were closer to the Arab position, as the following official statement indicates: policy was to be "guided by the revenue requirements of the country as a whole" and not

distinguish the separate contributions made to revenue, and the separate benefits received from its expenditure, by the Arab-Jewish and other categories of the population. . . . The distinction of fiscal contributions and benefits, . . . is illegitimate in any fiscal system which seeks to follow the principle that the individual's contribution to the general revenue should be proportional to the income and property which the existence of an ordered community enables him to obtain and enjoy (Survey of Palestine, 1946, Vol. II, p. 570).

This statement reveals the clear intention on the part of the government to maintain a proportional tax system, but the appropriate parameter by which proportionality was to be determined remains unclear. Was it the distribution of resources between Arabs and Jews—according to which the tax structure became proportional only in the mid-1930s? Or was it the domestic income distribution by which the system was found to be progressive (between the two national sectors) all along? In either case, one can conclude that the characteristics of the tax incidence were generally consistent with the government's concern about overall equity across national lines. This concern was also explicitly expressed in the first British partition plans of 1936, in which it was proposed that the Jewish state to be formed in part of Palestine should provide a continuous flow of grants-in-aid to the prospective Arab state in order to compensate for the loss of the net transfer generated by the fiscal system of the mandatory government (*Partition Commission Report*, 1938, pp. 179-246).

These general fiscal attitudes also reflected the gradual British retreat, in the late 1930s, from the original Jewish National Home concept, and its replacement by a vague idea of a unified, neither Jewish nor Arab state, put forward in the White Book of 1939 (*Zionism and the Arab Question*, 1979, p. 169). However, when it came to practical considerations having to do with particular individual taxes or expenditure categories, the government could not disregard the particularistic interests and rivalry be-

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tween the two national communities. The constraints imposed by this rivalry were explicitly recognized by the government, as the following quotation clearly indicates:

Needless to say, while the Jews demand greater expenditure on communications for their colonies, Arab witnesses attributed the neglect of Arab villages to the development of feeder roads in Jewish settlements. Here as in many other cases, the removal of an Arab grievance creates a Jewish grievance and vice versa (*Royal Commission Report*, 1937, p. 169).

Prominent examples of how the government accommodated its policy to the national interests were its postponement of the introduction of the income tax and its agreement to conduct a tax-incidence study in 1931 in order to provide factual background for the evaluation of Jewish demand to increase their employment in government public works. Recognition of the prima facie validity of these demands was expressed in a letter from Ramsay MacDonald, the British Prime Minister, to Chaim Weizmann, President of the Jewish Agency:

With regard to public and municipal works falling to be financed out of public funds, the claim of Jewish labour for a due share of the employment available, taking into account Jewish contributions to public revenue, shall be taken into consideration (letter of February 13, 1931, quoted in *Memorandum submitted to the Royal Commission*, 1936, p. 231).

This statement, as a practical guideline, stands in some contradiction to the general equitable ability-to-pay principle and in any case demonstrates the political difficulties in applying this principle to mandatory Palestine.

The Palestine Royal Commission of 1937 identified the problem very clearly in its report by stating that Jewish Nationalists

demand, too, that Government grants for public services should be shared between Arabs and Jews in strict proportion to their numbers; and, since Jews provide proportionally more revenue, the claim seems logical; but in fact it runs counter to one of the two principles. Either it repudiates the basic idea of public finance in the democratic world—that the rich should be taxed to meet the needs of the poor—or it denies or ignores the theory that Arabs and Jews are members of one Palestinian society (*Royal Commission Report*, 1937, pp. 119-120).

It was indeed the latter theory that the official Zionist position rejected. Since the Arabs continued to be a majority of the population, though by a declining margin, and in view of their uncompromising opposition to Jewish national-collective existence in Palestine<sup>15</sup> (*Zionism and the Arab Question*, 1979, pp. 163-172), for the Zionists to accept the ability-to-

principle and by implication the homogeneous society postulate would have been tantamount to abandoning the National Home as an objective. It was precisely for this reason that the Arabs gave wholehearted support to the equity-oriented approach to government fiscal policy.

Thus, because of its political implications, a redistributive fiscal system that would seem to have been a sound one for a typical developing dual economy was met with sharp disagreement and resentment in the nationally divided dualistic economy of mandatory Palestine.

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## NOTES

1. The study is confined to budgetary activities; it excludes paid-for services such as rail-road transport and posts and telegraphs. These are assumed to have been financed by users' fees and are thus not a channel of intersectoral resource transfer.
2. Years of violent outbreaks were 1921, 1929, 1936-1939, and 1947.
3. This assumption relies on existing partial information on the Arab sector and the intersectoral relations in Palestine from which it can be inferred that in the period between the mid-1920s and the mid-1930s the Arab economy experienced fast and vigorous growth (see Abramowich and Guelfar, 1944). An alternative extreme, though very unrealistic, assumption would be that the Arab economy did not grow at all between 1926/27 and 1935/36. This would reduce the Jewish share in Palestine's domestic product to 23 percent in 1926/27. However, this change in sectoral distributive shares would have only a moderate effect on the net fiscal incidence and very little on the percentage of net incidence in each sector's income and resources (see Appendix Table A5).
4. The ensuing discussion of Palestine's tax structure draws heavily on Morag (1967, pp. 1-40) and to some extent on Granovsky (1933).
5. The argument against the income tax was that the Jews would end up paying a disproportionate and unjustifiably high share of the proposed tax because they were the modern, urban, and market-oriented sector from which income taxes could easily be collected. On the other hand, it would be difficult to collect income tax from the traditional Arab sector, so the argument went, because of the lack of proper records and well-documented market transactions. (See Ruppin, 1932; Margalit, 1931.)

6. The attitude of contemporaries toward tax and expenditure incidence will be elaborated on in the final section of this essay.

7. I have also used this approximation in an earlier study on public finance in the Jewish economy (see Gross and Meitzer, 1978).

8. For a detailed discussion of the methodological issues related to incidence studies, see De Wolf (1975).

9. It turns out that the net fiscal incidence figures are only moderately affected by the method chosen for allocating the expenditures on law and order: see Appendix Table A5.

10. The following discussion of public education, attendance rates and expenditures, of the government department of education is based on the information contained in Education Reports (1926/27, 1935/36) and *Survey of Palestine* (1946, Vol. II, pp. 635-669).

11. The discussion and data of the government health services and their incidence relies on *Health Reports* (1926/27, 1935/36) and on *Survey of Palestine* (1946, Vol. III, pp. 609-634).

12. Most of the health expenditures (81.7 percent in 1926/27 and 61.6 percent in 1935/36) were for general administration and were allocated between Jews and Arabs according to the incidence of the specific expenditures: see Appendix Table A4.

13. This procedure implicitly assumes that the marginal utility of a pound paid in taxes is equal to the marginal utility of a pound's worth of government services (expenditures) received. This assumption is conceptually somewhat questionable because of the involuntary nature, on the individual level, of both government taxes and services. In the context of mandatory Palestine, however, where the issues were never whether government services were desired but whether enough of them were provided to Jews or Arabs, the conceptual problems stemming from the violation of consumer sovereignty seem to be of minor importance.

14. The income-based net transfers implied by the equal per capita expenditures would be £P378,800 in 1926/27 and £P813,000 in 1935/36. These upward biased figures exceed the transfers estimated here by 57 and 76 percent, respectively.

15. On the other hand, even the most extreme Jewish position always incorporated recognition of some form of collective Arab rights in the Jewish state-to-be (see *Zionism and the Arab Question*, 1979).

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## Fiscal Incidence and Resource Transfer in Palestine

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## APPENDIX

Table A.1. Incidence of Administrative Services

	1926/27		1935/36		Total
	Jews	Arabs	Total	Jews	
(in Thousands)					
"Department"					
(1) Pensions	2.0	13.8	15.8	8.8	23.5
(2) Public Debt & Loan Charges	7.8	24.3	32.1	53.5	72.9
(3) High Commissioner	1.8	5.6	7.4	3.9	5.2
(4) Secretariat	7.7	23.9	31.6	16.7	22.8
(5) District Administration	23.5	73.6	97.1	65.6	89.2
(6) Treasury	3.8	11.8	15.6	7.2	9.9
(7) Audit Department	1.8	5.8	7.6	5.8	7.8
(8) Customs, Excise & Trade	—	—	—	157.4	86.1
(9) Department of Migration	—	—	—	21.1	11.3
(10) Office of Statistics	—	—	—	0.8	0.7
(11) Miscellaneous	20.6	104.6	125.2	87.7	210.5
(12) Total	89.7	295.7	385.4	428.5	539.9
Public Works					
(13) Administration—General	7.0	22.1	29.1	33.0	44.9
(14) Specific Administrative Services	1.0	1.7	2.7	10.3	7.0
(15) Services exclusively used by Jews or Arabs	—	—	—	—	0.2
(16) General Public Works	1.9	5.5	7.4	4.4	5.5
(17) Total	9.9	29.3	39.2	47.7	57.6
(18) = (12) + (17)					
All Administrative Svs.	99.6	325.0	424.6	476.2	597.5
					1073.7

Notes by line number:

1. The Arab-Jewish distributive shares used for the allocation of pensions to retired government employees were constructed by averaging the population and the total-expenditure distributive shares of 1926/27 and 1935/36, respectively. Since the Jewish percentage was smaller in population than in governmental expenditures, this procedure takes account of the fact that the pensions paid each year reflected services mostly rendered in earlier periods, from which the Jews presumably benefited to a lesser extent than in the years analyzed.

2-7. These general expenditures were regarded as the operational costs of providing government services, and have therefore been allocated between Jews and Arabs according to the incidence of total expenditures.

8. In order to allocate the collection costs of the customs and excise tax between the two sectors, I have used weighted averages of Jewish and Arab percentage shares in Palestine's international trade and

Notes for Table A.1 continued

not domestic product (NDP), the figures for the Jews were 42 and 66 percent for trade (see Gurwih, 1932, 1936, and Gantman, 1978) and 33 and 52.5 percent for NDP in 1926/27 and 1935/36, respectively. The weights employed were the percentages of the internal and external taxes in the expenditure taxes category in each year.

9. The Jewish distributive share in the expenditures of the Immigration Department was calculated by averaging the Jewish share of total immigration and other travel, respectively, 96.4 and 33.6 percent in 1935 (see *Statistical Abstracts*, 1939, pp. 112-113; *Statistical Handbook*, 1947, p. 31). The assumption underlying this procedure, based on the composition of travelers in that year, was that only about half of the department's expenditures were immigration-related while the other half had to do with other kinds of foreign travel.

10. Since most of the statistical data generated by the government were economic in nature, the benefits generated from them were assumed to be closely associated with the level of economic activity. I have therefore used the percentage distribution of Palestine's NDP between Arabs and Jews as a basis for estimating the sectoral incidence of these expenditures.

11. A detailed breakdown of miscellaneous expenditures is only available for 1935/36. About half of them were grants to municipalities and religious institutions. The distribution of total miscellaneous expenditures, based on the classification of the individual components, turned out to be 29.4 percent Jewish and 70.6 percent Arab in 1935/36. This was very similar to the intersectoral distribution of the population. Assuming that the 1926/27 composition of miscellaneous expenditures was not much different from that of 1935/36, I estimated the incidence on the basis of the 1926/27 Jewish-Arab population shares.

12. The expenditures classified as Administration-General were construction and maintenance expenses and payment of rent for general governmental facilities. These were allocated between the two national communities according to their percentage shares in expenditures other than administration (see text for further details).

13. Various overhauls, rent, and maintenance expenditures were related to the administration of customs, excise, trade licenses, and immigration. I allocated them between Arabs and Jews according to the percentage distributions of international trade, NDP, and overseas travel, respectively.

14. This is the cost of running the Public Works Department attributed to administrative services according to the percentage of the latter in the total expenditure of the Public Works Department. Similarly, the relative incidence of these outlays was assumed to be identical to the relative incidence of all other Public Works Department administrative services combined.

Sources: Treasurer's Report 1938/39; Annual Reports of the Public Works Department, 1926/27 and 1935/36.

Table A.2. Incidence of Internal Security and Defense

	(£ P Thousand)			
	1926/27	1935/36	Jews	Arabs
			<i>Jews</i>	<i>Arabs</i>
Department			<i>Total</i>	<i>Total</i>
(1) Legal Department	3.1	6.2	9.3	5.8
(2) Judicial Department	23.0	46.8	69.8	44.7
(3) Police and Prisons	103.6	210.2	313.8	276.9
(4) Trans-Jordan Frontier Force (50%)	14.0	71.1	85.1	22.3
(5) Defense	—	—	—	37.8
(6) Garndarmet	6.5	13.2	19.7	—
(7) Total	150.2	347.5	497.7	392.2
Public Works				
(8) Internal Security	14.9	30.3	45.2	49.2
(9) Defense	0.7	3.8	4.5	—
(10) General Public Works	3.7	7.9	11.6	5.1
(11) Total	19.3	42.0	61.3	54.3
All Internal Security and Defense	169.5	389.5	559.0	446.5
				521.2
				967.7

(continued)

Notes for Table A.2 (by line number):

1-3, 6, 8: Expenditures in these categories were allocated according to the intersectoral percentage distribution of NDP; see text for further details.

4: Half of the expenditures on the Transjordan Frontier Force was attributed to Palestine's defense (see Gross and Metzger, 1978).

4-5, 9: The relative incidence of these defense outlays was assumed to be equal to the intersectoral distribution of the population; see text for further discussion of this assumption.

10: This is the part of the Public Works Department's running costs assigned to internal security and defense. It was distributed between the two national sectors according to the combined relative incidence of the expenditures in categories 8 and 9.

Sources: Treasurer's Report 1938/39; Annual Reports of the Public Works Department, 1926/27 and 1935/36.

Table A.3. Incidence of Economic Services

	(£ P Thousand)			
	1926/27	1935/36	Jews	Arabs
			<i>Total</i>	<i>Total</i>
a. Agriculture				
Department of Agriculture and Forestry				
(1) Grants to the Jewish Sector	—	—	29.8	—
(2) Other Expenditures	4.0	61.3	65.3	7.6
(3) Total	4.0	61.3	95.3	37.4
Public Works				
(4) Agriculture-General	0.3	12.8	13.1	4.3
(5) Agriculture Svs. exclusively used by Jews or Arabs	—	0.2	0.2	4.0
(6) General Public Works	0.1	3.0	3.1	0.9
(7) Total	0.4	16.0	16.4	9.2
(8) = (3) + (7) All Agricultural Svs. Public Works	4.4	77.3	81.7	46.6
b. Transportation				
Public Works				
(9) Transportation-General	30.3	57.5	87.8	256.6
(10) Transport Svs. exclusively used by Jews or Arabs	4.2	28.3	32.5	72.0
(11) General Public Works	8.1	20.0	28.1	33.7
(12) = (9) + (10) + (11) All Transportation Svs. Other (Water Supply, Electricity & Misc.) Economic Services	42.6	105.8	148.4	362.3
Department				
(13) Dept. of Land & Surveys	17.0	34.6	51.6	60.8
(14) Dept. of Development	—	—	—	4.4
(15) Total	17.0	34.6	51.6	65.2
Public Works				
(16) Other Economic Svs.—General	0.1	0.1	0.2	5.2
(17) Services exclusively used by Jews or Arabs	—	2.3	2.3	104.4
(18) General Public Works	—	0.5	0.5	11.4
(19) Total	0.1	2.9	3.0	121.0
(20) = (15) + (19) All Other Economic Svs. All Economic Services	17.1	37.5	54.6	186.2
(21) = (8) + (12) + (20)	64.1	220.6	284.7	395.1
				650.3
				1245.4

(continued)

Notes for Table A.3 (by line number)

1. Grants to agricultural research projects of the Jewish Agency and the Hebrew University and aid to the Kaduri Agricultural School on Mount Tabor.
2. The distributive shares of the two communities were estimated on the basis of the nature of the specific expenditures as reported in the annual reports of the Department of Agriculture.
4. In 1926/27, the expenditures in this category consisted of maintenance of facilities, 34 percent; construction and maintenance of livestock quarantines, and 4 percent for maintenance of a government experimental citrus station. These items were divided between Jews and Arabs according to the distribution of, respectively, the Department of Agriculture's expenditures, population, and citrus output.
5. Services used by Arabs comprised the cost of constructing and maintaining governmental agricultural facilities in Arab rural areas. The Jewish services were construction works by the Public Works Department in the Kaduri Agricultural School on Mount Tabor.
- 6, 11, 18. These are the costs of running the Public Works Department assigned to the various expenditure categories. For the functional distribution and the incidence of these costs see note 16 to Table A.1, and note 10 to Table A.2.
9. Includes the cost of constructing and maintaining roads used by both communities. The benefits derived from them were allocated between Jews and Arabs on the basis of the NDP or the international road distributive shares according to the location and purpose of the roads in question.
10. This category consists of expenditures on local roads constructed in nationally homogeneous regions, which were assumed to have been used exclusively by members of the resident national community.
- 13-14. The expenditures in these two categories have been distributed between the two communities according to the distributive shares in Palestine's NDP.
16. Office equipment for the Department of Land and Surveys, and I have allocated this item to Jews and Arabs according to the distribution of NDP.
17. Outlays on land surveys and water projects in exclusively Arab regions.

Sources: Annual Reports of the Department of Agriculture and Forests and of the Public Works Department 1926/27, 1935/36; Treasurer's Report 1938/39.

Notes for Table A.4 (by line number)

2. The Jewish share in this category consists of salaries paid to the Jewish senior staff of the Education Department, assuming that they were in charge of supervising and serving the Jewish school system.
4. The benefits from the archaeological discoveries financed by the Antiquities Department are assumed to have been uniformly distributed among all the residents of Palestine.
6. All the expenditures in this category were related to the activities of the Antiquities Department and were thus allocated like line 4.
7. earmarked expenditures and grants for the construction and maintenance of Arab and Jewish schools.
- 8, 18. Running costs of the Public Works Department allocated to education and health: for the procedure, see note 16 to Table A.1.
11. Primarily antimalaria activities, swamp drainage, sanitation, and various epidemic-prevention projects: these items are here regarded as public goods and distributed on a per capita basis.
12. The incidence of expenditure on hospital and ambulatory treatment was estimated on the basis of the Jewish-Arab distribution of hospitalization days. It was derived by multiplying the number of persons who received hospital and clinic services by the average number of hospital days per patient as reported in the annual reports of the Department of Health.

Table A.4. Incidence of Welfare Services

(£ P Thousand)

	1926/27		1935/36			
	Jews	Arabs	Total	Jews	Arabs	Total
<b>a. Education &amp; Culture</b>						
"Department"						
Department of Education:						
(1) Grants-in-Aid to Jewish Schools	10.9	—	10.9	35.8	—	38.5
(2) Other Expenditures	2.5	103.4	105.9	2.4	180.2	182.6
(3) Total	13.4	103.4	116.8	40.9	180.2	221.1
(4) Antiquities Dept.	1.6	7.9	9.5	4.8	13.5	18.3
(5) = (3) + (4) Total	15.0	111.3	126.3	45.7	193.7	239.4
<b>Public Works</b>						
(6) Education & Culture—General	0.4	2.0	2.4	3.2	9.3	12.5
(7) Educational Sys. exclusively used by Jews or Arabs	—	8.2	8.2	1.1	85.0	86.1
(8) General Public Works	0.1	2.4	2.5	0.5	9.7	10.2
(9) Total	0.5	12.6	13.1	4.8	104.0	108.8
(10) = (5) + (9)						
All Education & Cultural Services	15.5	123.9	139.4	50.5	297.7	348.2
<b>b. Health</b>						
"Department"						
Department of Health:						
(11) Public Health Sys.	0.7	3.3	4.0	4.3	12.1	16.4
(12) Hospital & Clinic Sys.	2.2	10.0	12.2	5.8	23.4	29.2
(13) Health Sys. exclusively used by Jews or Arabs	—	0.6	0.6	19.9	9.4	29.3
(14) Gen. Health. Dept. Expenditures	12.9	62.0	74.9	28.6	91.1	119.7
(15) Total	15.8	75.9	91.7	58.6	136.0	194.6
<b>Public Works</b>						
(16) Health—General	1.5	7.5	9.0	1.4	4.0	5.4
(17) Hospitals & Clinics	1.4	7.2	8.6	4.5	15.5	20.0
(18) General Public Works	0.7	3.4	4.1	0.6	2.0	2.6
(19) Total	3.6	18.1	21.7	6.5	21.5	28.0
(20) = (15) + (19) All Health Services	19.4	94.0	113.4	65.1	157.5	222.6
(21) = (10) + (20) All Welfare Services	34.9	217.9	252.8	115.6	455.2	570.8

Notes for Table A.4 continued

13. The expenditures designated as "Arab" consisted of various health services provided in Arab villages and cities: Eighty percent of the Jewish expenditure was a grant given to the autonomous Jewish health services, the rest consisting of swamp drainage in mainly Jewish regions.
14. These general expenditures of the Health Department were allocated to Jews and Arabs according to the percentage distribution of the rest of the department's outlays between them.
16. Consists of construction, maintenance, and acquisition of equipment for general public health facilities. The intersectoral distribution is according to population shares.
17. The distributive shares here differ somewhat from those of the corresponding Health Department category (12) because the Jewish-Arab distribution of hospitalization in the particular establishments dealt with by the Public Works Department in the two years analyzed was not identical to the overall distribution.

Sources: Annual Reports of the Departments of Education and Health 1926/27, 1935/36; Treasurer's Report 1938/39.



Table A.5. Sensitivity Analysis of Net Fiscal Incidence<sup>a</sup>

	1926/27				1935/36			
	Internal Security				Internal Security			
	By Distribution of Income		By Distribution of Population		By Distribution of Income		By Distribution of Population	
	Jews (1)	Arabs (2)	Jews (3)	Arabs (4)	Jews (5)	Arabs (6)	Jews (7)	Arabs (8)
Net (including surplus) Budgetary Incidence (£P Thousand)								
(1) NDP— $\alpha$	(-) 241.9	(+) 241.9	(-) 255.2	(+) 255.2	(-) 1031.2	(+) 1031.2	(-) 1268.4	(+) 1268.4
(2) NDP— $\beta$	(-) 270.7	(+) 270.7	(-) 307.0	(+) 307.0	—	—	—	—
Share of Net Fiscal Incidence in Net Domestic Product (Percent)								
(3) NDP— $\alpha$	(-) 5.4	(+) 2.7	(-) 5.7	(+) 2.8	(-) 5.7	(+) 6.3	(-) 7.0	(+) 7.7
(4) NDP— $\beta$	(-) 6.0	(+) 1.8	(-) 6.8	(+) 2.0	—	—	—	—

Note:

<sup>a</sup> The net fiscal incidence and its product shares are calculated under alternative assumptions concerning the Jewish-Arab percentage distribution of NDP in 1926/27 and the distribution of the benefits from internal security services. The net fiscal incidence figures used in the text are those of columns (1), (2), (5), and (6), lines (1) and (3). They were calculated on the following assumptions: a) that the entire economy of Palestine grew at the same rate as the Jewish economy between 1926/27 and 1935/36, which implies that the Jewish share in NDP was 33 percent in 1926/27 (NDP— $\alpha$ ); b) that the benefits from internal security were distributed between the two national communities by their respective distributive shares in Palestine's income. The alternative assumptions are that the Arab economy did not grow between the two years at all (implying a Jewish share of 23 percent in the 1926/27 NDP, (NDP— $\beta$ ), and that the benefits from internal security were uniformly distributed on a per capita basis. The net fiscal incidence under these assumptions is given in columns (3), (4), (7), and (8), lines (2) and (4).