

Lewisf, Frank D

Working Paper

Compensation and the Abandoned Property of the 1948 Palestinian Refugees: Assessment and Implications

Queen's Economics Department Working Paper, No. 1117

Provided in Cooperation with:

Queen's University, Department of Economics (QED)

Suggested Citation: Lewisf, Frank D (2006) : Compensation and the Abandoned Property of the 1948 Palestinian Refugees: Assessment and Implications, Queen's Economics Department Working Paper, No. 1117, Queen's University, Department of Economics, Kingston (Ontario)

This Version is available at:

<https://hdl.handle.net/10419/189393>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Queen's Economics Department Working Paper No. 1117

Compensation and the Abandoned Property of the 1948 Palestinian Refugees: Assessment and Implications

Frank D Lewis
Queen's University

Department of Economics
Queen's University
94 University Avenue
Kingston, Ontario, Canada
K7L 3N6

12-2006

Compensation and the Abandoned Property of the 1948 Palestinian Refugees

Assessment and Implications

June 2006

This paper extends the analysis of “Agricultural Property and the 1948 Palestinian Refugees: Assessing the Loss” (Lewis 1996) to non-agricultural property. The estimate is based mainly on the area of urban property abandoned by refugees, where valuations are based on contemporary transfer prices, tax payable on the property, and inferences about rent. The amounts are much higher than those derived by the United Nations Conciliation Commission in 1951. Still the total implied by this paper and (Lewis 1996) is such that if Israel were to pay the overall loss as compensation, the transfers are unlikely to have a serious impact on their economy.

Whatever the current state of negotiations between Israel and the Palestinian National Authority regarding the outline of a future agreement, one element to be settled is the so-called “right-of-return” of Palestinian refugees. United Nations Resolution 194 (III), passed by the General Assembly in December 1948, includes: “that refugees wishing to return to their homes and live at peace with their neighbors be permitted to do so and at the earliest practicable date, and that compensation should be paid for property of those choosing not to return.”¹ After nearly sixty years, the return of those who left their homes during the 1948 Arab-Israeli War is unlikely; on the other hand, the paying of compensation remains an important issue to be addressed, whether it is to those who lost the property, their estates, or to the Palestinian Authority itself. Lewis (1996) provided a partial answer to the question of compensation by estimating the value of agricultural property abandoned by Arabs as a result of the 1948 War.² The agricultural area lost was calculated as the difference between Arab holdings within the boundaries of post-1948 Israel and the agricultural land they retained; while values were based on the imputed rent on this land just prior to the war.³ The overall loss on agricultural property was estimated at £P169 to £P205 million (1945 prices)⁴ or between \$2.6 and \$2.9 billion (US 1993). Allowing for foregone interest after 1948, the loss as of 1993 was \$8.2 to \$10.0 billion (US 1993).

Lewis (1996) based land values on rents imputed from agricultural output; but a more direct source would have been the transfer prices of agricultural land, which are reported in the *General Monthly Bulletin of Current Statistics (MBS)*. The data on transfer prices do not distinguish quality, and were therefore unsuited for assessing the value of the lost Arab agricultural land, whose quality varied widely; nevertheless, the average transfer price of Arab-

owned land was similar to the average value generated by capitalizing imputed rent, suggesting that transfers were in fact representative of average land quality. As in the case of rural land, there was considerable variation in the prices of urban property, especially since these prices would have included the value of structures. Thus prices could differ because of locational rents and differences in the ratio of dwelling-to-land values. It will be assumed, as turned out to be true of rural land, that the overall transfer prices of urban land reflected average property values. At the same time, allowance will be made for variations in property values across urban areas.⁵

Village Statistics (1970) divides the rural land in Mandatory Palestine into seventeen categories. Fifteen produced agricultural output; category 4 (village land) was rural land that had been built on or reserved for building, and category 16 was described as uncultivable. In addition there was the built-up area in the towns. There is some problem of comparability between *Village Statistics* and the *MBS* data, since the latter includes transfers of village land in the “rural” category along with agricultural land, whereas *Village Statistics* combines village land with the area in the towns. For this reason, the use of transfer prices is confined to urban land as defined in *MBS*.⁶ The value of urban land is based on nearly all the sales of Arab-owned property, whether to Jews or to other Arabs (by far the larger component). Land prices are compared according to purchaser, and on the basis of these prices and other evidence, mainly tax data, an estimated loss is derived. In addition an estimate is made of the loss of non-dwelling capital.

The Loss of Urban and Village Land

Arabs retained some urban and village land after 1948, but the calculation begins with an

estimate of the Arab-owned "Built-up and Category 4" land that was on the Israeli side of the Green Line just prior to the war. Where there is no ambiguity, the Israeli side of the Green Line will subsequently be referred to as "Israel" even if the discussion concerns the pre-war period. Within Israel in 1945, the Arab urban population was 228 thousand or 38.4 percent of the total urban population (see Table 1).⁷ Their share of private urban land ownership in terms of area was similar, 37.1 percent. In April 1945, Arabs owned 41,113 dunums within the Green Line, of which more than 22 thousand dunums were in Haifa and Jaffa.⁸ Between April 1945 and September 1947, sales of Arab-owned land exceeded Arab purchases by 1,061 dunums.⁹ Adjusting to 937 dunums to account for net sales in Jerusalem, which are treated separately, gives estimated Arab holdings at the start of the war of 40,176 dunums.¹⁰ Urban public land totaled 28,561 dunums, much of which was in predominantly Jewish areas. Attributing a portion of this land to Arabs according to their population share in each urban area adds 13,272 dunums to what will be treated as Arab-owned land.¹¹

Village Statistics included under the designation, urban, some towns with very small populations, but these were predominantly Jewish. So even if towns with fewer than 5,000 are excluded, the estimate of Arab-owned land is hardly affected.¹² In addition to land held in towns was "Built-up Areas and Category 4" land that was not part of any urban area. This village land totaled 20,511 dunums, which is reduced by one percent to allow for net sales to Jews from April 1945 to the start of the war (Lewis 1996, p.179).¹³

The area lost by Arabs is the difference between their pre-war holdings and the land they held in Israel after the war. To allow for the return of refugees shortly after 1948, the basis of the calculation is 1951. There are no direct estimates of Arab urban land holdings after the war, as is

the case with agricultural land. Instead, the decline in Arab land ownership is based on population.¹⁴ Excluding Jerusalem, 227,680 Arabs were living in urban Israel in 1945 (see Table 1), and likely seven percent more by the start of the war.¹⁵ The post-war (December 1951) Arab urban population of Israel was 45,374 (*Statistical Abstract of Israel 1951/52*, p. 7).¹⁶ Assuming the decline in their pre-war urban land holdings of 40,176 dunums was proportionate to the decline in their population, the loss was 32,169 dunums. Abandonment of public land (excluding Jerusalem) is put at 11,619 dunums.

The loss in village land is derived in a similar fashion. Excluding Bedouins in the Beersheba sub-district, the Arab rural population in Israel in 1945 was 448,257.¹⁷ In December 1951 the settled Arab rural population was 107,736 (*Statistical Abstract of Israel 1951/52*, p.7). Again assuming population growth of seven percent from 1945 to the start of the war, it follows that the Arab rural population was reduced by 77.6 percent, giving an implied loss in village land of 15,750 dunums.¹⁸

The lost Arab property in Jerusalem was treated separately by the U.N. Conciliation Commission. In 1945, Arabs owned 10,423 dunums in Jerusalem of which about 750 dunums was in the Old City. Outside the Old City, 56 percent of the Arab population lived on the Israeli side of the Green Line.¹⁹ Allocating the land outside the Old City according to population gives Arab holdings of 5,430 dunums in what became West Jerusalem, of which perhaps 99 percent was lost.²⁰ There was in addition 820 dunums of public land that is treated as Arab-owned.

The Value of Arab-Owned Urban and Village Land

Several approaches are used to value the lost land and property. In the case of urban land

special emphasis is given to transfer prices. A different method is adopted for village land, for which transfer prices are not available.²¹ The *MBS* reports sales and values by seller and buyer; thus price series can be derived for inter-Arab sales, as well as for sales between Arabs and Jews. The per-dunum sale prices of Arab-owned land in £P(1945), for the period January 1945 to September 1947, are presented in Figure 1. Despite the likelihood that actual and expected Jewish immigration drove up land prices in the 1930s, there is no indication in the transfer price data of an upward trend during this period.²² The prices of inter-Arabs sales trended downward; and, excluding a few months where sales to Jews was five dunums or less, there was no trend in the prices paid by Jews.²³

In deriving Arab losses, urban land values are based on a weighted average of (constant £P) transfer prices for the period January 1945 to September 1947.²⁴ The average per-dunum sale price of Arab-owned land was £P1,619 (1945 prices), with prices paid by Jews averaging 10 percent lower (see Table 2). Without knowing the quality of the parcels, one cannot draw firm conclusions about the market, but sale restrictions or other market imperfections do not appear to have been driving up the price to Jews of Arab-owned property. Indeed the volumes and prices are more suggestive of a perfectly competitive market rather than one where Jewish purchasers faced monopoly power on the part of Arab sellers.

Over the period January 1945 to September 1947, Jewish purchases accounted for just 24 percent of total sales of Arab-owned land, and annual purchases by Jews were a tiny fraction of the total stock of Arab-owned land; less than 0.5 percent. On the demand side, Arab-owned urban land represented a small share of Jewish purchases, just 6.4 percent, and less than 0.1 percent of Jewish urban land holdings. In 1940, restrictions were placed on the sale of Arab-

owned land to Jews, depending on the location and type of land. Although the restrictions affected the market for agricultural land, a designated “free” zone was exempted from the restrictions. In addition to including some rural land near Haifa, Jaffa, and Jerusalem, all municipal areas were part of the “free” zone (*Survey of Palestine*, vol. 1, pp. 260-63). Thus the relatively small purchases by Jews of Arab-owned urban land cannot be attributed to the 1940 land transfer regulations.

The United Nations Conciliation Commission arrived at an estimate of the value of lost urban property on the basis of tax payable by Arabs in 1945. Table 3 presents their results for twelve towns representing 96 percent of the Arab-owned urban land in Israel in 1945.²⁵ The Commission did not report area, but their figures for population are almost identical to those in *Village Statistics*. Taxes per person averaged £P0.45(current) with considerable variation;²⁶ and the tax per dunum, which averaged £P2.57, also varied widely.²⁷ In Haifa and Jaffa, taxes per person at over £P0.60, were more than three times those in the other towns, and taxes per dunum were 2.6 times higher. With the exception of Haifa and Jaffa, however, there was no relation between the size of the town and the tax per dunum, and little relation to tax per person.²⁸ The decline in the Arab population after the war in the Haifa and Jaffa was 92 percent which compares to an 80 percent decline in all urban areas. To the extent then that taxes reflected relative property values, an average price of urban land would understate Arab losses.

The U.N. Conciliation Commission put the value of urban property at 240 times the urban property tax. This factor was based on a tax rate of 10 percent on imputed rent, an adjustment of 44 percent to allow for under-assessment, and a 6 percent discount rate. Given total tax payable by Arabs of £P101 thousand in the twelve towns enumerated by the Commission, the total value

of Arab urban property implied by the Commission procedure is £P24.3 million, which converts to £P618 per dunum based on the area owned (see Table 1). This is just 38 percent of the average transfer price (in 1945 prices) of Arab land sold from January 1945 to September 1947. The Commission's use of tax revenues may have been reasonable, but the conversion factor of 240 was almost certainly too low. Because property assessments were typically quinquennial, the Commission argued for 25-percent adjustment due to appreciation that had not been fully taken into account.²⁹ The Commission claimed to have adjusted property values upward by a further 25 percent because, as is typical of property taxes, assessments tended to be below market prices.³⁰ Given their discussion, a total adjustment of 56 percent rather than 44 percent would seem implied.³¹

More serious in terms of the land valuation was their choice of a 6-percent discount rate. This is double the rate they used to capitalize imputed rent on agricultural land; and higher than the 4.5-percent rate suggested by the yield on long-term debentures (Lewis 1996, p.181).³² In Lewis (1996, p.181), which allowed for an expected annual rent increase of 2 percent on agricultural land, a 2.5-percent discount rate was used to capitalize rent. Despite the growth in the urban population of Palestine in the 1940s the land transfer data reveal only a modest trend in real urban property prices of both Arab-owned and Jewish-owned land (see Figure 2).³³ The rate of price increase is quite sensitive to the starting date because there were unusually high prices in the early years of the war. Over the entire period January 1940 to September 1947, the annual rate of increase for Arab-owned land was just 1.45 percent, but if the starting date is moved to January 1942, the rate increases to 4.28 percent.³⁴ Assuming expected rent appreciation of 2 percent, gives a net discount rate of 2.5 percent rather than the 6-percent rate used by the

Commission. Adjusting for the lower net discount rate and higher imputed rent raises the estimated value of Arab property in the twelve cities to £P63.4 million (1945) or £P1,609 per dunum. The average transfer price of Arab-owned property from January 1945 to September 1947 was £P1,619 (1945) per dunum, but this would have included property in Jerusalem, which tended to sell for much higher prices, as well as sales of urban land outside the Green Line, which likely sold for less than the average.³⁵ Adjusting for the inclusion of this property in the reported transfer prices gives a value of £P1,476. This is 92 percent of the price implied by the capitalization procedure.³⁶ Taking £P1,476 as reflective of the average quality of all Arab-owned urban land, the implied loss associated with the abandonment of 32,168 dunums is £P47.5 million. This total, however, does not take into account variations across towns in the value of urban property and the fact that Arabs lost relatively more land in the higher-priced areas. Arab losses were especially high in Haifa and Jaffa, cities whose per-dunum property values were more than two-and-a-half times the average of the other, smaller, urban areas. Weighting according to location (see Table 3) gives losses of £P52.5 million, which is about 30 percent of the loss in agricultural property estimated in Lewis (1996, p.185).

In addition to urban land, Arabs lost village land which, although rural, was non-agricultural and hence not included in Lewis (1996). Even though transfer prices of rural land are reported, nearly all this land was agricultural, and no separate data is given for village land. The approach here is to rely on the tax assessments. In the late 1930s the tax on village land was 160 mils (£P0.16) per dunum, which was increased because of wartime inflation to 640 mils per dunum in 1945. This is about half the average tax rate in the towns, excluding Haifa and Jaffa, and close to the lowest rates of tax in the twelve main Arab towns in Israel. The rate in Nazareth

averages 670 mils and in Beersheba, 680 mils. Assuming the same rate of conversion from tax rate to price that has been applied to urban land, the implied value of village land was £P368 (1945) per dunum.³⁷ The 15,750 dunums of village land estimated to have been abandoned is therefore valued at £P5.8 million (1945), or about 10 percent of the loss of privately-owned property in the towns.

Although individuals would not have had title to what was described in the *Village Statistics* as public land, the approach here is to include public land in Arab losses. The loss is based on their population share in each urban area. There are reports in *MBS* on public land transfers, both purchases and sales, but very little public land traded and the reported prices are highly variable, although in general they are somewhat above the prices of private property. Recognizing that the value of public land is the least supported of the various components, public land is assigned the same price, by urban area, as the private land. The 11,619 dunums of public land lost by Arabs is valued at £P16.4 million (1945).³⁸

As noted by the U.N. Conciliation Commission, the loss of property in the City of Jerusalem involved special problems, both because of the division of the city and because Arabs abandoned some unusually valuable housing. In the absence of information on the value of the Arab property, the approach is essentially to rely on the Commission's imputation of rent on this property, but capitalize that rent at 2.5 percent rather than the 6-percent rate that the Commission assumed. The Commission estimated the lost rent at £P555,000, giving a capitalized value of £P22.2 million (1945). Assuming the area lost was 5,375 dunums, the average value of the Arab-owned property implied by the adjusted U.N. calculation is £P4,130 per dunum. This estimated price is 75 percent above the average calculated for Jaffa and double that in Haifa. Applying the

same price to the 820 dunums of lost public land adds a further £P3.4 million to the loss.

Losses of Other Non-Agricultural Property

The loss of other property would have been of an order-of-magnitude less. To provide a rough idea of the amount, a value has been derived based on the manufacturing and construction output of the Arab economy in Mandatory Palestine and an estimate of the capital-output ratio. According to Metzger (1998, p. 239), Arab net output in manufacturing and construction was £P8.3 million in 1945. In 1943 the ratio of capital invested to net output in Arab-owned industry was 1.34 (Loftus 1948, p. 6). Assuming that 20 percent of this capital represented land and structures,³⁹ which have already been counted, the value of non-agricultural capital in Arab Palestine is put at £P8.8 million. Allowing that much of manufacturing and construction activity took place in urban areas, the proportion of this capital located in Israel is based on the distribution of the Arab urban population.⁴⁰ Given an 80 percent decline in the Arab urban population in Israel, the loss is put at £P4.7 million.

The Aggregate Loss of Arab Property: Implications

The aggregate loss and its various component are given in Table 4. It is apparent that, although most of the property lost by Arabs was agricultural, the loss of non-agricultural property was substantial. In 1945 prices the loss was £P105 million which compares to agricultural losses of between £P169 and £P205 million.⁴¹ Over 90 percent of the non-agricultural losses were in twelve towns and Jerusalem, with village land accounting for 5.5 percent. To the extent that issues of compensation might involve title to property, it is useful to note that 19 percent of the

loss represented the public land that has been attributed to Arabs on the basis of population. Finally, it was in the three major cities that losses were by far the greatest; more than 80 percent of the lost non-agricultural property was in Jaffa, Haifa and Jerusalem.

Combining the agricultural and non-agricultural estimates gives an aggregate loss of £P274 million to £P310 million in 1945 prices. The average of the two estimates is 94 percent of Israeli NNP in 1950 and 58 percent of NNP six years later (Lewis 1996, p. 185). Even amortized, the burden of compensation in the early 1950s would have been considerable. At a rate of 3 percent over 10 years, the payment would have been 6.8 percent of NNP in 1950 falling to 4.3 percent in 1951. Assuming an amortization period of 20 years reduces the annual payments to 3.9 percent and 2.5 percent, respectively. Even taking NNP in 1956 as the base, the implied payment of 58 percent of NNP as compensation would have been two and a half times the Franco-Prussian War indemnity of 1871, which in turn is among the largest post-war transfers ever paid (Stern 1973, p. 258).

No compensation payment has been made, and although the conflict was nearly sixty years ago, the issue is likely to be part of any future negotiations leading toward a resolution of the dispute over refugees. To indicate the order of magnitude of a current amount, the losses expressed in £Ps of 1945 have been converted to 2004 \$US.⁴² The loss as of 1948 was \$4.2 to \$4.8 billion, the average being 4.8 percent of Israel's 2004 national income.⁴³ Should compensation also include the use of the capital over the past sixty years, the total would be \$22.0 to \$26.2 billion, or about 25 percent of Israel's 2004 national income.⁴⁴ A payment of this magnitude would be comparable to the Franco-Prussian War indemnity. The circumstances are very different, yet it is still worth noting that France paid the amount at comparatively little net

cost to its economy (Devereux and Smith 2005).

Amortized over twenty years at 3 percent, the compensation cost would be 1.68 percent of 2004 national income. This share would of course decline with the growth of the economy. If the payments were structured to be a constant share of national income, the annual payment would be 1.25 percent assuming 3 percent annual growth (this was the growth rate of real net national income from 1994 to 2004).⁴⁵ Alternatively one might relate the compensation cost to exports as a measure of ability to pay. In 2004, exports, including goods, services, and income, totaled \$53,744 million (*Statistical Abstract of Israel 2005*, p. 550). Expressed as a share of exports, the annual payment would be 3.01 percent assuming a constant payment over twenty years, or 2.24 percent if a constant share of export income were paid.⁴⁶

In Table 5 the estimated compensation is compared with historical examples of transfers associated with war. For a ten-year amortization period, the transfer from Israel expressed as a share of exports would still be less than the transfers from Great Britain to Continental Europe during the Napoleonic War period, from Finland to the Soviet Union, and from Germany in the 1920s, as well as from France after the Franco-Prussian War. Using National Income as the measure of comparison, the relative size of the transfer from Israel would be comparable, but still generally less, than the transfers that were made by these countries. Although the paying of compensation is not a substitute for defense, it might be noted that the estimated transfers are about 10 percent of annual Israeli defense expenditures.

This aggregate approach to compensation is unsuited to addressing specific claims by Palestinian refugees or their heirs. Such a calculation would involve the evaluation of specific parcels and identifying past ownership. The main objective here is to suggest orders of

magnitude of a future compensation package based on the average value of the property that was lost. To the extent that the estimates derived here and in Lewis (1996) are similar to values that might ultimately be agreed to, a case can be made that in future negotiations between Israel and the Palestinian National Authority, the payment of compensation as a way of addressing the “right of return” should be one of the more tractable issues to be resolved.

Table 1 Urban Population and Urban Land Area; Israel, 1945

INSERT TABLE 1 HERE

Table 1
Urban Population and Urban Land Area: Israel, 1945

Sub-District	Town	Population		Land Area (dunums) ^a			
		Arabs	Jews	Arabs	Jews	All Public	Arab Public
Acre	Acre	12,310	50	1,187	6	345	344
	Nahariya		1,440	13	1,986	190	
Beersheba	Beersheba	5,570		1,531	80	2,279	2,279
Beisan	Beisan	5,180		561	1	101	101
Gaza	Majdal, El	9,910		1,144		202	202
Haifa	Hadera	20	7,810	4	2,254	276	1
	Haifa	62,800	75,500	12,911	27,623	13,771	6,253
	Shafa Amr	3,630	10	297		41	41
Hebron							
Jaffa	Bat Yam		2,000	13	2,107	998	
	Benei Beraq		5,760		1,142	181	
	Herzliya		4,650		1,103	134	
	Holon		3,280	165	1,886	122	
	Jaffa	66,310	28,000	9,319	1,374	2,378	1,672
	Kefar Sava		4,320		1,239	153	
	Nahalat Yits-haq		870		480	16	
	Petah Tiqva	150	17,100		4,011	557	5
	Ra'anana		3,290		2,861	248	
	Ramat Gan		10,200	252	4,338	693	
	Sarona	150		1,281	51	235	235
	Tel Aviv	660	166,000	1,845	9,101	1,776	7
Jenin							
Jerusalem	Jerusalem ^b	60,080	97,000	10,423	5,047	3,861	1,477
Nablus							
Nazareth	Afula	10	2,300	12	679	301	1
	Nazareth	14,200		4,398		590	590
Ramallah							
Ramle	Lydda	16,760	20	3,136		719	718
	Ramle Er	15,160		1,492		277	277
	Rehovot	20	10,000		2,445	362	1
	Rishon le Zion		8,100		1,840	276	
Safad	Safad	9,530	2,400	998	153	278	222
Tiberias	Tiberias	5,310	6,000	552	1,864	689	323
Tulkarm	Natanya		5,070	2	993	373	
TOTAL (excl. Jerusalem)		227,680	364,170	41,113	69,617	28,561	13,272

^a One dunum = 1,000 sq. metres (.227 acres); ^b Population and area in Palestine.

Sources: *Village Statistics* (1970); Appendix, available from the author.

Table 2 Transfers of Urban property in Palestine: January, 1945 to September, 1947

INSERT TABLE 2 HERE

Table 2
Transfers of Urban Property in Palestine: January, 1945 to September, 1947

	Arab to Arab	Arab to Jew	Arab to Arab or Jew	Jew to Jew
Gross sales (dunums)	4,278	1,329	5,607	19,724
Average price per dunum (£P 1945)	1,663	1,475	1,619	1,797

Source : MBS , various.

Table 3 Arab Population, Land Holdings, and Property Tax Payable in Twelve Towns:
1945

INSERT TABLE 3 HERE

Table 3
Arab Population, Land Holdings, and Property Tax Payable in Twelve Towns: 1945

Town ^a	Population	Land area dunums	Tax Payable	Tax per dunum	Tax per person	Area Lost dunums
			£P (current)			
Acre	12,310	1,187	3,111	2.62	0.253	864
Beisan	5,180	561	1,373	2.45	0.265	546
Nazareth	14,200	4,398	2,942	0.67	0.207	0
Safad	9,530	998	1,357	1.36	0.142	972
Tiberias	5,310	552	1,911	3.46	0.360	538
Haifa	62,800	12,911	39,980	3.10	0.637	11,430
Shafa Amr	3,630	297	455	1.53	0.125	0
Tel Aviv-Jaffa	66,970	11,164	41,688	3.73	0.622	10,140
Lydda	16,760	3,136	2,919	0.93	0.174	2,863
Ramle Er	15,160	1,492	3,347	2.24	0.221	1,291
Majdal, El	9,910	1,144	1,244	1.09	0.126	855
Beersheba	5,570	1,531	1,043	0.68	0.187	1,491
ALL	227,330	39,371	101,370	2.57	0.446	30,991

^a Towns selected by the U.N. Conciliation Commission.

Sources : United Nations (1951); text.

Table 4 The Value of Lost Arab Property

INSERT TABLE 4 HERE

Table 4
The Value of Lost Arab Property

	1945 £P (millions)	Present value in 1948 2004 \$US (millions)	Present value in 2004 2004 \$US (millions)
Non-Agricultural Property			
Urban Property (excl. Jerusalem)			
Private	52.5	804.5	4,211.2
Public	16.4	251.3	1,315.5
Rural Property (Village Land)	5.8	88.9	465.2
Jerusalem			
Private	22.2	340.2	1,780.7
Public	3.4	52.1	272.7
Other Non-Agricultural Capital	4.7	72.0	377.0
Total Non-Agricultural Property	105.0	1,609.0	8,422.4
Agricultural Property			
A	168.8	2,586.6	13,540.0
B	205.0	3,141.4	16,443.7
Total Lost Property			
A	273.8	4,195.6	21,962.4
B	310.0	4,750.3	24,866.1

Note : The conversion to U.S. dollars follows Lewis (1996). £P are expressed in 1936 prices and converted to U.S. dollars at the 1936 exchange rate. Then a U.S. price index is used.

Sources : Lewis (1996, p. 185); text.

Table 5 Hypothetical Transfer from Israel and Historical Examples of Transfers

INSERT TABLE 5 HERE

Table 5
Hypothetical Transfer from Israel and Historical Examples of Transfers

	Transfers/Exports %	Transfers/National Income %
Great Britain		
1806-16	20.1	3.6
France		
1872-75	30	5.6
Germany		
1925-28	10.9	2.5 ^a
1929-32	14.7	
Finland		
1944-48		4.0
1948-52	8.7	2.2
Israel (hypothetical)		
2004-14	5.11	2.93
2004-24	3.01	1.68

^a 1924-32 average.

Sources : Stern (1973, p. 258), Brakman and van Marrewijk (1998, p.17); Mitchell (1962, p. 366), text.

Figure 1 Transfer Prices of Arab-Owned Urban Property in Palestine: January, 1945 to September, 1947 (1945 prices)

INSERT FIGURE 1 HERE

Source: MBS, various.

Figure 1
Transfer Prices of Arab-Owned Urban Property in Palestine: January, 1945 to September, 1947 (1945 prices)

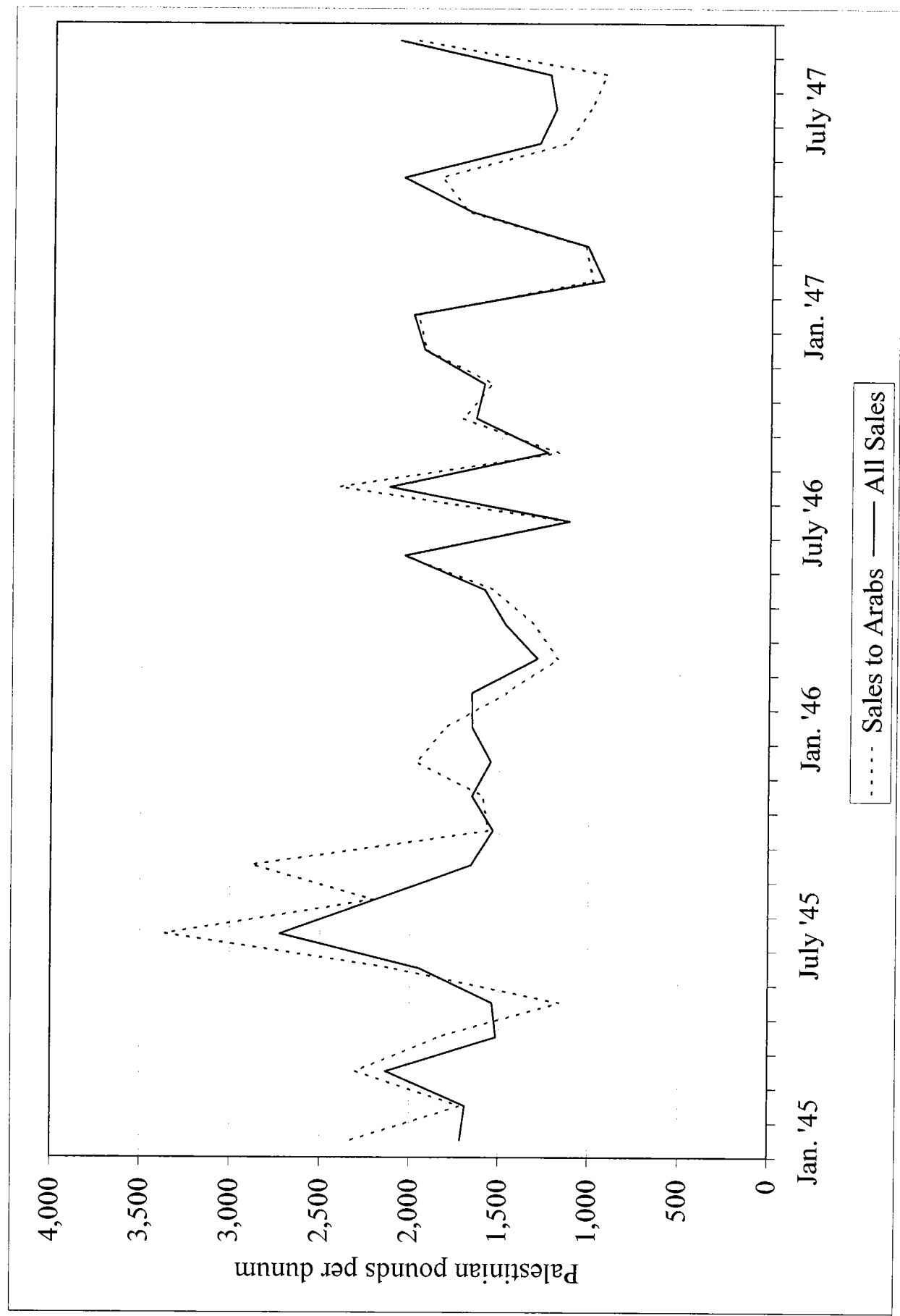
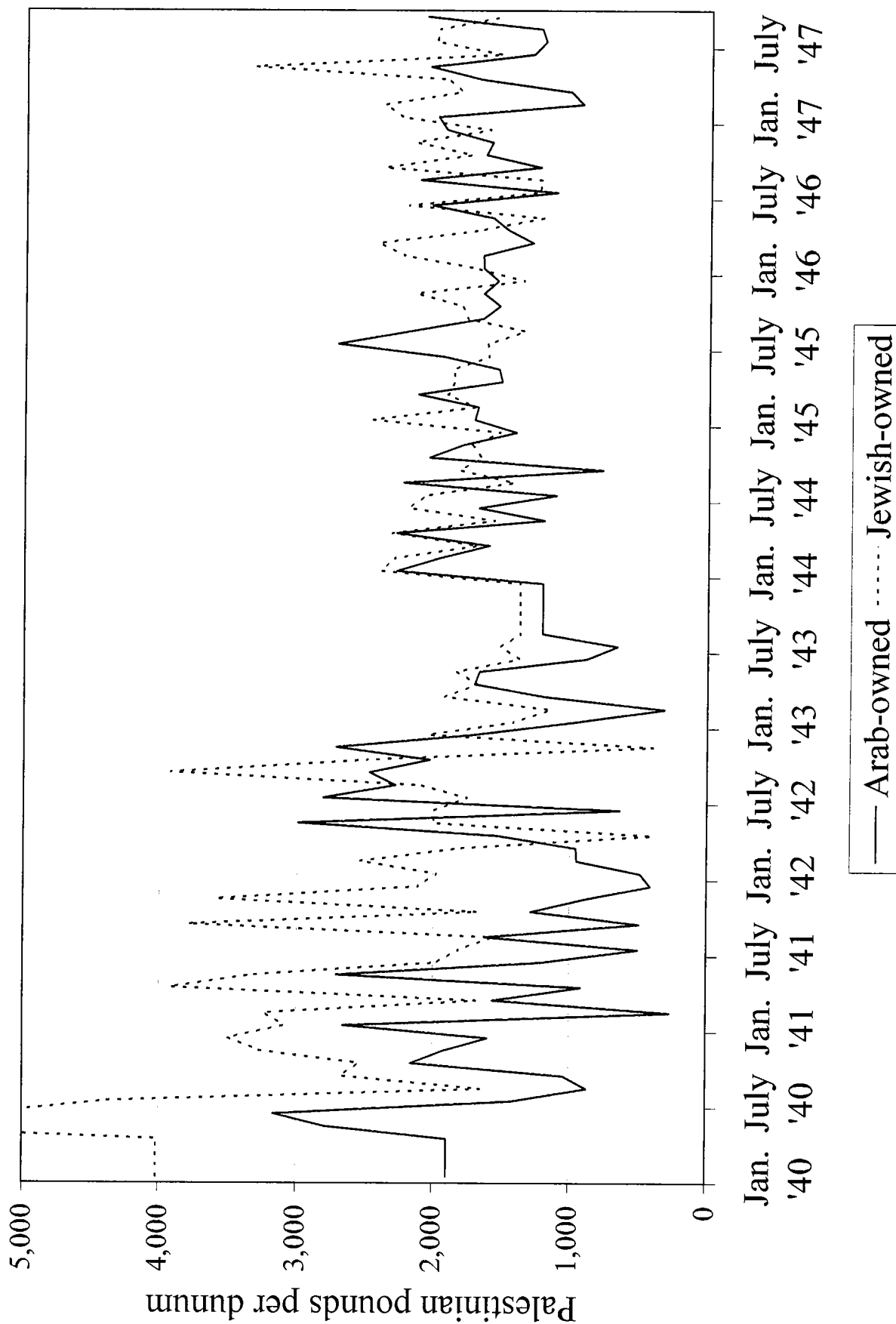


Figure 2 Transfer Prices of Arab and Jewish Urban Property in Palestine: January, 1940 to September, 1947 (1945 prices)

INSERT FIGURE 2 HERE

Source: MBS, various.

Figure 2
Transfer Prices of Arab and Jewish Urban Property in Palestine: January, 1940 to September, 1947 (1945 prices)



References

- Atlas of Jerusalem*, Hebrew University of Jerusalem. Jerusalem: Massada Press, 1973.
- Bachi, Roberto. *The Population of Israel*. Jewish Population Studies Series. Jerusalem: Hebrew University of Jerusalem, 1976.
- Brackman, Steven, and van Marrewijk, Charles. *The Economics of International Transfers*. Cambridge, U.K.: Cambridge University Press, 1998.
- Devereux, Michael b., and Smith, Gregor W. "Transfer Problem Dynamics: Macroeconomics of the Franco-Prussian War Indemnity." Department of Economics, Queen's University, August 2005.
- Gaathon, A. L. *Capital Stock, Employment, and Output in Israel: 1950-1959*. Special Studies No. 1. Jerusalem: Bank of Israel Research Department, 1961.
- General Monthly Bulletin of Current Statistics (MBS)*. Palestine, Office of Statistics. Jerusalem: Government Printer, 1940-1948.
- Lewis, Frank D. "Agricultural Property and the 1948 Palestinian Refugees: Assessing the Loss," *Explorations in Economic History* 33 (1996): 169-194.
- Loftus, P.J. *National Income of Palestine 1945*. Jerusalem: Government Printer, 1948.
- Metzer, Jacob. *The Divided Economy of Mandatory Palestine*. Cambridge, UK: Cambridge University Press, 1998.
- Nathan, Robert R., Gass, Oscar, Creamer, Daniel. *Palestine: Problem and Promise, An Economic Study*. Washington, DC: Public Affair Press, under the auspices of the American Palestine Institute, 1946.
- Village Statistics 1945: A Classification of Land and Area Ownership in Palestine*, with

explanatory notes by Sami Hadawi. Beirut: Palestine Liberation Organization Research Center, 1970

Statistical Abstract of Israel. Central Bureau of Statistics. Jerusalem: Government Printer, various.

Survey of Palestine. Prepared in Dec. 1945 and Jan. 1946 for the information of the Anglo-American Committee of Inquiry, 2 Vols. Jerusalem: Government Printer, 1946.

United Nations, *Progress Report of the United Nations Conciliation Commission for Palestine, covering the period from 23 Jan. to 19 Nov. 1951*. General Assembly, Official Records: Sixth Session, Supplement 18 (A/1985). Paris, 1951.

World Bank, "The Palestine Economy and the Prospects for Its Recovery," Economic Monitoring Report to the Ad Hoc Liaison Committee, Number 1. December 2005

Endnotes

1. Quoted in Schechtman (1952, p.130).
2. In this paper as in Lewis (1996), “Arab” includes Moslems, Christians, and other non-Jewish natives of Palestine. As of the end of 1947, the population distribution of Palestine was: Moslems, 59.9 percent; Jews, 32.0 percent; Christians, 7.3 percent; and Others (including Druze), 0.8 percent. See Bachi (1976, p.399).
3. Land not owned by Jews was assumed to be Arab-owned. Important to the calculation was land quality as reported in *Village Statistics* (1970). Imputed land rents were based on a variety of sources, but relied mainly on agricultural output in 1945.
4. The currency of Mandatory Palestine, the Palestinian pound, was the basis of the calculation.
5. Variations in urban land values will be based mainly on property taxes.
6. Arab losses of urban land and property were far greater both in area and even more so in value than their losses in the villages.
7. These numbers exclude Jerusalem. Jerusalem poses special problems, and so it is addressed separately.
8. These totals exclude Jerusalem. The Turkish dunum equals .227 acres.
9. Based on reports of land transfers. Monthly transfers of property are presented in an appendix available from the author. Reported sales of agricultural land from Arabs to Jews understated total transfers, especially in the 1930s; but it appears that reports of urban sales were quite complete.
10. The calculation of Arab property in Jerusalem is discussed below.
11. The objective here is not to address individual claims of compensation, where title to property is important, but rather to suggest an overall magnitude of the total loss.

12. Only 4 percent of Arab-owned urban land was in towns with populations under 5,000. As well, there was no public land in urban areas with populations under 5,000, where Arabs were present.
13. The aggregate for "Built-up Areas and Category 4" land was 61,624 dunums, and 41,113 dunums was in the towns, implying that village land totaled 20,511 dunums.
14. This method of estimating urban land losses was adopted by the United Nations Conciliation Commission for Palestine (United Nations 1951).
15. Excluding nomads, the Arab population of Palestine increased 7.12 percent from 1945 to 1947 (Metzer 1998, p. 215).
16. No adjustment in the calculation is made for the absence of Jerusalem, because there were very few Arabs in West Jerusalem after the war.
17. The number of nomadic Arabs outside the Beersheba sub-district was very small.
18. The United Nations Conciliation Commission (United Nations 1951) put losses of village land at 14,602 dunums, a difference of 1,150 dunums, or seven percent of the estimate derived here. The Commission report does not detail how the decline in Arab ownership of village land was determined, but it appears that the basis of their estimate was similar; pre-war ownership as reported in *Village Statistics* was derived, and the loss was inferred from the decline in population. The Commission did not allow for population growth after 1945. This adjustment would reduce the difference in estimates to 5 percent.
19. This estimate is based on the distribution of the Arab population of Jerusalem in 1944 (*Atlas of Jerusalem*, plate 42).
20. Property in the "no-man's" land of post-1948 Jerusalem is treated as being outside Israel.
21. Average transfer prices for rural land are reported in *MBS*, but this was almost entirely

agricultural land.

22. In fact the trend the per dunum price of property sold to both Arabs and Jews was downward. On the increase in urban property prices in the 1930s see Nathan, Gass, and Creamer (1946, p. 249).

23. There also was almost no trend in the prices of inter-Jewish sales.

24. Weights are number of dunums sold.

25. Arabs owned small areas in some mainly Jewish towns; and Sarona, a town of 150 in the Jaffa sub-district, that was defined as urban by *Village Statistics*, was not included in the Commission calculation. With Sarona removed, the towns in the U.N. report account for 99 percent of the urban area owned by Arabs according to *Village Statistics*.

26. The standard deviation is .18 £P.

27. The standard deviation is 1.09 £P.

28. The correlation between population and tax per dunum was -0.024. There was a small positive correlation between population and tax per person, 0.127.

29. Given that over the previous five years, urban land prices were appreciating at more than 10 percent per year, a 25-percent adjustment is reasonable.

30. The description of the calculation includes: “[the tax] was multiplied by ten to arrive at the net annual value. This figure was ‘weighted’ by 25 percent to take account of the fact that, under the system of tax assessment which operated in Palestine, the assessments ...rarely represented the full market value; and by a further 25 per cent to take account of the rise in values between the last assessment prior to 1945 and the end of 1947.”

31. The U.N. report does not state specifically that their adjustment was 44 percent, but it can be inferred from the calculation.

32. Although it is hard to interpret the Commission's rationale for its choice of discount rate, it appears that they treated agricultural and urban land differently because they saw agricultural land as a less risky investment. Clearly the Commission did not consider the impact of expected rent appreciation on land values.

33. The trend in the price of Arab-owned property is slightly upward; 0.21 percent per month or 1.45 percent annually ($R^2 = .014$). Because of unusually high prices in the early war years, the price trend in Jewish-owned property is downward.

34. The estimated monthly rate of change is 0.35 percent ($R^2 = .028$).

35. The Commission estimated income from lost property in Jerusalem. The corresponding area lost (as discussed below) implies Jerusalem property generated an income per dunum 2.57 times that of other cities evaluated by the Commission. On the other hand, the urban property in towns outside the Green Line likely had similar average value as the towns in Israel other than Jaffa and Haifa. The land in these towns, based on tax payable, had a value half the overall average.

Assuming that the transfer data was in proportion to Arab urban land ownership in Palestine (15 percent for Jerusalem and 27 percent for towns outside the Green Line), the implied average transfer price of Arab-owned property in Israel but outside Jerusalem was £P1,476 (1945).

36. It should be noted, though, that the result based capitalizing income is very sensitive to the discount rate. Interestingly, if the Commission adjustment of 44 percent to the assessment is assumed, the average property value generated by capitalizing rent, £P1,483, is almost identical to the average transfer price.

37. The U.N. Commission arrived at an estimate of £P150 based on urban taxes paid in several Arab villages. Given their procedure which, as noted, was based on a discount rate of 6 percent and may have insufficiently adjusted for under-assessment, this estimate should likely be

multiplied by 2.6, giving a price of £P391, which is close to the valuation here based on the rural tax.

38. The value of the lost public land in the twelve towns listed in Table 3 is put at £P16.0 million. The remaining public land is assigned the average price of land outside Haifa and Jaffa.

Note: to the extent that the amenities associated with public land would have been entered the price of private property, including the value of public land would double-count the loss.

39. Although, not ideal, this is based on an estimate for industry and mining in 1950 Israel (Gaathon 1961, p. 96).

40. Of the Arab urban population, 66 percent lived on the Israel side of the Green Line.

41. The U.N. Conciliation Commission seriously underestimated agricultural losses (Lewis 1996, pp. 182-84), and it appears they understated nonagricultural losses to a similar degree.

They put nonagricultural property losses at 40 percent of their agricultural estimate; and although here the ratio is 0.56, if public land and non-building capital is excluded, that ratio falls to 0.43.

The Commission very accurately estimated the area of lost agricultural land. They based urban losses on taxes and population, and converting their approach to a land measure suggests this part of their calculation was reasonable as well. What the Commission failed to do was assign appropriate values to the lost property.

42. See Lewis (1996) for the conversion method.

43. In 2004, Israel's net national income (market prices) was 419.8 billion NIS which converts to \$93.7 billion US (*Statistical Abstract of Israel 2005*, pp. 524, 602).

44. Compounding is at 3 percent.

45. *Statistical Abstract of Israel 2000, 2005*.

46. The economy of the Palestinian territories being much smaller than that of Israel, the impact

would be substantially greater. The transfers would be more than 40 percent of the 2004 Gross National Income of the West Bank and Gaza (excluding East Jerusalem), and would exceed the total fiscal expenditure of the Palestinian National Authority. World Bank (2005, pp. 7-8).

