The Economic Viability of a Palestinian State

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The economic viability of a state in Palestine is not a new issue. Indeed, it was a dominant theme in the economic literature of the Zionist movement long before and leading up to the establishment of the State of Israel. The message then, simple and constant, was that a Jewish state in Palestine was economically viable and that there were no assignable limits, *a priori*, to the capacity of Palestine to absorb additional immigrants.

Chaim Weizmann, in his presentation on behalf of the Jewish Agency for Palestine before the Anglo-American Committee of Inquiry in January 1946, stated that the economy of Palestine was capable of absorbing one million new Jewish immigrants with appropriate investment to develop its resource base.[1] Although higher estimates were advanced at different times by other advocates of the Zionist colonization of Palestine,[2] the figure of one million gradually emerged as the consensus estimate. This was the basis on which Ludwig Gruenbaum of the Jewish Agency developed his detailed and, in many respects, pioneering study of the economic viability of a Jewish state in Palestine published in 1946. At the time, Palestine had a total population of about 1,750,000, of which Jews constituted an estimated 520,000 and controlled 1,800 square kilometers (sq. km.), or 6.8 percent,

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of Palestine's total area. In those days before the UN partition resolution allocated about 55 percent of Palestine to the Jewish state, Gruenbaum estimated that only an additional 1,750 sq.km. of land, or 6.6 percent, would be needed to accommodate a total Jewish population of 1,520,000, rising to 1,900,000 at the end of a twelve-year development period.[3]

Both Weizmann and Gruenbaum, as well as all other advocates of the Zionist program of the period, repeatedly made the solemn assertion that Jewish colonization of Palestine was predicated upon, and would proceed, ". . . without harm to the present population, Jews or Arabs, and without thinking of displacing anybody."[4] In other words, a Jewish state in Palestine accommodating nearly two million Jewish inhabitants established on 13.4 percent of the land area of Palestine would be not only viable, but also at peace with the indigenous Arab population of Palestine.

Against this background, what can be said now about the economic viability of an *Arab* state in Palestine, when, in an ironic twist of history, the former believers have become the new skeptics? For the question is now being disparagingly posed by those who reject the concept of a Palestinian Arab state comprising the West Bank and Gaza Strip. They maintain that the land area is too small and too poor in natural resources, that the economy would remain underdeveloped and dependent, that the population pressures would be overwhelming. In short, such a state, subject to enormous internal and external pressures, could become a source of instability in the region. Hence—for those prepared even to entertain the notion of exchanging territories for a durable peace—the need for a solution via Jordan or some other approach not involving the establishment of an independent Palestinian state.

It is essential in this regard to emphasize that the *right* of the Palestinian people to self-determination and to sovereignty on the land they have inhabited since time immemorial is inalienable. It does not require confirmation by arguments of economic viability, nor can it be reduced or abrogated by its presumed absence. Since World War II, over 100 countries have gained independence, and however one judges the eventual consequences of this development, their right to sovereignty was hardly ever justified on grounds of economic viability nor denied on account of its absence. The arguments about the economic viability of a Palestinian state are therefore about practical matters of how best to manage the country's affairs after independence, and not about whether or not the Palestinian people have a *right* to independence in the first place.

Such practical matters are of course conditioned by the final shape of the political settlement of the conflict in Palestine and of the wider Arab-Israeli

impasse. The geopolitical outcome defines the basic parameters for the more technical and specific discussions of economic viability and of development strategy.

Outlines of a Settlement: The Economic Implications

Analyzing the economic viability and development strategy of a Palestinian state requires the elaboration of the terms of a political settlement. This may be defined with reference to the emerging Palestinian consensus expressed at the 19th Palestine National Council (PNC) in Algiers in November 1988. It should be noted that my adoption of this frame of reference for the purposes of this analysis is strictly methodological, and does not necessarily imply either endorsement of any specific political views or, certainly, any assumptions about the early attainability of the terms and conditions implicit in the PNC's political program. Furthermore, while the geopolitical framework adopted here restricts the analysis to the Palestinian-Israeli dimension of the Arab-Israeli conflict, I wish to emphasize that, to be durable, any resolution of the Palestine conflict must be part of a more comprehensive settlement addressing the outstanding issues embedded in the larger Arab-Israeli conflict.

Given the broad support the PNC's program has received in the Palestinian and international communities, it may reasonably be assumed that the program constitutes a suitable framework for further analysis of the economics of a Palestinian state.[5] The substantive, as distinct from procedural, principles of the settlement may be summarized as follows:

1. Complete withdrawal of the Israeli occupation forces from all lands conquered in the 1967 war, including Arab Jerusalem.
2. The early exercise in Palestine of the right of self-determination by the Palestinian people, including the right to establish an independent and sovereign state in Palestine.
3. The reinstatement and early implementation of the Palestinian refugees' right of return and/or compensation.
4. The return to full Palestinian Arab control of all natural resources, specifically land and water, forcibly (and, need one add, illegally) appropriated by Israel during the period of occupation.
5. All other issues outstanding between Palestine and Israel are to be resolved on the basis of equality of treatment and reciprocity of rights and obligations. This principle may encompass a number of issues, such as arrangements for mutual security and for the protection of

citizens of one state choosing to settle within the boundaries of the other, minor adjustments of boundaries, sharing of resources, openness of frontiers, normalization arrangements, and so on.

For Palestinians, a settlement based on the above principles represents the minimum needed to accord some measure of cohesion and integrity to the new Palestinian state and to the Palestinian Arab community that will reside in it. The settlement would also pave the way for the integration of the new state into the larger Arab community, with all that entails in terms of strategic, political, and economic arrangements. Such a settlement can (I do not say will) afford the reconstituted Palestinian society the opportunity to grow and develop with at least the same probability of success as any other state in the region.

The economic implications of a settlement, however, give rise to three substantial problems of adjustment in the post-settlement period. These essentially are problems of demography, of non-renewable resources, and of economic structure. Clearly the three are interrelated, but I will discuss each of them separately before proceeding to propose an economic development program to deal with them.

Demography

At present a total of 1.7 million Palestinian Arabs live in the West Bank (including East Jerusalem) and the Gaza Strip.[6] Just under 4.3 million Israelis, including about 650,000 Arabs, live in Israel proper.[7] The establishment of a state is likely to lead to a considerable increase in the Arab population of Palestine.

I would estimate that within the first two to three years of independence, nearly 750,000 Palestinians residing abroad, especially those still living in camps outside Palestine (Jordan, Lebanon, and Syria), will *seek* to return almost immediately within the framework of a phased repatriation program. In addition, more than 340,000 refugees now living in camps in the West Bank and Gaza (not to speak of refugees living outside the camps in these areas)[8] will need to be included in the absorption and settlement program during the transitional period. Given the present and prospective constellation of powers in the Arab region and in the world at large, a political settlement of the Arab-Israeli conflict is likely to entail the repatriation of between 50,000 and 100,000 people to areas conquered by Israel in 1948 under a comprehensive agreement on refugees. Consequently, the vast majority of the Palestinians seeking to return will have to

be repatriated to or at least enfranchised in the new State of Palestine comprising the West Bank and Gaza.

Thus, with the additional influx, the population of the Palestinian state would rise almost immediately to about 2.4 million (1990 basis). If, on the conservative assumption that no *net* migration takes place during this period (there could be flows in either direction but assuming these flows somehow balance out), the total population of the Palestinian state would increase further by almost one million, to about 3.3 million, by the year 2000.[9] By then the population density for the whole state would be about 560 persons per square kilometer, a rather high figure. Gaza's population density, depending on whether or not economic developments there would over time induce emigration, could exceed 2,700 inhabitants per square kilometer. In order to put these figures in some international perspective, one may compare population density in some of the currently more crowded territories: Israel 210, Belgium 325, Japan 325, the Netherlands 360, Taiwan 555, Hong Kong 1,900, Singapore 4,200.[10]

The demographic dimension may also be viewed from a wider perspective if we take into account likely developments in both Israel and the Palestinian state. By the year 2000, assuming no substantial net migration into Israel, the total population of historic Palestine (i.e. Arabs and Jews) would approach 8.0 million. By then the population density for the entire area would be about 300 inhabitants per square kilometer. A country that is admittedly crowded, somewhat comparable to Belgium or Japan, but on the other hand not unmanageably so.

Returning to the issue of absorptive capacity, one may state that there is no hard and fast rule about the ability of any country to support any given population. It depends very much on the resources available (land, water, climate, capital, technology), the character and dynamism of the population itself, the openness of the country to economic interchange with other countries, the organization of economic activity, and so on. None of these factors are in themselves decisive either way, as can be seen by the number of countries that have successfully overcome one or more such handicaps. Indeed, Chaim Weizmann's apt statement that "the absorptive capacity of any country is what the population makes of it"[11] is by and large valid. This is not to say that the demographic factor does not matter, but simply to suggest that while it must be taken into account in the design of a development program, it nevertheless should not alarm economic planners.

Natural Resources

The second major problem to be tackled within the framework of a development program for the new Palestinian state is that of natural or non-renewable resources, primarily, land and water.

The land area of the West Bank is just under 5,600 sq.km, while that of Gaza is about 360 sq.km. The two areas together constitute about 22 percent of the total area of mandatory Palestine.[12] Israel directly controls about 50 percent of the area of the West Bank and 34 percent of that of the Gaza Strip.[13] It has also issued military orders and plans restricting Arab use of virtually all remaining lands. The occupation policies and practices have had the effect of generally directing all resource exploitation activities to the accommodation of Israel's geopolitical requirements. Israel has also built a system of roads and infrastructural facilities that has substantially altered potential use of much of the territories' land and water resources. Needless to say, a political settlement embodying the establishment of a Palestinian state would have to return to Palestinian Arab sovereignty of all land and water currently under Israeli control in the West Bank and the Gaza Strip.

Of the total land area of the West Bank, about 36 percent is used for various forms of agriculture, about 7 percent for built-up areas and public infrastructure, and the remaining 57 percent is either pastureland or unused (rocky, steep gradient, etc.). Of the total cultivable (and largely cultivated) area of about 2 million dunums, about 145,000 dunums are irrigated, of which about 40,000 dunums are cultivated by Jewish settlers. Arab irrigated land area in the West Bank has remained about the same since 1966 due to Israeli-imposed restrictions on the use of water by Arab farmers. It is estimated that irrigable land in the West Bank could be expanded to 535,000 dunums with the availability of water,[14] and this potential represents the most promising opportunity for the expansion of agricultural production in the West Bank, provided new costs and prices made such expansion cost-effective.

Of the Gaza Strip's total area of 363,000 dunums, about 205,000 dunums (or 56 percent) are already under cultivation, of which 37,000 dunums have been "allocated" to Jewish settlements.[15] A substantial area of the Strip (more than 16 percent) is already built-up, and the expansion of cultivation is severely restricted by lack of suitable land and even more so by lack of water.

A cursory review of the water situation in the West Bank and in Gaza also reveals divergences between conditions in the two territories. But

above all, it shows the severity of the restraints placed by the Israeli occupation on water utilization by Palestinians.

A central fact about the West Bank is that the area's own natural water supplies are potentially more than adequate to meet the needs of the present and future population (including returning refugees) well into the next century. The West Bank's potential annual output of water on a sustained yield basis is in excess of 700 million cubic meters (mcm).[16] However, Israel appropriates for its own use more than 60 percent of this entire amount by tapping into deep aquifers mainly underneath the surface of the West Bank. In addition, Jewish settlements are allocated 30 mcm–40 mcm per year. Total annual Arab consumption of water in the West Bank is restricted to about 115 mcm for more than one million inhabitants. Overall annual consumption of water per capita in Israel is about 4 times and household consumption is about 6 times that in the West Bank.[17]

Assuming the full restoration of Palestinian rights to the West Bank water now being used by Israel (which presently constitutes about one-fourth of the country's annual water supply), there should be enough water in the West Bank portion of the Palestinian state to expand the area under irrigation nearly four-fold (and hence improve considerably the food balances of the new state); raise the level of water consumption for household use to reasonable standards; and accommodate industrial demand for water without any damage to the natural replenishment process of water resources in the area.[18]

As for the Gaza Strip, current water use (about 120 mcm per year) is estimated to exceed natural supplies by about 60 mcm.[19] The widening deficit has led to a drop in the water table and to a marked increase in salinity with serious adverse effects on Arab agriculture. Although the restoration of water resources currently being exploited by Jewish settlers, together with improvements in efficiency of use, would provide some relief for a period, water shortages in the Strip would soon set in and limit further economic development in the region. The only escape is through either drastic reductions or perhaps even the gradual elimination of the agricultural sector (which consumes about 90 percent of available water supplies);[20] the construction of desalination plants in conjunction with power generation; or the transfer of fresh water supplies from outside the area altogether.

To recapitulate, land and water resources for the new Palestinian state do not seem to pose insurmountable problems although serious crowding and rising water shortages in the Gaza Strip will continue to impose unavoidable constraints on economic development there. This will remain

the case even after the Arab rights over water resources in the Strip are fully restored. In the West Bank, on the other hand, the political settlement outlined earlier (incorporating above all the restoration of Arab rights over land and water), while increasing the intensity of land use for all purposes, would nevertheless *improve* the resource balance, and hence the prospects for economic development in the area.

Economic Structure

Under the general heading of economic structure I will simply highlight three of the key imbalances, along with a number of secondary structural problems, that will require immediate attention once the occupation has been removed and a state is established.

External Orientation. One of the most destructive economic effects of the prolonged occupation of the West Bank and Gaza is the isolation of the occupied territories from their traditional, and by and large natural, Arab markets, and the forced re-orientation of the Palestinian economy towards the specific requirements of Israeli hegemony.

External trade and capital movements between the occupied territories and the Arab countries (especially imports) were severely restricted and replaced by free Israeli access to the territories' markets. Restrictions on Arab use of water resources and lack of access to external markets (including Israel) stunted agricultural growth while Israel's administrative powers (such as its licensing authority) were used to suppress industrial development. The obstruction of indigenous development created a crippling dependency relationship and reduced the occupied territories essentially to an easy market for Israeli goods (on the eve of the intifada, Israel exported almost $1 billion in goods to the occupied areas, which constituted the second largest single, national export market, after the U.S.) and a pool of cheap labor, especially for Israel's construction, agriculture, and lower-paying service sectors.[21]

It is clear therefore that any effort to re-normalize the Palestinian economy's external economic relations will entail wrenching changes in its production base and in its relations with the outside world. These adjustments are likely to be costly and painful in the early phases of statehood.

Manpower. Another visible and critically important distortion arising from the prolonged occupation is the deformation that has beset the development and deployment of Palestinian manpower in the occupied territories.

In the first place, restrictions on economic development in the private sector and the stagnation or decline in the activity of the public sector (except perhaps for the perverse growth of the Israeli security apparatus) narrowed considerably the employment opportunities for the professional, the highly skilled, and the entrepreneurial categories of manpower. This led to substantial emigration by some of the potentially most productive elements of the labor force and deprived the occupied territories of a key factor in its social and economic development.[22]

As a consequence of this massive expatriation, the absolute number of workers employed in indigenous activity in the West Bank and Gaza stagnated during the twenty-two years of occupation, remaining at around 155,000. Thus, the overall increase in the labor force during this period was forced either into emigration or employment in Israel, where the total number of workers approached 130,000 just before the intifada.[23] The direct effects of this expatriation are certainly bad enough—the absolute decline in employment in the commodity-producing sectors, the high proportion of workers' income spent in Israel, the enormous human resource losses arising from long and costly transportation requirements, and outright discrimination and monopsonistic exploitation of workers. But also important are the more subtle effects, such as those arising from the peculiar structure of Israel's demand for expatriate labor and its adverse implications to the educational orientation and skill development of the Palestinian work force itself.

The high demand for unskilled workers in Israel, combined with the security-related exclusion of non-Jewish workers from the highly skilled and professional jobs, as well as the usual doses of discrimination and racism, all have served to suppress and distort the Palestinian worker's disposition to acquire advanced education, professional training, or higher skills. There has therefore been a considerable "de-skilling" of Palestinian manpower under occupation. This has had a catastrophic effect on one of the most valuable and widely noted attributes of the Palestinian people, namely, their strong commitment to and attainment of relatively high standards of education and professional development.

The third and final point related to the question of manpower is the serious deterioration of the entire educational and manpower development infrastructure during the period of occupation. This is not to deny that through the Palestinians' own efforts, and in the face of persistent obstacles erected by the Israeli authorities, certain *quantitative* improvements in private education did take place (including the opening up of several institutions of post-secondary education). But the fundamental point is that

educational standards declined, and vocational and technical training stagnated or—in the case of agricultural manpower training—was eliminated altogether. Any reconstruction and development program in the new Palestinian state must therefore confront the enormous task of having virtually to reconstitute a substantial portion of the entire educational and skill development infrastructure.

There will be a need to reorient and reabsorb workers now employed in Israel, as well as workers returning from exile. In addition, the entire skill and occupational structure of the presently active workforce, and the associated infrastructure, will have to be redirected towards the new and entirely different requirements of indigenous Palestinian development.

Infrastructure. Physical infrastructure in the occupied territories has also generally deteriorated. Per capita measures of such facilities as paved roads, hospital beds, and surface area of school rooms all declined during the twenty-two years of occupation.[24] Some improvements in communication systems and power delivery networks were introduced, but these were designed more to reinforce Israeli hegemony than to serve the needs of Arab localities. As Benvenisti and Khayat note: "Physical infrastructure is primarily planned to accommodate Israeli interests—especially settlement construction, Jewish agricultural development, and military needs."[25]

Even under Jordanian and Egyptian administration, physical infrastructure in the West Bank and Gaza did not receive high priority in terms of public outlays, although it did not materially deteriorate during the period. Under Israeli occupation, housing shortages persisted despite heavy investment by Palestinian families in private, single-family dwellings, financed largely by remittances from Palestinians abroad.

Social infrastructure, on the other hand, which came increasingly under the control of the Palestinian communities themselves, developed and in some important respects improved, despite obstruction by the Israeli authorities. The private educational system expanded quantitatively, even if lack of resources limited the extent of qualitative improvements. Local councils, charitable societies, professional associations, voluntary committees, and production cooperatives—now numbering over four hundred and in virtually all Palestinian towns, villages, and camps—sprang up especially in the past decade, in part to fill a widening gap in officially supplied services. This trend has accelerated since the intifada, with "popular committees" being added to the other formations to serve as quasi-governmental departments. Thus, a locally run, grass-roots system providing a wide spectrum of services (health, education, social welfare, manpower training, and medium-term agricultural and industrial development

credit) began to take shape as an alternative to the alien and largely discredited system imposed by the Israeli occupation authorities. The valuable experience in establishing this grass-roots infrastructure will be most usefully applied within the context of the new Palestinian state.[26]

In sum, massive investments would be required not only to upgrade infrastructural facilities that deteriorated under occupation but also to re-structure present facilities and networks so as to meet the emerging development needs of the new Palestinian state. The investment program must also take into account the huge backlog of needs that would have accumulated over a period of more than forty years of underinvestment and repression.

The New Palestinian Economy: The Legacy and the Future

It is clear that Israel's occupation of the West Bank and Gaza, even if it were to end soon (and I seriously doubt that it will), will leave the emerging Palestinian economy burdened by colossal handicaps and distortions. The first order of business in the new state must therefore be to tackle those problems.

Assuming that the political settlement will take the shape outlined earlier, the economic problems of the nascent state would stand out in sharp relief. In this new context, the issue of economic viability would be stripped of its circumstantial ambiguity and would take on the specificity of a testable proposition.

Can the new Palestinian state be economically viable?[27] Yes, it can, provided that, within a reasonably short period of time—say 5 to 7 years—it is able to overcome its inherited handicaps and proceed on a course of sustainable economic growth. The only way to ensure such a course is through, on the one hand, articulating a comprehensive reconstruction and development program and underpinning it by adequate resources—human, technical, and financial—and, on the other hand, by enlightened, predominantly liberal, growth-promoting policies. Such a program would have to deal with three closely related tasks: reorienting and restructuring the economy, absorbing substantial numbers of incoming refugees, and laying the infrastructural and institutional foundations of the new economy. I will now briefly examine the economic implications of each of these.

Reorientation and Restructuring

This task would require essentially the dismantling of the crippling dependency relationship that has been imposed upon the Palestinian economy by the occupation. The disengagement from the Israeli economy would be most pronounced and most rapid in those areas where the dependency is the greatest—the occupied territories' export of labor services and imports of all kinds.

As a corollary to this shift, the Palestinian economy would have to turn inwards, at least to some extent, in order to develop its own resources and to increase the production of its own requirements. This would have the effect of gradually rectifying the imbalances that had arisen over the past twenty-two years. In addition, the Palestinian economy would be expected to draw closer to that of Jordan and the Arab countries, thereby reestablishing the economic and financial relationships that had been abruptly severed, or at least severely constrained, by the Israeli occupation. Finally, the Palestinian economy would establish largely free and open relationships of economic interchange with the rest of the world, although, initially at least, some protection of some of its domestic industry may be required.

As to the Palestinian economy's relationship with Israel, it would depend almost entirely on the nature of the political settlement reached, not only between Israel and the Palestinians but also between Israel and the Arab states. The closer this settlement comes to fulfilling legitimate aspirations and requirements of the Palestinian and other Arab peoples, the closer to "normal" the economic and financial relations between Palestine and Israel are likely to be.

One perhaps need not elaborate on the proposition that the new Palestinian state's economic relations with Jordan will flow from the special relationship that has existed between the Palestinian and Jordanian communities over the past decades. Suffice it to say that, from the standpoint of the economic viability of the Palestinian state, it is essential that the nascent state evolve its own system of political and economic organization, using as a guide the Palestinian people's distinctive national experience both at home and in exile, *prior* to rushing into formal arrangements of confederalism or other forms of merger with Jordan, essential as these arrangements might be for both parties in the long run.

In terms of the requirements for restructuring, the sectoral origin of the economy's output would have to be altered to allow for a considerable increase in agricultural and industrial output and a great expansion and modernization of the services sector. Development in this sector would

focus especially on tourism and financial services, in both of which areas the Palestinian economy could rapidly develop a comparative advantage. The share of industry in gross domestic product (GDP), which has stagnated in the range of 7 to 9 percent for the past twenty-two years, would have to be raised to a more "normal" 30–35 percent.[28] Agricultural output, especially of cash crops grown on the expanded area of irrigated land, would increase considerably, as would basic food supplies such as meat, poultry, dairy products, and the like. Extensive agriculture, such as grains production, will become increasingly unremunerative and the Palestinian state would have to continue to depend on grain imports.

The single most important feature of the development program (the restructuring) would be the massive capital and technological deepening that would have to be incorporated into all sectors of the economy. For the Palestinian economy to transcend the inherent resource constraints and to avoid slipping into a state of permanent underdevelopment, it would have to invest enormous resources in training and retraining of manpower, in basic and applied research, in adapting and developing new technologies, and in introducing and operating the most efficient production techniques. This would require that special attention be given to the development of highly-skilled professional and scientific manpower, as well as open and extensive interaction with the most advanced industrial countries through education, research, joint ventures, the purchase and adaptation of technology, and so on. Only by these means will the Palestinian economy be able to prepare for the twenty-first century in the most expeditious and effective manner.

In other words, the Palestinian economy would have to lift itself from the state of subsistence and underdevelopment that has been imposed upon it to a state of dynamic growth based on high-level manpower, technology, and entrepreneurial and managerial talent. The new Palestinian state, being the homeland of more than five million Palestinians, will undoubtedly draw in some of the most dynamic elements in the business, entrepreneurial, professional, and scientific communities currently prospering in their countries of residence. The repatriation of this high-level manpower would enable the new state to make use of a most valuable experience already acquired in the course of the Palestinians' participation in state-building elsewhere.

Absorption of Returnees

As indicated earlier, it may reasonably be assumed that between 650,000 and 700,000 Palestinians now in exile will seek to return to the

new state during the first two to three years of independence, even though their repatriation, resettlement, and absorption into the new society may take longer. (This, incidentally, may be contrasted with an almost equal number of Jews who arrived in the newly established State of Israel in the three years from 1948 to 1951.) Depending on the circumstances, the number could conceivably be larger.

Although the absorption and reintegration of this additional number of people into the emerging Palestinian economy would pose many complex and daunting challenges, three deserve particular attention. The *first* is, of course, the infrastructural requirements, primarily housing, schools, and intermediate facilities. The *second* is the attendant labor force increase. On the conservative assumption that the labor force participation rate among returnees will be 20 percent (approximately the same as among the present population of the occupied areas), an additional 140,000 jobs will have to be created simply to accommodate the newcomers. This does not include the approximately 120,000 jobs needed to absorb workers now employed in Israel, although this latter task could be phased over a somewhat longer period. The *third* challenge is that, aside from the small numbers that may be permitted to be repatriated to areas within Israel proper, almost the entire inflow of returnees will have to be accommodated in the West Bank, since the absorptive capacity of the Gaza Strip will have reached its tolerable limits, if it has not done so already.

In its broader scope, the resettlement and absorption program would also have to address the problems of reintegrating an additional 340,000 refugees now living in camps in the West Bank (95,000) and the Gaza Strip (245,000) and possibly some portion of the territories' nearly 500,000 refugees not living in camps (about 280,000 in the West Bank and 205,000 in the Gaza Strip).[29]

Building for Sustained Long-Term Growth

All of these elements can be brought together in a comprehensive development program for the emerging Palestinian state. The program will have to concentrate initially on two basic tasks for which the bulk of investment resources would have to be allocated: manpower development, and the physical (and to a lesser extent the social) infrastructure. These two features of the plan will dominate the first phase, perhaps the first five years, but their importance will gradually decline in relative terms as investments undertaken largely by the private sector in industry, agriculture, and services will come to dominate the later phases of the adjustment program.

The need to accommodate a large influx of returnees both from abroad and from work in Israel is ameliorated somewhat by the proposed development strategy, as large numbers of young adults will be absorbed into the massive training and retraining effort, and an even larger number will find employment in the extensive construction program required by infrastructural development.

Concerning manpower training, about one-third of all students enrolled in the last three years of secondary education (about 25,000–30,000, if returnees are included)[30] would have to be enrolled, as soon as is practicable, in vocational and technical training institutes. In addition, no less than 20,000 adults initially (the number rising to 40,000 within a few years) will need to be continuously enrolled in training and retraining programs, some of which will be run and funded by the state and others by private industry with partial state support. The training programs will need to cover the full spectrum of the economy's requirements—from basic three-month courses in operating agricultural machinery to twelve-year programs for neurosurgeons. Finally, local university education will need to be thoroughly overhauled and redirected towards the radically different requirements of the new economy and society. As a consequence, it may expand somewhat in size from the current 15,000 students, but the most urgent requirement here will be the improvement in quality.

As to infrastructure, the development of which will dominate the first phase of the program and thus claim by far the largest share of its resources, it may be useful simply to outline the key components and indicate approximate, order-of-magnitude cost estimates (all in 1990 prices). Such a program will have to be phased over a period of ten to fifteen years. The various components would also need to be articulated so as to ensure the synchronization of expenditures required by the forward and backward linkages of various components. In any event, the bulky components of the program (roads, airport, electrical generation capacity) will require one to three years of planning and design, whereas other elements (e.g. housing) could start immediately.

The single most urgent and costly element in the physical infrastructure of the new state will be housing. In order to accommodate the housing needs solely of the incoming population and the refugees now living in camps in the West Bank and Gaza, approximately 200,000 housing units will have to be built during the adjustment period of, say, ten to fifteen years, at a total cost (again in 1990 prices) of approximately $4.5 billion. Such a construction program will employ an average of 25,000 workers annually, perhaps as many as 40,000 in the initial period if the program is "front-loaded," as would probably be the case.

The State of Palestine: Estimates of Infrastructural Costs of a Reconstruction and Development Program[31] (in millions of U.S. dollars at 1990 prices)

A. *Physical Infrastructure*	*9,500*
1. Housing (200,000 units)	4,500
2. Roads (5,000 km)	1,250
3. Irrigation, land reclamation, and rural infrastructure	1,200
4. Power/electricity capacity and networks	750
5. Water and sewage facilities	600
6. Communications	400
7. Air and seaport facilities	350
8. Public buildings	300
9. Other facilities	150
B. *Social Infrastructure*	*2,450*
1. Hospitals & other health facilities	1,200
2. Educational facilities	600
3. Social institutions	300
4. Public facilities (parks, etc.)	150
5. Tourism facilities (public share)	100
6. Other facilities	100
Sub-Total (A+B)	*11,950*
C. *Contingency (10%)*	*1,200*
D. *TOTAL (A+B+C)*	*13,150*

Other elements of the physical infrastructure are shown in the accompanying table along with approximate costs for the whole development program. The total cost of such a program in 1990 prices (including contingency of about 10 percent) would be about $13 billion. The pattern of outlays over a twelve-year period will not be even, as the program requires greater emphasis on infrastructure in the first phase, probably about $2 billion in the peak year and declining to about $0.5 billion in the terminal year. Incidentally, these figures do not include the normal capital expenditures that will be allocated annually from the state budget for the expansion, repair, and construction of other facilities. This aspect would add on average $0.5 billion to $0.75 billion annually, although the funds may not be required in these amounts in the early stages of the program.

Also, not all of the resources required for the infrastructural expenditure program would have to come from public funds, especially in the case of housing and educational facilities. Moreover, much of the infrastructural facilities could, once operational, generate the necessary revenues for maintenance and repair (through a system of fees for the consumption of water, electricity, communication, health and recreation services, etc.).

Parallel to the development of physical and social infrastructure, both public and private sector investment in expanding industrial and agricultural production and remunerative services (tourism, banking, and insurance) will also proceed, initially in smaller amounts but rising steadily as the infrastructural facilities are gradually put in place. Thus, if the industrial sector is to raise its share in the future GDP of the country to a target of, say, 30 percent net, a cumulative investment of more than $7.5 billion will have to be made in this sector. In the agricultural sector, and if expanded irrigation for the production of high-value crops were to prove cost-effective, approximately $1.5 billion will need to be invested in production facilities (aside from the investment in infrastructure). Finally, about $0.75 billion will need to be invested in tourism and other services. Allowing for other capital expenditures, total investment in productive capacity of the economy, mostly from private sources although public lending may also be required, would be just under $10 billion during the ten- to fifteen-year period.

Taking into account the inter-relationships between the public and private sectors in terms of their respective shares in financing and combining the two streams of investments, one would arrive at an estimate for the total program of $23 billion, of which the share of the public sector would be about $12 billion.[32]

One perhaps need not go into the details of the possible sources of finance for the proposed development plan, since the estimated figures do not appear overwhelming when placed in proper perspective. However, one may surmise that of the $12 billion spread over about twelve years that constitutes the total public share of the costs, about $6 billion could come from the Arab countries, another $4 billion from official bilateral assistance, and $2 billion from international financial and development institutions. The private sector share of the program, just under $10 billion, will come largely from private Palestinian, Arab, and international businessmen and entrepreneurs who would essentially channel their investments into remunerative projects in industry, agriculture, and services. The above distribution of investment shares assumes that the public sector will underwrite a variety of indirect costs in the form of investment subsidies, concessionary loans, marketing and credit facilities, and so on, and these costs could also be borne in part by international agencies.

Economic Organization and Development Policies

One of the most critical issues that will face the political leadership of the new state is the set of principles on which the organization of the

economy is to be based. These essentially turn on such fundamental questions as the delineation of roles for the public and private sectors, the use of the economic system to ensure a minimum level of social justice, property rights and their regulation in society, the extent of reliance on the price mechanism in decisions on production and distribution, and the degree of openness of the Palestinian economy to interaction with other economies in the region and elsewhere.

Derived from these issues is a set of economic policies that must be designed in accordance with how the above issues are ultimately resolved. For example, an economic system that affords the private sector wide latitude requires an appropriate set of economic policies (on taxation, foreign exchange, currency and banking regulation, etc.) which must also be reflected in the management of the reconstruction and development program outlined above. In other words, this program can only be conceived and articulated in light of the decisions the political leadership makes concerning the fundamental issues of economic organization in the new society.

The debate on these issues is likely to be wide-ranging and is bound to be influenced by the experience of the Palestinian people themselves both in their homeland and in the world at large, the experience of the neighboring Arab countries and, unavoidably, that of Israel, and of course the developments which have been unfolding with stunning rapidity in the socialist countries of Europe and Asia. Without prejudging the eventual outcome of this debate, one need only mention that all these factors point in the direction of an economic system that allows a dominant role for the private sector, where the price mechanism is the primary instrument for the allocation of resources, where fiscal and regulatory policies are designed to ensure adequate incentives while mitigating the maldistribution of income and wealth, and where the exchange and trade system is virtually free of controls.

Certain policies implying a strong public sector role would inevitably be required, especially as regards land and water resource management, basic services (education, health, welfare, environment), and facilities (transportation, communications). But even in such areas of quasi-economic activities, the system of independent public authorities (commissions) organized within the law but outside the direct influence of the state apparatus may prove to be most appropriate. In any event, if the resources for the above development program are to be efficiently mobilized, and if the development program itself is to have a chance of being implemented expeditiously and effectively, the required economic policies would have to

rely heavily on market forces and minimize state intervention in the management of the economy.

Economic Impact of the Development Program

To put these figures into some perspective, one may compare the expenditures on infrastructure for a population rising from 2.4 million in the initial year to 3.3 million ten years later, with the infrastructural outlays of the Jewish Agency, the World Zionist Organization, and the State of Israel for the some 67,000 inhabitants of the Jewish settlements in the West Bank and Gaza. Such outlays during the period 1968–1986 amounted to $2.4 billion.[33]

One may also compare the $1.5 to $2.5 billion in prospective average annual capital outlays of the Palestinian state to capital expenditures in other countries. Generally speaking, such outlays for a given country size are a function of the level of development as indicated by per capita GNP. For example, Arab oil countries with high GNP per capita tend to overspend (in relation to the norm), while poorer countries naturally under-invest. The State of Kuwait, for example, with a population of 1.8 million (about two-thirds of the prospective average population of the Palestinian state) and a per capita GNP of about $15,000, allocates about $3.2 billion annually to capital expenditures. In contrast to the future State of Palestine, Kuwait's basic infrastructure is fully developed (hence requiring less expenditure), but on the other hand resources are more ample and unit costs are probably higher (hence calling for larger outlays). Jordan, meanwhile with a population of 3.8 million and per capita GNP of only $1,600, spends about $500 million (public sector only) annually on development.[34]

Assuming the formulation of such an investment program, one of the most critical issues that will confront policy makers in the new state will be how to phase actual investment expenditures (which are unusually large in relation to the size of the emerging economy) so as to minimize its inflationary effects. Indeed, powerful inflationary forces arising from both the supply and the demand sides will dominate all economic policy concerns, at least during the early phases of the program. If these forces are not kept under strict control, the thrust of the program will be dissipated with little lasting effect.

Space does not permit a full treatment of the subject, but certain precautionary remarks may be in order. First, the program may have to start slowly to allow for the construction and operation of certain key infrastruc-

tural facilities that would permit the orderly shipment and distribution of key imports. Second, private and public consumption will have to be severely curtailed to permit the non-inflationary absorption of the relatively sizeable investment expenditures implied by the program (fiscal and monetary policies will have to be designed to that end). Third, the external trade and exchange system will have to be completely free of controls in order to permit the release of mounting inflationary pressures into the external sector. Fourth, domestic resource mobilization would have to go hand in hand with the receipt of external funding for the development program; in this respect, the excess supply of labor caused by the return of large numbers of refugees and by the repatriation of workers now employed in Israel will have the effect of easing somewhat the severity of domestic resource constraints.

In terms of employment impact of the expenditure program, and taking into account earlier remarks concerning manpower training, the infrastructural program could employ as many as 80,000 workers annually. If we include employment generation in the social infrastructure (including government) and in the services sectors that will be stimulated by the investment program, one may estimate that, except for an initial adjustment period of perhaps short duration, more than 120,000 job opportunities will be created on an annual basis. This would still leave the emerging Palestinian economy with the task of creating an additional 80,000 to 100,000 jobs (somewhat less than the number now working in Israel), and this task will require the attention of the planners and the authorities to ensure that a phased plan for creating this number of jobs is formulated and incorporated into the overall development program.

The economic goal of this development program is to gradually raise per capita GNP from the pre-intifada level of about $1,200 for both the West Bank and Gaza to about $3,500 (in 1990 prices) at the end of the program period. This level of average income would place the Palestinian state in a reasonably favorable position among the developing economies; specifically, this level would place it fifty-first among the 151 countries for which the World Bank has data on per capita GNP (in 1986 figures).[35] Per capita GNP at the end of the transition period would be comparable to that of present day Greece, for example, but only about 60 percent of Israel's current per capital GNP.

The income level indicated here would be in line with other socioeconomic indicators of the Palestinian population such as literacy rates, life expectancy at birth, infant mortality rates, and school enrollment ratios, which at present are somewhat too favorable in relation to the actual

income level in the occupied areas. As indicated earlier, the occupied territories have been subjected to repressive conditions which have stunted their economic growth, even while the Palestinian people's own drive for social and individual improvement continued to be manifest.

Conclusion

In examining the question of the economic viability of a Palestinian state in the West Bank and Gaza, this paper has demonstrated that economic viability, at acceptable levels of income and with reasonable prospects for further growth, is not only possible but necessary for underpinning a just and durable peace in the Middle East.

To be sure, obstacles in the way of establishing such viability are formidable and call for a concerted international effort in support of the Palestinian program for peace in two critical areas. The first is the achievement of a political settlement that would assure the newly created Palestinian entity the essential elements of territorial and geopolitical integrity (hence, nothing less than complete withdrawal of Israel from all the areas conquered in 1967 and the establishment of a land corridor between the West Bank and Gaza). The second is the provision of adequate material support for the reconstruction and development program. This would be needed not only to reabsorb an estimated 750,000 returnees, but also to compensate for decades of neglect, repression, and destruction of the economic potential of the Palestinian community in Palestine.

In 1946, as if to refute the skeptics' doubts about the economic viability of the Zionist enterprise in Palestine, Chaim Weizmann noted that:

> The economic absorptive capacity of a country is what its population makes it. Natural conditions, area, fertility, climate, will exercise their influence . . . but by themselves they can give no indication of the number of inhabitants which the country can ultimately sustain. Ultimate results will depend on whether a people is educated and intelligent . . .; whether its social system does or does not encourage the widest expansion of economic effort; whether intelligent use is made of natural resources; and finally—and in very high degree—on whether the government exerts itself to increase the country's absorptive capacity or is indifferent to it.[36]

In November 1988, and in the long shadow of the intifada in the occupied territories, the Palestinian leadership made the historic decision to accept a two-state solution in Palestine. The Palestinian people have thereby also accepted the challenge of establishing a state that is not only economically viable but—perhaps even more significantly—a secular, democratic, and progressive force in the region.

The Palestinian people have overcome chronic adversity to achieve one of the highest standards of educational, scientific, and cultural development in the Third World. Palestinian entrepreneurship in business, industry, and the professions has left its positive impact on several countries in the region. The Palestinian people's commitment to their national cause and their socio-political cohesion as an integral community in the face of dispossession and dispersion require no proof. Paraphrasing Weizmann, the economic absorptive capacity of a Palestinian state in Palestine is indeed what its intelligent, enterprising, and committed population will make it. The weight of evidence is that the Palestinian people have demonstrated their capacity to rise to the challenge.

The leaders of the Zionist movement, in nurturing their colonization project in Palestine, always solemnly pledged that they would never countenance "displacing anybody." Having now dispossessed the majority of the Palestinian people from four-fifths of their ancestral homeland, and having imposed a most repressive occupation on those who remained in Palestine, thereby undercutting their capacity to grow and develop, these leaders are perhaps less than morally justified in fostering notions about the non-viability of an Arab state in the remaining one-fifth of Palestinian territory.

In conclusion, one may state in answer to the query about the economic viability of a Palestinian state, that such a state, established within the framework of the political settlement outlined at the beginning of this paper, can indeed be viable provided certain fundamental conditions are fulfilled. Moreover, and this is probably a more important point, the establishment of a Palestinian state as a homeland in which the majority of Palestinians may reside and to which all Palestinians may belong, would afford the Palestinians, with the help of the Arab states and the world community at large, a unique opportunity to build a modern, healthy and progressive society that would contribute materially to the future peace and prosperity of the entire region.

1. The Jewish Agency for Palestine, *The Jewish Case Before the Anglo-American Committee of Inquiry on Palestine* (Jerusalem: 1947, also reprinted by the Hyperion Press, Westport, Conn. USA, 1976), p. 497. In his testimony, Weizmann also refered to the estimate of Lord Herbert Samuel (the first British High Commissioner in Palestine)

that ". . . there would seem to be room for double or treble the present population of Palestine" then about 1,750,000, *ibid.*, p. 16.

2. Messrs. Robert R. Nathan, Oscar Grass, and Daniel Creamer, in their rather comprehensive study, *Palestine: Problem and Promise* (Washington: Public Affairs Press, 1946) gave a range of 615,000–1,125,000 as the "central range" for an estimate of the probable number of new Jewish immigrants into Palestine over the subsequent decade. Others gave larger estimates. See, for example, Walter C. Lowdermilk, *Palestine: Land of Promise* (New York: Greenwood Press, 1968, a reprint of the 1944 work published by Harper and Row) pp. 227–8; Alfred E. Kahn, "Palestine: A Problem in Economic Evaluation," *American Economic Review* 34 (September 1944), p. 559; and Arthur Ruppin's numerous writings (e.g. his *The Jewish Fate and Future*, Macmillan & Co., 1940), pp. 347–52.
3. Ludwig Gruenbaum, *Outlines of a Development Plan for Jewish Palestine* (Jerusalem: The Jewish Agency for Palestine, Economic Research Institute, 1946), pp. xiii and 1–8.
4. Chaim Weizmann, in *The Jewish Agency for Palestine, op.cit.*, p. 16. Indeed, Zionist spokesmen often made the argument that Jewish colonization of Palestine would be beneficial to the Arabs.
5. Except for the U.S. and Israel, the two-state solution proposed by the PNC has been almost universally accepted as a basis for a comprehensive settlement to be guaranteed by a properly constituted international conference.
6. According to the latest estimates (1987) of the West Bank Data Base Project (WBDP) the "permanent population" (i.e. residents plus those out of the country for less than a year) of the West Bank was about 1,068,000 and that of the Gaza Strip 633,000. See Meron Benvenisti and Shlomo Khayat, *The West Bank and Gaza Atlas*, (Jerusalem: WBDP and the *Jerusalem Post*, 1988), pp. 27–31 and p. 109. The figure for the West Bank exceeds the estimate of the Central Bureau of Statistics (CBS) by about 210,000 persons. Both exclude the Arab population of Jerusalem of about 136,000. If we take a mean estimate for the West Bank and include Jerusalem in the calculation, the total Arab population of the West Bank and the Gaza Strip would be about 1.7 million.
7. Calculated from the State of Israel, Central Bureau of Statistics, *Statistical Abstract of Israel, 1988*, No. 39, pp. 32–9. These figures exclude the Arab populations of occupied East Jerusalem (136,000) and of the Golan Heights (15,000).
8. The figure of 750,000 is calculated as follows: all the Palestinian refugees living in camps in Jordan, Lebanon, and Syria (428,000 in 1987 according to UNRWA figures) plus an arbitrarily chosen ratio of 20 percent for refugees living outside camps in these countries (both figures augmented by 3.0 percent annually to arrive at a 1990 estimate), plus 30,000–50,000 from among Palestinians residing in other countries and who for various reasons have residency difficulties and may be therefore included in the early phases of a repatriation program. For estimates of refugees, see United Nations Relief and Works Agency (UNRWA) *Maps of Operation: 30 June 1987*, (Vienna: UNRWA Headquarters, 1987).
9. The projection implied in this figure is based on assumptions of moderate growth as calculated in the State of Israel, Central Bureau of Statistics, *Projections of Population in Judea, Samaria and Gaza Area up to 2002* (Jerusalem: CBS, 1987) after adjustment for underestimation of the population in the base (1982) year as pointed out in Benvenisti and Khayat, *ibid.*
10. The population density for the future state of Palestine comprising the West Bank and the Gaza Strip with, presumably, a land corridor connecting them is based on an area of the former of 5,500 sq.km and of the latter of 365 sq.km as cited in Benvenisti and Khayat, *ibid.*, pp. 25, 113. Other population densities cited in the paragraph are derived from population and area statistics found in the World Bank, *World Development Report*, 1989, and *World Bank Atlas, 1988*.

11. The Jewish Agency for Palestine, *The Jewish Case Before the Anglo-American Committee of Inquiry on Palestine* (Jerusalem: 1947, also reprinted by the Hyperion Press, Westport, Connecticut, USA, 1976), p. 495.
12. The total surface area of mandatory Palestine is assumed to be 26,320 sq.km. See Anglo-American Committee of Inquiry, *A Survey of Palestine* (Palestine: Government Printer, 1946) Vol. I, p. 103.
13. Meron Benvenisti, *The West Bank Database Project: A Survey of Israeli Policies* (Washington, D.C.: American Enterprise Institute, 1984) pp. 20–1; and the *WBDP 1986 Report* (Jerusalem: WBDP and the *Jerusalem Post*, 1986), p. 25.
14. Figures in this paragraph are derived from Meron Benvenisti and Shlomo Khayat, *ibid.*, p. 25
15. *Ibid*, p. 112.
16. The potential annual water supplies available to the West Bank are variously estimated at between 600 million cubic meters (mcm) and 800 mcm. See discussion in Benvenisti and Khayat, *Ibid.*, pp. 25–27; D. Kahan, *Agricultural and Water Resources in the West Bank and Gaza: 1967–1987* (Jerusalem: West Bank Data Base Project, 1987); and H. Awartani, *The Economy of the West Bank and Gaza* (Arabic), Chapters I and V (manuscript).
17. See above sources as well as Uri Davis, "Arab Water Resources and Israeli Water Policies" in A.M. Farid and H. Sirriyeh, *Israel and Arab Water* (London: Arab Research Center, 1985), pp. 16–24; Arab Thought Forum, *Shu'un Tanmawiyyah (Development Affairs)*, (Jerusalem: ATF) March, 1988.
18. The irrigated area in the West Bank could be expanded to approach its maximum potential, say 450,000 dunums (as compared with about 105,000 dunums now), thus consuming an additional 225 mcm; household water consumption in the West Bank and Gaza could increase from the current estimated level of 15 cu.m. to about 80 cu.m. per capita thus taking up an additional 160 mcm; while remaining uses could rise by an additional 20–30 mcm. All of these increases in water consumption would be approximately equal to, and according to some estimates even less than, the amounts of water currently appropriated by Israel from the water resources of the West Bank alone. It should be pointed out that whether or not irrigated agriculture in the West Bank *should be* expanded to the level indicated remains an economic question that must be decided on the merits of the case.
19. Benvenisti and Khayat, *ibid.*, p. 113–4 and Awartani, *ibid.*, Chap. I.
20. This proposition is not in fact as radical as it may seem. Water use by extensive citrus agriculture has been curtailed considerably and replaced by high-value, water-conserving, intensive agriculture. In Israel itself, and in spite of the local resistance of die-hard Zionists, the present official policy is to reduce the cultivated areas because of mounting water constraints.
21. See Yusif Sayigh's "Dispossession and Pauperisation: The Palestinian Economy Under Occupation" in G.T. Abed, *The Palestinian Economy: Studies in Development under Prolonged Occupation* (London: Routledge, 1988) for an analysis of the special character and development of the dependency relationship between the occupied areas and Israel. The data on trade are from CBS, *Statistical Abstract 1988*, Table XXVII/12, p. 715.

    For data and analysis of the role of Palestinian Arab labor from the West Bank and Gaza in the Israeli economy, see Moshe Semyonov and Noah Lewin-Epstein, *Hewers of Wood and Drawers of Water: Noncitizen Arabs in the Israeli Labor Market* (Ithaca, N.Y.: ILR Press, Cornell University, 1987), especially Chapters 4 and 5.
22. The "brain drain" from the occupied areas is evident not only in the entrepreneurial and professional success of those Palestinians who left the areas for the Arab (especially oil exporting) countries, but also in the "thinning out" of the age and occupational structures of the remaining labor force in precisely those categories that would normally be the most productive. For example, despite the fact that Palestinians abroad tend to be generally prominent in

the medical sciences, the occupied areas in the early 1980s did not have a single specialist in pathology, anesthesiology, bioengineering or in any number of other highly specialized occupations. The ratio of males in the West Bank in the age groups 19–45 years was in general about 20 percent *below* its normal value on account of emigration. See Central Bureau of Statistics, *Statistical Abstract of Israel 1988*, No. 39, p. 706, and Hani Makbul, *Al-Awda' al-Dimografiyya fi al-Diffa al-Gharbiyya* (Jerusalem: Arab Studies Society, 1987), pp. 271 and 277.

23. For labor force data see CBS, *Statistical Abstract of Israel 1988*, p. 732. Israeli official statistics do not include the 20,000–25,000 Palestinians who work in Israel without a work permit; they also exclude from West Bank statistics workers from East Jerusalem.
24. M. Benvenisti and S. Khayat, *ibid.*, pp. 37–39.
25. M. Benvenisti and S. Khayat, *ibid.*, p. 36.
26. It is interesting to note that efforts by Palestinians to organize responsive, self-help institutions to address local development needs and requirements were generally opposed and, in many instances, thwarted by the Israeli occupation authorities. See for example Mohammad K. Shadid, "Israeli Policy Towards Economic Development in the West Bank and Gaza" in G.T. Abed, *ibid.*, pp. 121–38. Since the intifada, the occupation authorities have closed down a large number of medical, social, and economic development institutions and have outlawed the "popular committees." See e.g. *Tanmiya* (Welfare Association, Geneva, Switzerland) Vol. 3, No. 4 (December 1988). It is still the case that a large, and since the intifada, increasing number of grassroots and largely voluntary development groups operate without official sanction.

    The literature on the "civil society" that has developed under occupation is still sparse, in part because of the security risks to the voluntary, grassroots organizations under existing conditions. Suffice it to say that these groups and organizations which had developed mainly before the intifada have expanded their role and scope of activity since then. For a brief discussion of this phenomenon that is now in print see David McDowall, *Palestine and Israel: the Uprising and Beyond* (London: I.B. Taurus, 1989), pp. 110–22. Also see Samir Hlaili, "Grass-Roots Organizations in the West Bank", Palestinian Association for the Study of International Affairs (PASIA), Jerusalem, August 1989 (unpublished paper), and Arab Thought Forum, Jerusalem, *Shu'un Tanmawiyya* (*Development Affairs*) No. 1, 1988 and No. 3, 1989.
27. The economic viability of a Palestinian state cannot be said to have preoccupied the professional economists. Only two studies on the subject may be cited to date—Elias Tuma and Haim Darmi-Drabkin's *The Economic Case for Palestine* (London: Croom Helm, 1978) and the less substantial Vivian Bull, *The West Bank: Is It Viable?* (Lexington Books, 1976). Emile Nakhleh's *The West Bank and Gaza: Toward the Making of a Palestinian State* (Washington: American Enterprise Institute, 1979) only broaches the subject while the book edited by G.T. Abed, *The Palestinian Economy: Studies in Development Under Prolonged Occupation* (London and New York: Routledge and Chapman Hall, 1988) provides comprehensive and useful background but seeks to formulate a strategy of dynamic survival under repressive conditions rather than development in the context of independence. Most other studies on Palestinian statehood deal primarily with the political and strategic issues, largely from an Israeli vantage point, and do not directly address the issue of economic viability. These include Mark A. Heller, *A Palestinian State: The Implications for Israel* (Cambridge, MA: Harvard University Press, 1983) and the Jaffee Center for Strategic Studies *West Bank and Gaza: Israel's Option for Peace* (Tel Aviv: Tel Aviv University, 1989).
28. For example, for a group of 13 upper-middle income countries with a range of per capita GNP of $2,020- $5,810 in 1987 (the group to which Palestine would belong once its economy "matures" following an intensive reconstruction and development program

[see below]), the range in the shares of industry in GDP was 32 percent to 43 percent. See World Bank, *World Development Report 1989* (World Bank and Oxford University Press, 1989), Tables 1 and 3, pp. 165 and 169, respectively.

29. UNRWA, *ibid.*
30. Figures for secondary school students for the West Bank and the Gaza Strip are taken from CBS, *Statistical Abstract of Israel 1988*, Table XXVII/48 p. 754, while the same enrollment ratio is assumed for the returning refugees. All figures are for 1987/88 and have been augmented by 3.0 percent per year to 1990, the base year of the reconstruction and development program.
31. Most estimates are based on actual costs prevailing in the late 1980s in Israel or in Jordan, taking into account the ruggedness of the terrain and its impact, for example, on the cost of highway construction. The following details are given as indication.

    For *housing*, it is assumed that the 1.2 million additional persons will need 200,000 housing units on the basis of 6.0 persons per unit; current (1987) occupancy rates are about 6.5 persons per unit and this figure does not appear to have changed much in recent years [see Simcha Bahiri, *Construction and Housing in the West Bank and Gaza* (Jerusalem: WBDP, 1989) pp. 44–51]. Average surface area per unit is assumed to be 90 sq.m (recently constructed units in the occupied territories have been larger) and the cost per square meter is assumed to be a conservative US$ 250 in 1990 prices. Employment figures are based on worker productivity of about 70 sq.m per year; actual figures have ranged between about 66 sq.m and 82 sq.m (see S. Bahiri, *ibid.*, p. 20, and E. Tuma and H. Darin-Drabkin, *The Economic Case for Palestine, ibid.*, pp. 82–7).

    The cost estimates for roads are based on raising the road length to population ratio to about 2.0 km/1000 pop. for both the West Bank and Gaza, with the ratio of the former assumed to be 2.5 and for the latter 1.0, the difference due to differences in spatial settlement. In 1966 the ratio for the West Bank was 2.3 and since then it has declined (largely as a result of population increases and near stagnation in road construction in *Arab* areas) to 1.8 km/1,000 pop. (see Benvenisti and Khayat, *ibid.*, p. 34). Total road length required by the end of the program period would be about 6,700 km. Taking into account the total length of existing (1985) roads, about 1,750 km, this would imply *new* construction during the entire period of reconstruction and development of about 5,000 km. Assuming US$ 250,000/km as cost of construction (1990 prices), the total cost of the new road network would be US$1.25 billion.

    Other estimates are only indicative although every effort has been made to utilize actual data and to apply them conservatively.
32. This assumes that the public sector will underwrite about 70 percent of the infrastructural costs and about 30 percent of the costs of investment in productive capacity.
33. Benvenisti and Khayat, *ibid.*, Table 2, p. 32.
34. The data on per capita GNP are for 1987 and are from the World Bank: *World Development Report 1989, ibid.*, Statistical Appendix, Table 1, p. 166. The data on capital expenditures are from International Monetary Fund, *Government Finance Statistics Yearbook*, Vol. XII, (Washington, DC: IMF, 1988), p. 443 (Kuwait) and p. 439 (Jordan).
35. The World Bank, *Atlas 1987* (Washington, D.C.: The World Bank, 1987), pp. 16–7.
36. Chaim Weizmann, *op. cit.*, p. 495.