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PROJECT RENEWAL'S HOUSING INITIATIVES: THEIR IMPACT ON HOUSING CONDITIONS AND HOUSING VALUES

discussion paper

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Project Renewal's Housing Initiatives: Their Impact on Housing Conditions and Housing Values

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with

Dan Evron

A Report Prepared for:

The International Committee for the Evaluation
of Project Renewal, Sponsored by
The Jewish Agency and the Government of Israel

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Chapter 1

Introduction

1.1 An Overview of the Report

Project Renewal is a large scale initiative to attack the problems of low income Israeli families on a neighborhood basis. The aim has been to raise the quality of life in selected neighborhoods by improving their physical environment and by enhancing the social, educational, and cultural life of the communities. Underlying the Project Renewal approach has been a philosophy that emphasizes the interaction between social and physical factors in neighborhood life and the need to increase the self-reliance of neighborhood residents. Since 1977, special funding from the government and the Jewish Agency has supported a range of activities, including the rebuilding of streets and sewers, the renovations of exteriors of apartment buildings, the enlargement of individual apartments, the building of community centers and other recreational facilities, and the enriching of educational programs. However, neighborhood residents have also contributed time and money to rebuilding their homes and to improving their environment. Many have participated in neighborhood committees developed by Project Renewal officials to plan neighborhood improvements; others have joined with neighbors to fix and beautify the exterior of their apartment buildings.

Behind the idea of targeting on particular neighborhoods is the notion that only an effective mass of physical and social activity can transform declining areas into healthy and viable ones. From this perspective, it is hazardous to assess the impact of some components in isolation from broad developments within the neighborhood. Physical improvements might be short-lived without accompanying social development. At the same time,

social programs might draw little interest from residents unless their own homes become physically more livable.

Although this report concentrates on Project Renewal's programs and impacts on housing conditions and housing values, it attempts to capture some of the interactive nature of the renewal process. The condition and value of a neighborhood's housing stock says much about its overall quality of life. A dwelling's physical state--including its density and the condition of plumbing, electricity, and walls--is an obvious indicator of how people live. But, changes in the housing situation reveal more about the direction in which the neighborhood is moving. A neighborhood in which house owners are willing to invest in physical improvements in their dwellings and where demand to buy apartments is rising is probably well on the way toward rehabilitation or at least stability. In contrast, where confidence is low and prospects look bleak, we generally find few people willing to spend their own money, either to improve their own dwelling or buy another.

We examine in detail the programs designed to achieve the goals of promoting homeownership and relieving density. We also analyze Project Renewal's impact on housing prices; such effects are key indicators of whether the renewal process, including its social and educational components, made the neighborhoods a more desirable place to live. The Project Renewal initiatives directed specifically at housing were:

- special loans to help public housing tenants buy their dwellings;
- loans to owners to enlarge their dwellings;
- grants to renovate the exteriors of apartment buildings; and
- grants to renovate and enlarge public rental units.

The key task of this report is to describe and assess these programs.[1] The next chapter examines the logic of these policies in the context of the housing market and housing conditions in Israel. Chapter 3 analyses the enlargement program in detail, including the program's adminstrative structure and its loan terms as well as the nature and extent of enlargement activity across neighborhoods. The chapter also presents estimates of the costs and benefits of enlargement activity. In Chapter 4, we take up the special loan program designed to stimulate public housing tenants in Project Renewal neighborhoods to purchase their dwellings. After describing and analyzing the incentives provided by the loan programs, we examine the purchase rates across neighborhoods. The chapter concludes with a discussion of whether and how the system of public rental housing impedes efforts to rehabilitate neighborhoods.

Our broadest indicators of Project Renewal outcomes are the effects of the program on housing prices in renewal neighborhoods. Chapter 5 develops estimates of price trends in selected renewal and non-renewal neighborhoods and discusses their implications for judging the impact of Project Renewal. In Chapter 6, we summarize the findings of the analysis and present our recommendations for policy.

1.2 A Note on Data Collection

Any empirical report requires good data. In the process of preparing this report, we found a large number of gaps in the data available on such basic facts as the stock of public and private dwellings by neighborhood,

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[1]We discuss the program for renovating building exteriors mainly in the context of other programs. For a detailed study of the building exterior program, see the forthcoming report of Ginsburg and Werczberger.

the number of public units purchased in each renewal neighborhood, and the size composition of enlargements. A major component of our work was to close these gaps. We did so partly by drawing on a number of existing sources, but mainly by assembling and collecting information directly.[2]

The data assembly and collection effort included:

- a special survey of physical project managers about each neighborhood's housing stock and Project Renewal activity;
- a sampling of actual enlargements undertaken in selected Project Renewal neighborhoods;
- a sample of price data in several neighborhoods from official records on individual transactions;
- the coordination of diverse data on purchases by public housing tenants; and
- the pulling together of information on the detailed operations of loan programs.

While the time involved in creating the variety of data sets was considerable, we believe that the effort was worthwhile. These data shed important light on the workings of Project Renewal programs and fill important gaps in the knowledge base.

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[2]It is striking that the responsible government agencies have lacked basic data on the operations and impact of Project Renewal. The Ministry of Housing has not developed a consistent set of figures on the numbers and composition of the public and private housing stocks in each neighborhood, and has not attempted to examine what share of loans under conventional programs (such as the Young Couples program) finance housing in Project Renewal neighborhoods. AMIDAR has only recently been able to tabulate purchases of public rental dwellings by Project Renewal neighborhoods; it still cannot provide data on the stock of public rentals in all Project Renewal neighborhoods.

Chapter 2

An Overview of the Project Renewal's Housing Strategy

Efforts to revitalize a neighborhood's social quality of life and efforts to improve its housing conditions go hand in hand. The recognition of these interactions has helped shaped Project Renewal's policy. In addition to having social and physical projects operate side by side, Project Renewal officials have often tried to stimulate neighborhood residents to become more self-reliant and thereby to overcome the self-perpetuating problems that arise when many residents are too dependent on government institutions. For example, Project Renewal's special housing loans have gone only to those willing to use some of their own money to improve their housing situation.[1]

Under its initial concept, Project Renewal was to focus on a limited number of neighborhoods. The program was to undertake a concentrated effort in these neighborhoods over a five year period and only then move on to upgrade other problem neighborhoods. Instead, Project Renewal came to operate in a large number of neighborhoods and did not phase out neighborhoods after the five year period. By 1982, the program was covering 80 neighborhoods with about 130,000 dwellings.

2.1 The Policy Context for the Project Renewal Housing Initiatives

The adoption of a neighborhood strategy involving the renovation of existing housing represents a noteworthy shift in government policy. Between the founding of the State of Israel and the 1970's, the Ministry of Housing

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[1]Neighborhood committees have been the primary mechanism for including resident participation in decisions about what social and physical improvements deserve priority.

has been involved in initiating, planning, and building new communities and neighborhoods as well as assisting individual families (mostly new immigrants) to buy or to rent specific housing units (mostly government-built dwellings in these neighborhoods). Once the neighborhoods were established, the Ministry of Housing had little involvement in the neighborhoods except for managing public rental units on an individualized basis.

By the early 1970's, the general form of assistance shifted toward financial aid (primarily subsidized loans) that recipients could use to buy an apartment of their choice within the maximum prices and sizes set by the government. The loans could help recipients purchase either a new apartment built with public funds or any apartment (new or old) supplied by the private market.[2] In addition to supplying loans to groups deemed deserving of housing assistance, the government continued to provide rent subsidies to individual families, mostly in government-owned housing managed by AMIDAR and other public companies.[3]

Thus, until Project Renewal, housing policies had developed along three lines: planning and building of new neighborhoods; aiding specific groups of eligible families to buy or rent housing; and managing an existing stock of publicly-owned dwellings. Underlying the housing assistance programs has been the idea of "housing solutions". According to the policy's apparent

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[2]The cost to the government of supplying these largely unlinked loans far exceeded expectations, because inflation ran many times faster than was anticipated. Since 1979, the government has reduced the share of housing loans not linked to the cost-of-living index. At the same time, banks have come to offer companion loans that raise substantially the share of a house price that a recipient may finance through borrowing.

[3]Once a family begins living in a subsidized public rental unit, they are able to retain their rights to remain in the dwellings at low rents. While most families in public rental units have lived there for many years, some young couples and families living in poor conditions have in recent years been able to obtain rent assistance (for private dwellings) or receive low cost public rental housing.

logic, families either are or are not in a satisfactory housing situation. The condition may be unsatisfactory because:

- o families forming new households (mainly young couples and new immigrants) do not own their own dwelling; or
- o the family's dwelling is overcrowded (2.5 or more persons per room) or dilapidated.

Although thinking of families as having or not having a housing solution may be appropriate for some purposes, the either-or approach vastly oversimplifies reality. Housing conditions vary enormously among those families defined as already having a solution. A family placed in a solution in 1963 may now be living far below today's norms of acceptable housing size and conditions. Other families may live at adequate or high levels, because they received more valuable aid in earlier periods, because they were placed in higher value communities, because they upgraded their own units, or because they lived in a public dwelling that happened to be well-maintained. Almost certainly, cases exist in which families classified as not having solutions require less aid than families classified as already possessing a solution.

Whatever the definitions of housing need in traditional Ministry of Housing programs, it was clear that a substantial share of families in Project Renewal neighborhoods lived in housing that fell far below the norms of the nation. There was a concentration of high density apartments in apartment buildings that were often in poor condition. About half of renewal area families were renting public housing units, as compared to about 15 per cent for the nation as a whole. Because the public housing companies were not maintaining these units effectively (in part due to the extremely low rent revenues available) and because tenants had little incentive to invest in them, many families were living in units that were

deteriorating. All these factors meant not only poor housing conditions for individual Project Renewal families, but they also represented a problem for neighborhood families living in adequate housing. Living adjacent to a poor quality housing stock would naturally affect an owner's expectations and willingness to maintain and invest in his home.

In spite of these problems, the Ministry of Housing placed little emphasis on helping those in existing, low quality housing, unless the families were in extremely crowded conditions. Most programs aided eligible families to buy housing, rather than upgrading existing housing.

2.2 Project Renewal's Housing Policies

The policies underlying Project Renewal suggest that the government has come to recognize that serious problems may beset individual families, even if they are not in one of the program categories presently eligible for housing loans or grants. For example, most families living in Project Renewal neighborhoods who already own an apartment have qualified for enlargement loans; this is true even though their housing conditions and density levels--while below national norms--were not so severe as to qualify for aid under conventional Ministry programs. The renewal policy not only takes account of individual housing problems that do not fit within standard categories, but also represents a shift toward the rehabilitation of existing housing. Adopting the renewal approach also implies an acceptance of the notion that some housing problems are neighborhood-wide and cannot be attacked simply on an individual basis. There is even a recognition that some of the neighborhood problems may have resulted from past government mistakes in the planning and building of entire communities.

Under Project Renewal, the government and the Jewish Agency have

developed and implemented several programs that affect individual and neighborhood problems. In undertaking these initiatives, the government attempted to upgrade the quality of existing housing and build confidence in the neighborhood partly by emphasizing self-help efforts of neighborhood residents. One program has offered tenants in public housing special loans and price discounts to encourage them to buy their dwellings. It was recognized that without the resident having the responsibility and incentive to maintain and upgrade his home, attitudes of dependency and the inadequate levels of maintenance were likely to persist. Since public housing rentals make up about half of the stock of housing units in renewal neighborhoods, these problems could influence residents in many apartment buildings or even the entire neighborhood. Although the effort to stimulate purchases of public rental units has not been confined to Project Renewal neighborhoods, the government has provided a more attractive package of purchase incentives to those buying in renewal neighborhoods.

A second set of programs has helped finance the renovation and enlargement of individual dwellings and the exteriors of entire buildings. Assistance for the enlargement of individual units has come by making loans available to all owners within Project Renewal neighborhoods who want to enlarge their apartments. Loans have not been available to Project Renewal residents in public housing rentals.[4] The program to renovate building exteriors has, until recently, operated at the discretion and with virtually complete financing by the government, subject to the advice of neighborhood

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[4]Initially, Project Renewal also provided loans to owners who wanted to undertake internal renovations without enlarging their dwellings. This component was abandoned partly because insuring that the loans went for renovations was difficult and partly because meaningful improvements in housing quality were unlikely without some increase in apartment size.

committees and small contributions by residents.[5]

A third set of programs has been the government and Jewish Agency efforts to upgrade social services and the neighborhood's physical infrastructure. To the extent that such programs enhance the quality of life in renewal neighborhoods, one would expect a positive impact on housing values since location is a highly significant factor in the market price of dwellings. The neighborhood improvements and any expected effects on housing values could, in turn, raise the incentive to invest in upgrading and enlarging existing dwellings as well as the incentive to buy a public rental unit.

The enlargement and purchase components differ from standard programs aimed at helping needy families; assistance depends on location (that is, residence in a renewal neighborhood), not on current income; benefits accrue in the form of increased wealth, rather than increased family income; and, since the receipt of aid depends on the family's willingness to share in the costs, the subsidies may end up helping the stronger families within the neighborhood.

The enlargement subsidies resemble in-kind transfers in that the benefit is to provide people with more of a specific commodity, rather than with a generalized increase in purchasing power. Like other such transfers, the commodity that is subsidized is one which citizens believe will do more to raise the quality of life than the alternative goods families might buy with an untargeted subsidy. A general problem with such subsidies is that recipients are able to shift the uses of targeted funds toward

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[5]As discussed in Chapter 4, the Ministry of Housing has altered its policy relating to the financing of external renovations of entire buildings. Now, government assistance is generally available for renovating buildings only if the residents are willing to pay for at least 50 per cent of the costs.

other purposes. For example, a program that provides families with coupons that can be exchanged for food may do little to raise food consumption, since recipient families can use the coupons for food and then reallocate the money they would have spent on food to buy other goods. Under the enlargement program, such responses are unlikely because very few enlargements would have been undertaken in the absence of the program. Indeed, it is more likely that the enlargement loans even stimulated additional spending on housing out of the family's own funds.

One reason has to do with the absence in Israel of a well-operating market for long-term credit. Government controls on the capital market have limited significantly the ability of families to borrow from private sources. As a result, even when the value of the family's investment (say, to enlarge a dwelling) justified the cost of repayments, many families could not raise the funds to undertake the investment. Credit barriers have probably led families to spend less on housing relative to other goods than they would have under a free capital market. This is because any significant upgrading of housing conditions, either by constructing new rooms or by trading up to new units, involves expenses that cannot be financed directly out of current income.

A second institutional barrier limiting the ability of low income families to enlarge their dwellings has been the difficulty of overcoming zoning and town planning restrictions. Under Project Renewal, Ministry of Housing officials and local project managers helped bring about a modification of these restrictions by making officials in many towns aware of the importance of enlargements and of the fact that their rules may

have been preventing families living in small units from enlarging them.[6]

A third reason for expecting the enlargement program to stimulate families to increase rather than decrease their own spending on housing is economies of scale. Most small units in low income neighborhoods are in buildings with a number of other tenants. Thus, enlargement activities by some families affect the desirability of enlargements by others. Where enlargements in such buildings can be coordinated, the costs for any given enlargement tend to fall and the benefits tend to rise. For example, the cost of architectural assistance provided through the program declines with the number of similar units being enlarged. To take advantage of these and other economies, Project Renewal physical project managers have helped coordinate enlargements in such buildings.

An additional rationale for programs designed to overcome institutional barriers to enlargements and renovations--beyond the assistance provided to individual families--is the possibility that social benefits will increase by more than the program's social costs. Under the enlargement program, the primary social costs are the resources used to build the new rooms; the primary social benefit is the increased value of the dwelling. In a competitive housing market, one would expect that these costs and benefits are essentially equal. However, in Israel, because of past government decisions to build apartments that were smaller than would have emerged through private decisions, the housing stock became heavily weighted toward small units and may have not yet reached an equilibrium. As a result, the Israeli housing market has tended to place a high premium on size, in the sense that the price advantage of large units over small ones exceeds

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[6]Some have argued that the liberalizing of rules for granting building permits has resulted in unfortunate side effects, by raising density and by leading to unaesthetic and poor quality enlargements.

the differential in building costs. If this is the case even in the used, low price apartments in renewal areas, the direct social benefits could well exceed the resource costs of enlargements.[7]

Alternatively, the rise in the housing unit's value could be no higher and often even lower than the costs of building added meters. Added space in an older unit may in fact be more costly and less valuable than the same space in a new unit. A policy of removing institutional barriers and leaving owners to pay for their own enlargements would generally insure that the benefits are worth the costs, at least from the owner's point of view. However, providing subsidies to enlargements may lead to serious inefficiencies if the government spends significant amounts to finance enlargements of minimal value. Further, one might not even be able to justify the subsidy entirely on distributional grounds or on grounds of upgrading the housing of low income families. By limiting the loan subsidies to the enlargement of existing units instead of allowing the purchase of alternative housing, the government would be distorting the decisions of recipients.

An overall assessment of Project Renewal's enlargement and purchase policies would have to take account of the programs' indirect, long-run effects as well as these direct, short-run effects. The enlargement program is almost certainly increasing neighborhood density. Is this desirable? Might the increased space <u>within</u> apartments have only a small impact in comparison to the negative effect on the neighborhood's environment from higher neighborhood density? Could other tools be used to raise housing standards in low income neighborhoods without adding people and concrete

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[7]The last part of Chapter 3 examines this issue empirically.

to the already crowded neighborhoods? Will improvements through enlargements to existing housing be short-lived in comparison to the building of new housing? A detailed comparison of Project Renewal initiatives and alternative housing policies is beyond the scope of this paper, but we do take up the issues in Chapter 6.

Notwithstanding some reservations about the enlargement approach, one must consider the possibility that not supporting the enlargement of small units in poor neighborhoods will lead to the deterioration of the entire dwelling. Were this a likely outcome, the benefit of enlarging a small apartment would include not only the value of the added square meters, but also the value of preserving the original dwelling. Such added benefits are primarily due to the fact that interior renovations nearly always accompany the enlargement activities. Preventing deterioration is also an important side effect of the program to stimulate purchases of public dwellings.

The social value of minimizing the deterioration and abandonment of housing in a neighborhood cannot be fully captured by the change in the dwelling's price. Neighborhood effects are highly likely. When buildings fall into disarray, adjacent owners lose confidence in the future prospects of the area and become less likely to invest in their own dwellings. The process can lead to the abandonment of units, the departure of the strong families, and an unhealthy concentration of poor families. At that point, rehabilitating the neighborhood might become a vastly more complex and costly task.

Chapter 3

An Analysis of Project Renewal's Enlargement Policy

Project Renewal has financed the upgrading of existing housing units in two major ways: through the renovation of external sections of apartment buildings, such as outside walls, roofs, stairways, and garden areas; and through loans for enlarging individual apartments. Through July 1984, the program had fully or partially financed exterior renovations of buildings with about 25,000 apartments and about 10,000 enlargements. Nearly 9,000 of the enlargements were undertaken by families who own their apartments. Thus, one out of five apartments, of the 130,000 total in renewal neighborhoods, was in a building in which Project Renewal funds paid for external renovations; and one of eight apartment owners, of the 70,000 in renewal neighborhoods, obtained a Project Renewal enlargement loan and had begun enlarging the family's apartment.

This chapter addresses several questions about the enlargement policy, including:

- in what ways did Project Renewal aid families to enlarge their units?
- how much financial assistance did the government offer?
- what was the form of the assistance?
- how did enlargement activity vary across neighborhoods?
- what accounted for the variability across neighborhoods?
- what were the initial sizes and final sizes of the units enlarged?
- how did families who chose to enlarge differ from those who did not enlarge?
- what have been the benefits and costs of the enlargement program?

3.1 The Administration of the Enlargement Program

Project Renewal has encouraged families to enlarge their apartments through loans and through certain types of nonfinancial assistance. The loan program has been open-ended, so that all who qualify and apply automatically receive the amounts for which they are eligible. In addition to the loan program, the Ministry of Housing has counted on the efforts of its physical project managers to help families through the process of enlarging their units. These managers are the primary point of contact between residents and the Ministry of Housing. In dealing with the enlargement program, project managers help make residents aware of the program; they process the loan applications; they provide architectural assistance to those that enlarge; they coordinate enlargements among owners within medium and large buildings; they do some supervision of the quality of construction; they certify that construction has proceeded far enough to permit the release of parts of the loan; they bring to the Ministry of Housing unusual cases inadequately addressed by the standard guidelines; and they advise residents about how, when, and whether to enlarge.

The administration of the Project Renewal enlargement program has involved several elements. When residents come to the local Project Renewal office saying they want to enlarge their unit, the project manager first checks the resident's eligibility for loans and the feasibility of enlarging in a way that meets local zoning requirements. The loan program is open to all owners in Project Renewal neighborhoods, but the size of the loan depends on family size and the initial size of the dwelling. Nearly all families have units small enough to qualify for loans, but many live in areas whose restrictive zoning makes it difficult or impossible to enlarge. Assuming that families qualify for a feasible enlargement, the project

manager then may offer partial or full assistance in preparing the architectural plans for the enlargement. The nature of the planning assistance has varied across neighborhoods, with the Ministry of Housing sometimes paying for all of the fees, sometimes paying half, and sometimes paying only for fees where a large share of the residents of a particular building decide to enlarge. The planning usually takes about one or two months to complete. After residents have an enlargement plan, they must obtain a building permit from the municipality. The time between the application for and the granting of the permit is generally 3 months, but often residents must wait much longer. Once residents receive their building permit, they apply for the enlargement loans, a process that usually takes less than one month.

The processing of loans operates in the following way. Residents file their applications with the physical project manager. The manager brings new applications (usually on a monthly or biweekly basis) for approval to the Housing Ministry's regional office. The regional loan committee calculates the size of loans available to each applicant on the basis of family size, the initial size of the apartment and the size of the proposed enlargement. Upon receiving the approved application, the central office within the Ministry dealing with aid programs sends the applicant a certificate approving the total loan and the amounts that are linked and unlinked to the cost-of-living index. Once the resident has this certificate, he can obtain 20 per cent of the loan from the bank. Receiving the remaining portions requires written confirmation from the project manager of progress toward completing the enlargement. After the manager confirms that the foundation has been laid, residents can obtain a further 50 per cent of the loan. The final 30 per cent is available only after the manager certifies

the completion of the interior plastering.

The owner is responsible for hiring the building contractor and for overseeing his work. This gives the owner the responsibility and flexibility to shop for the most appropriate contractor. One owner may prefer and be able to afford a high cost, high quality builder, while another might prefer or only be able to afford a low cost builder.

Having owners hire the contractor lessens their dependence on the government and reduces administrative costs; it also permits--indeed requires--owners to make the hard trade-offs between added costs and increased quality. On the negative side, the absence of Housing Ministry involvement in the choice of contractor often may have led to poor quality workmanship and jobs that were left uncompleted. Because owners often lack knowledge of construction, supervision, and establishing sound contracts, leaving the hiring decision entirely in their hands is hazardous. In some cases, owners who become dissatisfied with the work of their contractor turn to the physical project manager for assistance. Such help goes beyond the manager's normal responsibilities. Although managers are sometimes able to negotiate a solution to the problem, these difficulties can strain relations between managers and owners. Owners recognize that they have the responsibility to hire and oversee the builder's work; however, the Ministry of Housing guidelines holding the project manager responsible for "overall supervision" of enlargements can give false signals to owners that the Housing Ministry has more responsibility than is actually the case. This can be a special problem when the population involved has been accustomed to a dependence on government institutions.

Beyond these elements of the enlargement program, the Ministry of Housing has attempted to help overcome obstacles in the enlargement process.

The most formidable obstacles have been local zoning rules that sharply limit the ability of residents to enlarge. Restrictive zoning has reduced enlargements throughout the country, most importantly in Tel Aviv and Jerusalem. Efforts to overcome these and other obstacles to the enlargement program have centered in the Housing Ministry's office for the physical side of Project Renewal, under the direction of Mr. Avraham Elzon. Mr. Elzon's staff and his neighborhood project managers have tried to influence municipalities to show enough flexibility in planning and zoning to permit residents to enlarge their units. In some cases, project managers have prepared town plans where none previously existed. Where modifications were required, managers developed the maps and other necessary documents, with funding from the Housing Ministry.

In one important administrative and policy area--the size, structure, and timing of inflation adjustments of Ministry of Housing enlargement loans--Mr. Elzon, his staff, and physical project managers played no role at all. Officials from the Housing and Finance Ministries making these policy decisions rarely interacted with the unit responsible for carrying out the enlargement program. One result of this lack of interaction was that project managers and neighborhood residents had to make plans under a high degree of uncertainty. As we document in the next section, the structure of the loan program and the variation in the terms created unnecessary inequities and inefficiencies. Having the operational and policy units work together might have reduced these problems.

3.2 The Financial Assistance For Enlargements

How large has been the government's assistance to those enlarging

their apartments? This section addresses several questions about the loans for enlargements, including:

- what have been the eligibility requirements for enlargement loans?
- how has the overall size of loans and repayment terms varied over time and across areas?
- what have been the sizes of loans relative to the costs of enlargement?
- what share of the real burdens of the loans has been borne by residents and what share has been subsidized by the government?
- how has this ratio varied over time for enlargements of alternative sizes and costs per square meter?
- what has been the size of the repayment burdens relative to incomes?

3.2.1 A Description of the Loan Terms

The terms of enlargement loans have depended on the unit's location, household size, and initial size in square meters; and on the loan allowance per square meter and the maximum total loan specified at each time. In development towns, all families owning apartments within a Project Renewal neighborhood have qualified for enlargement loans, regardless of family size and initial unit size. In other Project Renewal neighborhoods, families of four persons or less have been eligible to receive loans for enlargements that bring their apartments up to 85 square meters.[1] For families of five, six, and seven persons, loans have been available to cover enlargements raising apartment sizes up to 95, 104, and 114 square meters, respectively. Each person beyond the seventh has raised by 12 square meters (beyond 114) the size the apartment could reach using an enlargement loan. The actual loans provided are constrained by the existence of loan ceilings.

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[1]Loans have not been provided for enlargements smaller than 10 square meters.

Table 3.1 lists the loans in recent periods by geographic area. Note that part of the loan was provided as 15 year loans without any linkage to the cost-of-living index, while the other part was linked to the index but extended for a 25 year term at 0 per cent interest. These are highly generous terms, even by the standards of Ministry of Housing loan programs.

To compute the potential size of the loan (in areas outside development towns), one must first calculate the difference between the apartment's initial size and either its final size or the final size (noted above) for which subsidies are available (whichever is lower). For example, for a family of four enlarging a 50 square meter unit to 90 square meters, the difference would be 35 square meters (85 - 50). Were the family enlarging to 80 square meters, the difference would be 30 square meters. In development towns, since there is no limitation on eligibility, the initial figure would simply be the actual number of square meters of the enlargement. Multiplying the square meter amount (say 35 square meters) times the loan amount per square meter specified by the Ministry of Housing (say, 20,000 IS per square meter) yields a tentative loan figure (in this case, 700,000 IS). Applicants receive this amount or the maximum loan, whichever is lower. Table 3.2 illustrates this process for units of different sizes and locations.

One other element concerns the relationship between the linked and unlinked components of the loan. Until January 1984, owners would receive the entire unlinked component of the loan before receiving any of the linked portion. Since January 1984, all loan amounts must have the same linked and unlinked ratios as that of the maximum loan. Thus, with the latest loan maximums set at 960,000 IS (linked) and 320,000 IS (unlinked), 75 per cent of every loan is now linked and 25 per cent is unlinked, whatever

TABLE 3.1. Maximum Enlargement Loans Available in Project Renewal Neighborhoods by Area: August 1984

AREA AND INITIAL UNIT SIZE	MAXIMUM TOTAL LOAN	AMOUNT NOT LINKED	AMOUNT LINKED 0% INTEREST	INITIAL MONTHLY REPAYMENT	AMOUNT PER SQMETER ENLARGED
Jerusalem					
All units	1,600,000	400,000	1,200,000	5,200	42,000
	$5,161	$1,290	$3,871	$17	$135
Development Towns					
30 sq.m. or less	2,290,000	740,000	1,550,000	7,390	42,000
	$7,387	$2,387	$5,000	$24	$135
31-40 sq.m.	1,950,000	640,000	1,310,000	6,290	42,000
	$6,290	$2,065	$4,226	$20	$135
41 sq.m. or more	1,600,000	520,000	1,080,000	5,160	42,000
	$5,161	$1,677	$3,484	$17	$135
Other Areas					
30 sq.m. or less	1,860,000	540,000	1,320,000	6,020	42,000
	$6,000	$1,742	$4,258	$19	$135
31-40 sq.m.	1,550,000	450,000	1,100,000	5,020	42,000
	$5,000	$1,452	$3,548	$16	$135
41 sq.m. or more	1,280,000	320,000	960,000	4,160	42,000
	$4,129	$1,032	$30,968	$13	$135

Note: Of the 80 neighborhoods in Project Renewal's physical program, 6 are in Jerusalem neighborhoods, 20 are in development towns and 54 are in other areas.

TABLE 3.2 Computing the Maximal Enlargement Loan By Family Type

A FAMILY OF 4 ENLARGING A UNIT FROM 60 TO 90 SQUARE METERS

LOCATION AND DATE	SQMETERS ELIGIBLE TO ADD	ACTUAL METERS ADDED	CEILING OF LOAN IN SQMa	SQMETERS LOAN FINANCESb	LOAN AMOUNT PER SQM	TOTAL LOAN TO FAMILYc
JERUSALEM						
JULY.1983	25	30	41.9	25	16000	400000 $8,111
JULY,1984	25	30	38.1	25	42000	1050000 $4,086
DEVELOPMENT TOWNS						
JULY 1983	NO LIMIT	30	41.9	30	16000	480000 $9733
JULY 1984	NO LIMIT	30	38.1	30	42000	1260000 $4903
OTHER AREAS						
JULY 1983	25	30	33.8	25	16000	400000 $8,111
JULY 1984	25	30	30.5	25	42000	1050000 $4,086

A FAMILY OF 6 ENLARGING A UNIT FROM 60 TO 100 SQUARE METERS

LOCATION AND DATE	SQMETERS ELIGIBLE TO ADD	ACTUAL METERS ADDED	CEILING OF LOAN IN SQMa	SQMETERS LOAN FINANCESb	LOAN AMOUNT PER SQM	TOTAL LOAN TO FAMILYc
JERUSALEM						
JULY 1983	44	40	41.9	40.0	16000	640000 $12,978
JULY 1984	44	40	38.1	38.1	42000	1600000 $6,226
DEVELOPMENT TOWNS						
JULY 1983	NO LIMIT	40	41.9	40.0	16000	640000 $12,978
JULY 1984	NO LIMIT	40	38.1	38.1	42000	1600000 $6,226
OTHER AREAS						
JULY 1983	44	40	33.8	33.8	16000	540000 $10,949
JULY 1984	44	40	30.5	30.5	42000	1280000 $4,981

a. Ceiling loan in square meters is derived by dividing the overall loan ceiling by the loan amount per square meters.
b. Square meters financed is the lesser of the ceiling loan in square meters and the square meters the family is eligible to add.
c. Loan amount per square meter times square meters loan finances.

the absolute size.

The size of loan levels in real terms has varied considerably over time, partly because of policy changes concerning the size of the subsidy and partly because inflation erodes the real value of loans between adjustment periods.[2] With the enormous rates of inflation in Israel, even a lag of a few months between adjustments can produce sharp fluctuations in the real value of loans. Figure 3.1 shows the trends in maximum loan amounts (converted to dollar terms) between July 1980 and July 1984. Note that in addition to the obvious fluctuations, the total has declined significantly over the last two years. Over this period, the linked portion of the maximum loan has gradually increased.

These figures do not show precisely how individual borrowers have been affected because actual loan totals have depended on the loan allotment per square meter and the size of the enlargement as well as on the loan ceilings. For example, owners had to add out-of-pocket outlays when the loan allotment per square meter provided by the Ministry of Housing was lower than the costs per square meter charged by the builder. Figure 3.2 shows the variation over time in the dollar value of the loan allotment per square meter. Since this figure has been very low in some periods, even owners undertaking small enlargements, whose costs are well within the overall loan maximums, have at times found the loans did not cover their costs.

3.2.2 The Adequacy and Real Burden of Enlargement Loans

In a free capital market, where terms of loans are flexible and interest

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[2]Between 1980 and 1984, the Ministry of Housing raised the enlargement loan levels once or twice a year: in July 1980, in February and November 1981, in June and December 1982, in May 1983, and in January and May 1984.

Figure 3.1: Maximum Loan for Enlargement in Dollar Terms: July 1980 to July 1984

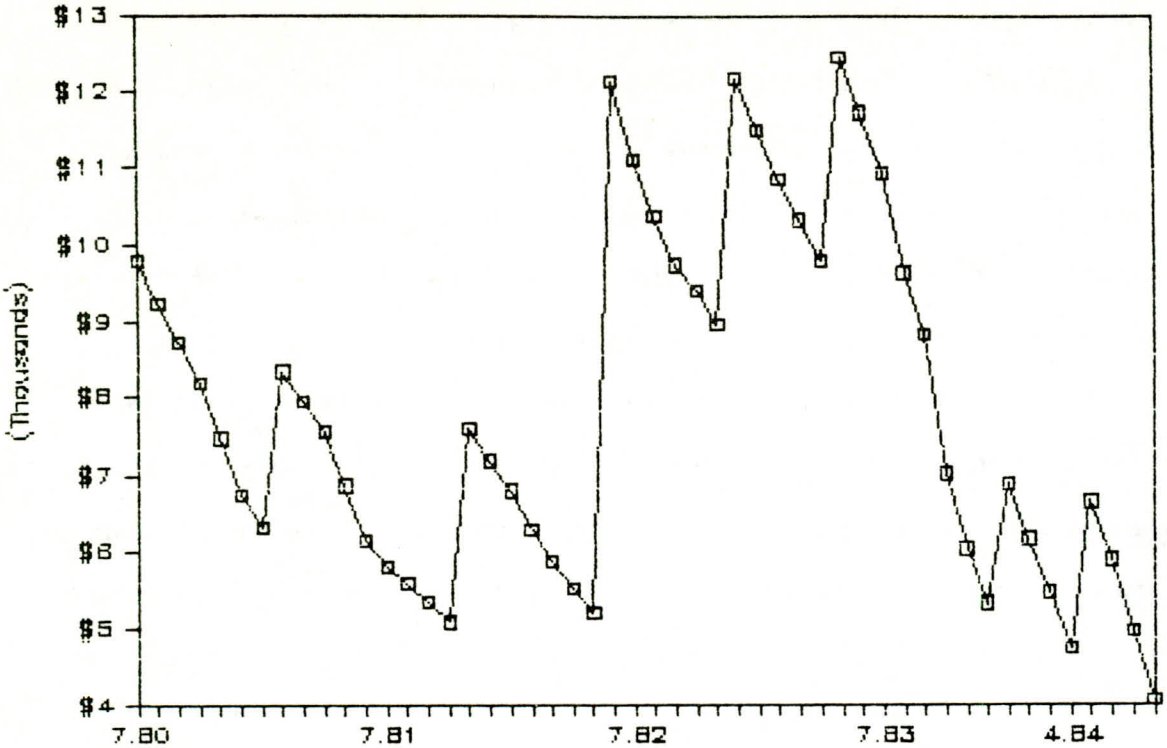
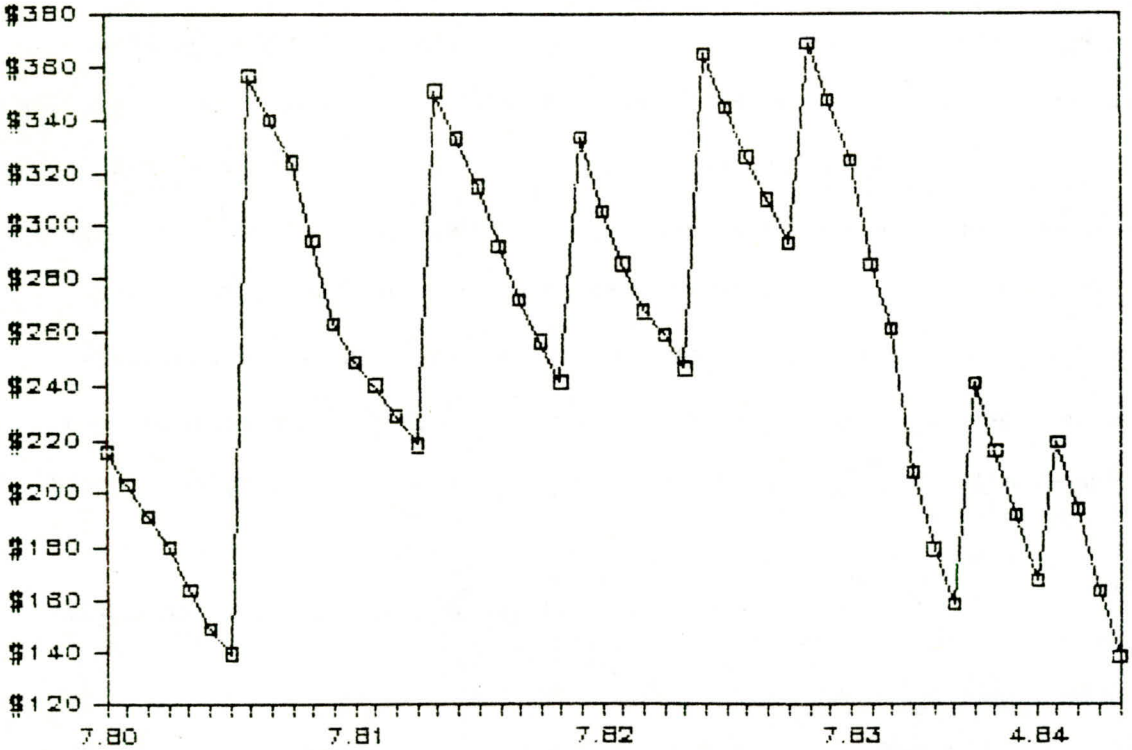


Figure 3.2: Maximum Loan per Square Meter in Dollars: July 1980 to July 1984



rates on borrowing and lending are similar, the main benefit from having access to a special loan program is the subsidy component of the loan. The adequacy of the loan for financing an enlargement would be less important, since owners could generally borrow privately the enlargement costs not covered by the government loan.[3] In Israel, long-term borrowing is difficult or impossible, certainly at rates similar to those paid to lenders. Thus, the adequacy of the loan is also a significant factor.

Another way of looking at the potential benefit from the loan is to note the distinction between two ways of calculating its subsidy content. Because of government restrictions on long-term private lending, someone able to obtain a long-term loan (assume they are available at some interest rate) must pay real interest rates that are substantially higher than he would pay in a free market and that are substantially higher than the government's borrowing costs. In this setting, one can calculate the subsidy as the difference between the government's borrowing and lending costs, as the difference between the terms of a government loan and a private loan, or as something in between the two. Suppose, for example, the government can borrow at a 4 per cent real interest rate and the rate on a long-term private loan were 10 per cent real. If the government provides loans to Project Renewal residents at a 4 per cent real interest rate, should the subsidy value equal zero or 6 per cent per period? The answer depends on whether one is measuring the taxpayer cost or social cost. On the basis of taxpayer cost, the subsidy would be zero; on the basis of social cost, assuming that the renewal loan came at the expense of a loan to an alternative private borrower, then the opportunity cost would

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[3]We are assuming here that owners have adequate collateral in their homes or enough reliable co-signers to secure the loan.

be 6 per cent.

A second problem in specifying the adequacy and subsidy amounts of the loans is to come up with an accurate and meaningful figure for the costs of enlargements. Variations in costs per square meter are apparently due to three sources. First, prices of building contractors may differ, even for work of similar quality. Because owners contract directly with the builder, they are sometimes able to find builders whose small scale allows them to evade some taxes and pass on some of the savings to the owner. Although no hard evidence is available on the tax payments of contractors undertaking enlargements, there are indications that many owners use unregistered contractors and pay less than the prices charged by registered builders. Differences in the extent of competition might also affect the costs of enlargements; areas with larger numbers of enlargements may attract a larger number of contractors.

A second reason for finding variations in the costs of enlargements is differences in quality. The durability and the attractiveness of the work apparently varies substantially among contractors. A third reason for cost differences has to do with the extent of upgrading that accompanies an enlargement. Nearly all enlargements involve some renovation of the apartment, as the increased size of the unit permits a change to a more convenient layout (e.g., placement of kitchen or bathroom). In general, costs will rise the more the owner renovates as well as enlarges and the more the owner adds special features (such as high quality tiles) to the new space.

To obtain estimates of costs, we surveyed physical project managers, asked the Housing Ministry's Director for Project Renewal, and consulted with a few private architects and builders. Estimates mentioned in these

discussions showed a moderate range, except for the extremely high costs of AMIDAR enlargements. The $700 per square meter that the Ministry of Housing paid AMIDAR for enlargements of public units was more than double the estimated $300-350 costs paid by private owners. In all likelihood, the high costs of the AMIDAR enlargements were due to its insistence on high construction quality and its use of registered builders; such builders charge more than many neighborhood contractors, who pay lower taxes and employ less experienced workers. The estimates of outlays required for standard quality enlargements undertaken by builders most involved in the program generally fell between $250 and $350 per square meter. While we believe these are reasonable estimates, they may be somewhat on the low side, since they are well under estimates stated by about one-third of local project managers.[4]

An additional assumption required in examining the loans relative to enlargement costs concerns how long the construction takes. This can be important because, as noted above, individuals obtain only 20 per cent of the the total loan at the time the construction begins. The subsequent payments, paid at later stages of construction, will generally be lower in dollar terms than expected on the basis of the loan's initial dollar value because of the shekel's erosion relative to the dollar. Only if the Ministry of Housing has adjusted the loan terms before the owners receive the later components of their total loan (at the completion of the foundation and the final plastering) might these payments rise relative to initial

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[4]To estimate how building costs may have varied over time, we deflated these dollar estimates for recent periods by the building cost index over the four prior years. Since there was little trend in the building cost index relative to the dollar rate of exchange, we used the $250 and $350 figures for all periods.

expectations.[5] For these calculations, we assume that the construction takes three months, that individuals receive 20 percent at month 1, 50 per cent in month 2, and 30 per cent in month 3.

To illustrate the adequacy of loans relative to costs, we present in Figures 3.3 and 3.4 the dollar value of loans as a proportion of dollar costs of 25 and 40 square meter enlargements. For all the figures and calculations in this chapter, we use the loan terms for units initially 41 square meters or larger (nearly all units enlarged fit into this category) and for areas outside Jerusalem and development towns. These terms are applicable to two-thirds of renewal neighborhoods. The trends are similar for all cases. The program began by covering only a moderate share of total costs; between mid-1982 and mid-1983, loans were made significantly more generous; since mid- to late-1983, the levels have been allowed to erode substantially. Loans for a moderate 25 square meter enlargement, which in the past had covered 60 to 100 per cent of the costs, have fallen to the point where they finance only 40 to 55 per cent. Similar reductions have taken place among owners undertaking 40 meter enlargements. An owner paying $350 per square meter for a 40 square meter enlargement had in recent periods to come up with $9,000-$10,000 of the total $14,000 cost.

The variation within periods has been due to the effect of inflation between adjustments of loan levels; while the loan policies were not responsible for the high inflation rates, government decisions to make relatively infrequent adjustments did result in high variability in the generosity of loans. Across periods, changes in loan terms came about

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[5]Consider a loan initially set at 100,000 IS. The owner could receive 20,000 IS at the time the certificate is issued. Suppose that between the initial month and the time the foundation is laid, the loan levels are adjusted to 1.4 times their original amounts. Then, the owner's second payment would be 50 per cent of 140,000 IS, or 70,000 IS.

Figure 3.3: Loans as Proportion of Total Costs of 25 Square Meter Enlargement: $250 to $350 Costs per Square Meter, July 1980 to July 1984

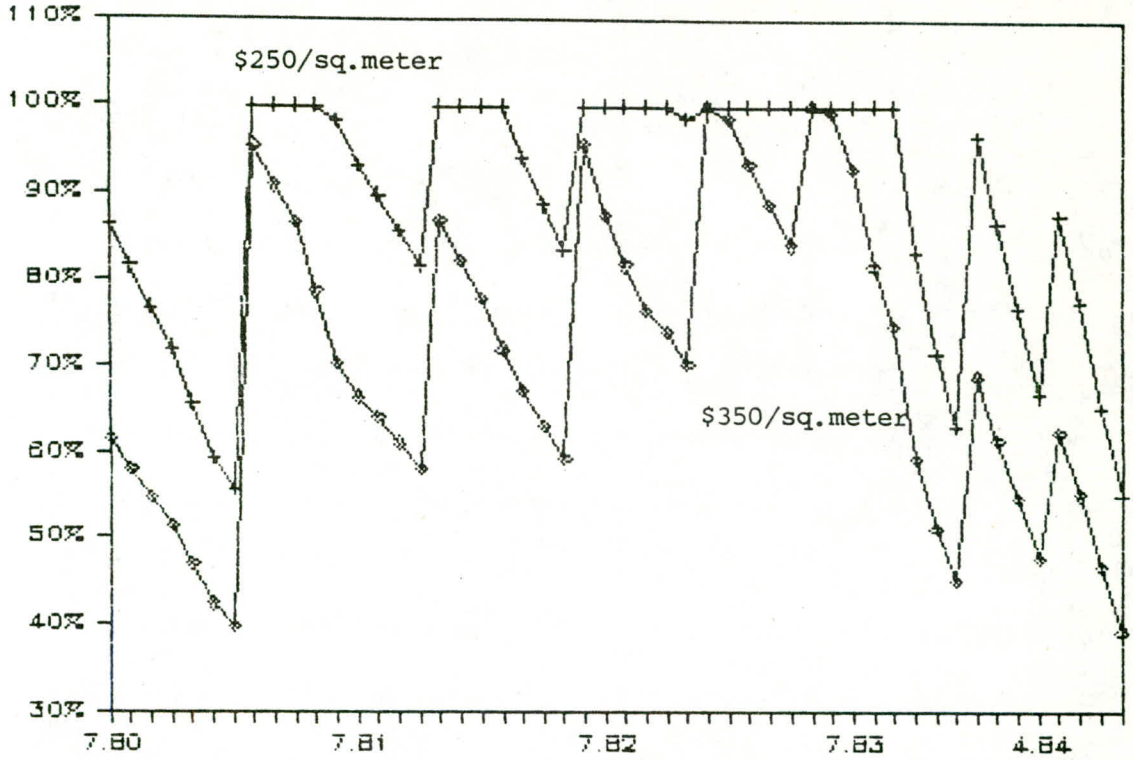
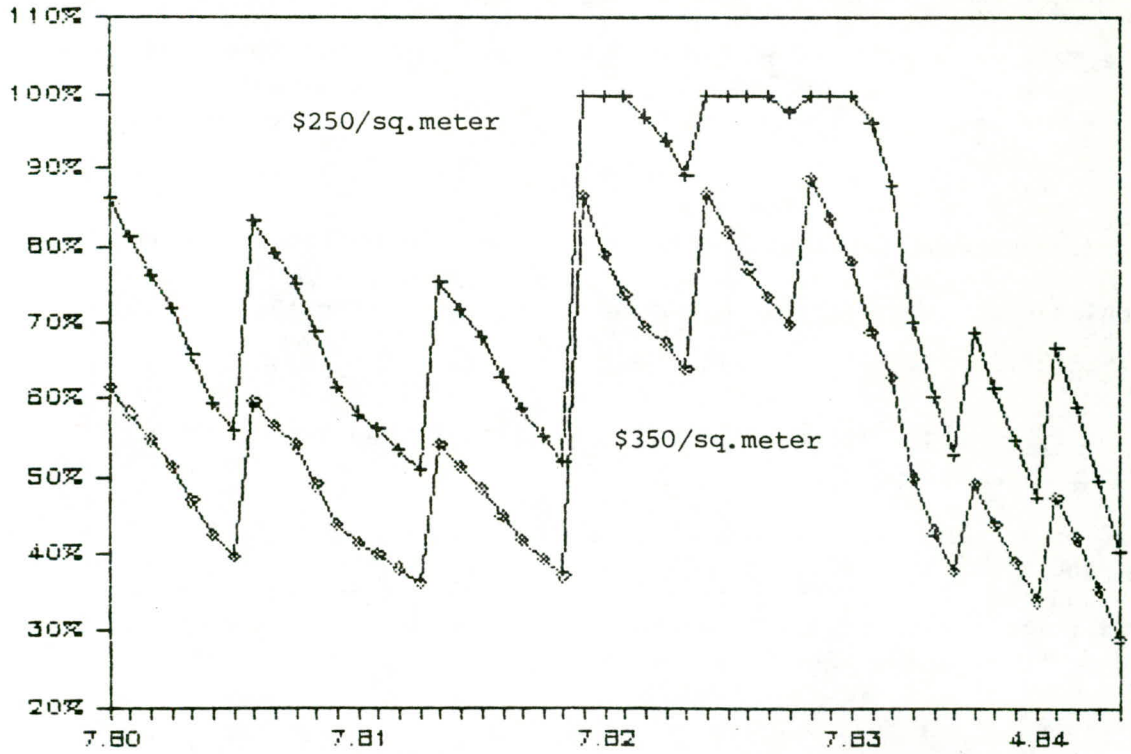


Figure 3.4: Loans as Proportion of Total Costs of 40 Square Meter Enlargement: $250 to $350 Costs per Square Meter, July 1980 to July 1984



from concrete policy choices concerning the size of the adjustment of the loan ceilings and the loan amounts per square meter. Some of the variation may even have to do with confusion over how the adjustment of individual parts of a formula produce specific outcomes.

The owner's total cost burden is the sum of his out-of-pocket outlays plus the value in today's terms of his loan repayments.[6] Out-of-pocket outlays (the costs less the total loan he receives) have varied either because of changes in the loan amount per square meter relative to the real costs per square meter and/or because of changes in the loan ceilings. The value of repayments has varied because of changes in the mix of linked and unlinked loans and in the size of loans available for particular types of enlargements. In estimating the present value of loan repayments, we assume: 1) the nominal interest rate is 10% per month; and 2) the real interest rate is 5% per year.

Because of policy changes and infrequent adjustments for inflation, the share of the cost burden borne by owners and the share subsidized by the government have been subject to large shifts over time. Figures 3.5 and 3.6 illustrate the trends by units size and cost per square meter. Figure 3.7 shows the changes over time in the dollar levels of government subsidy. Not only were there enormous fluctuations in loan terms between loan adjustments, there were also striking variations in burdens from one adjustment to another. The burdens on owners began at a moderate level, fell sharply during the mid-1982 to mid-1983 period, and jumped to very high levels since late 1983.

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[6]The value of repayments in today's terms refers to the present value of the flow of loan repayments. The present value of $110 one year from now, when the interest rate is 10% per year, is $100. Our calculations bring the owner's entire flow of repayments into a single current dollar value.

Figure 3.5: Owner's Share of Total Costs of 25 Square Meter Enlargement: $250 and $350 Costs per Square Meter, July 1980 to July 1984

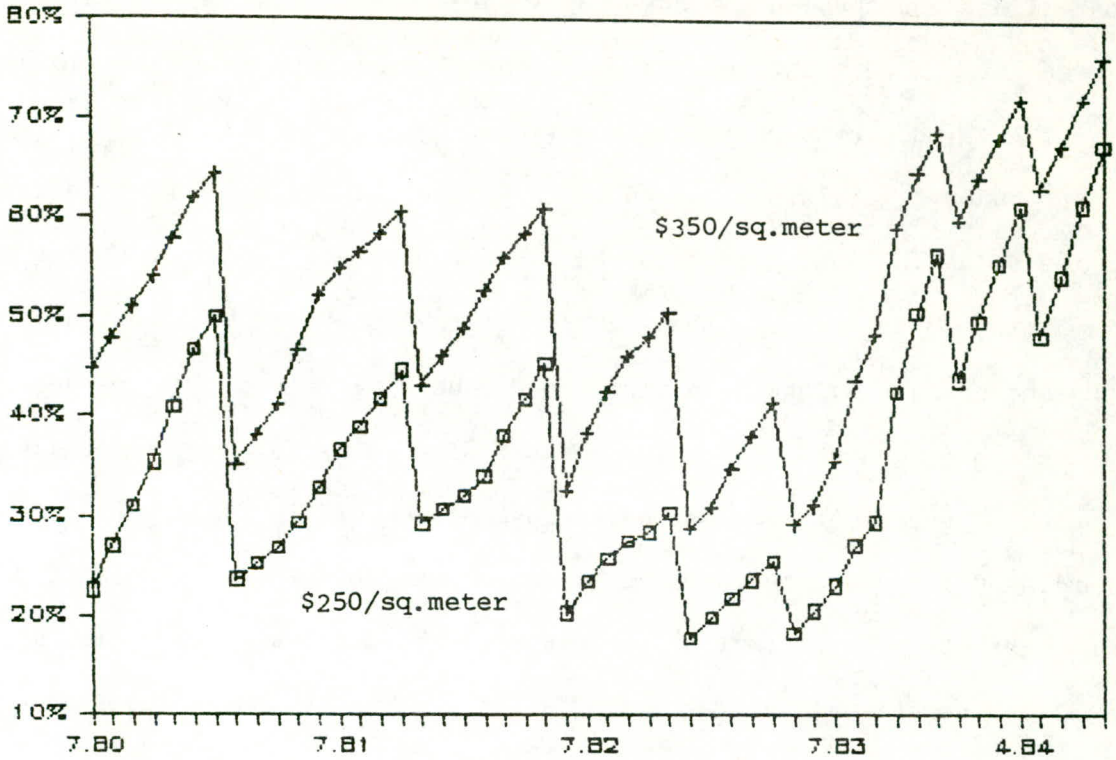


Figure 3.6: Owner's Share of Total Costs of 40 Square Meter Enlargement: $250 and $350 Costs per Square Meter, July 1980 to July 1984

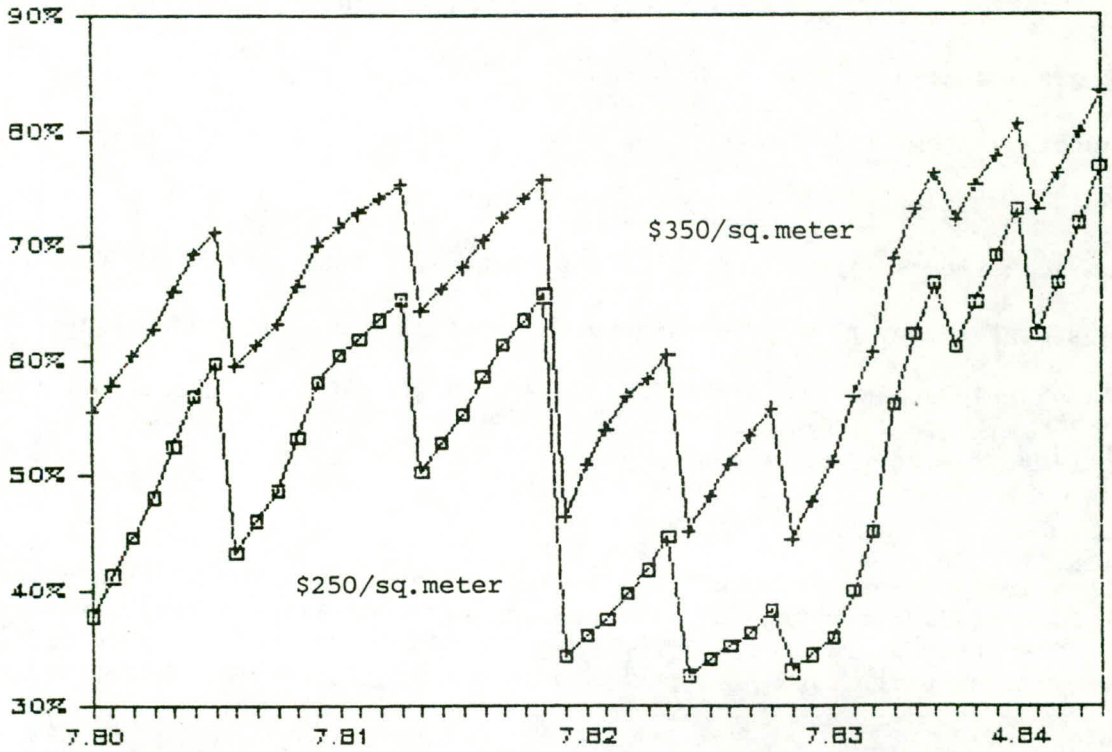


Figure 3.7: Government Subsidy (in Dollars) for Enlargement of 25 Square Meters at Costs of $350 per Square Meter, July 1980 to July 1984

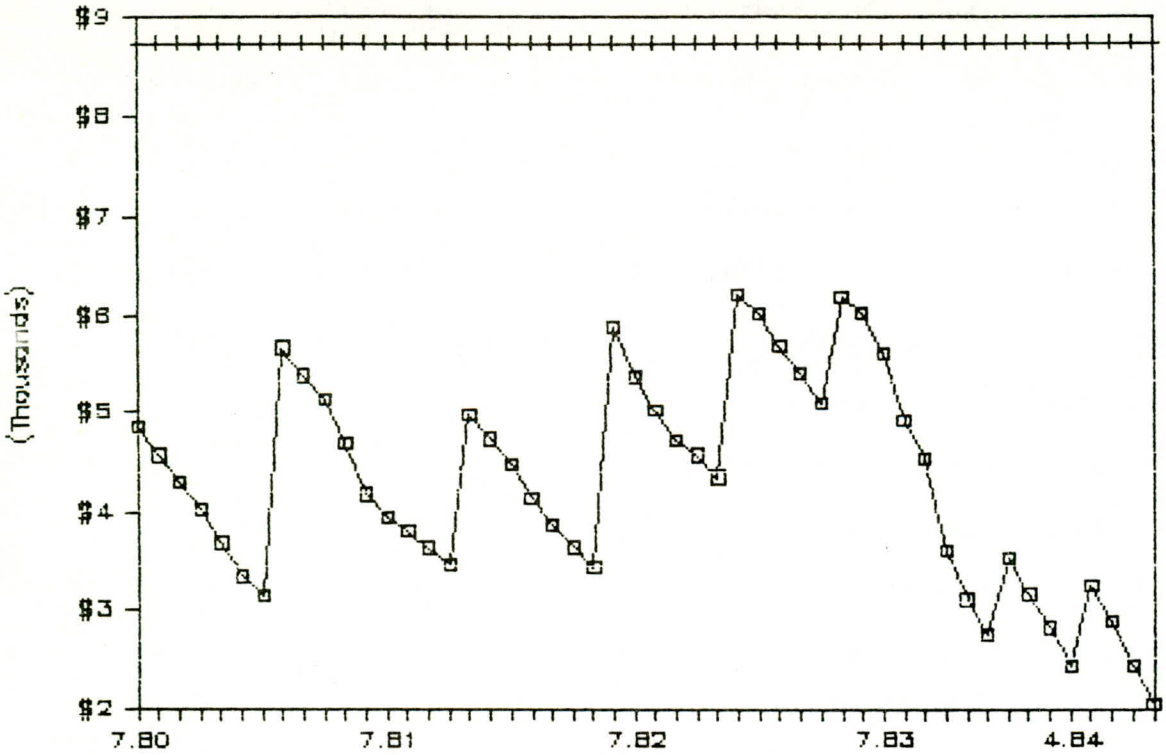
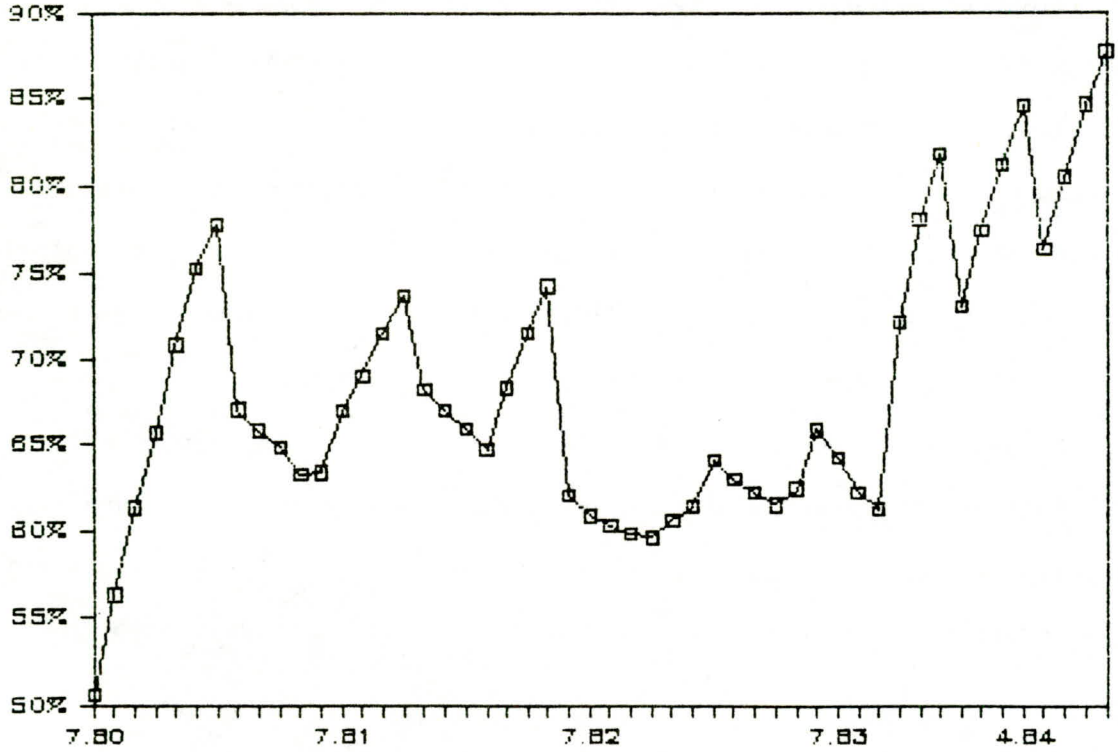


Figure 3.8: Out-of-Pocket Costs (Down Payment and Other Current Outlays) As Per Cent of Total Burden Placed on Owners: July 1980 to July 1984



The government had the discretion to choose how to allocate burdens among types of households and to vary the level of burdens over time as budgetary factors dictated. What criteria, if any, did the government develop for the level and distribution of burdens? Did it provide generous financing for a small enlargement and minimal financing for any additional meters? Or, did it choose to extract a moderate percentage from all enlargers? Did it decide to impose a set share of the overall burden through out-of-pocket costs and the rest through the value of repayments? Apparently, no well-defined criteria were developed or articulated. Large shifts took place not only in the size of the total burden, but also in the distribution of burdens. Out-of-pocket costs have fluctuated wildly not only in absolute terms, but also as a share of the total burden on owners (see Figure 3.8); the relative burden of small versus large enlargements and of low cost ($250 per square meter) versus high cost ($350 per square meter) enlargements have also varied widely over time (see Figures 3.9 and 3.10).

This lack of consistency in the extent of financing is unfortunate, since a soundly structured loan program could have improved equity, reduced uncertainty, and perhaps even lowered the government's costs of encouraging enlargements. In its loan policies guiding the young couples assistance program, the Ministry of Housing has shifted in recent years from subsidizing a high share of small loans to subsidizing a moderate or low share of large loans. This has added equity to the program (by allowing more couples with low assets to take advantage of the loans) and efficiency as well (by permitting the government to provide more assistance for a given subsidy allocation). But, the approach of offering loans with little or no subsidy for a constant, relatively high share of the total housing investment does

Figure 3.9: Owner's Share of Costs of 25 Square Meter Enlargement as Per Cent of Owner's Share of 40 Square Meter Enlargement, July 1980 to July 1984

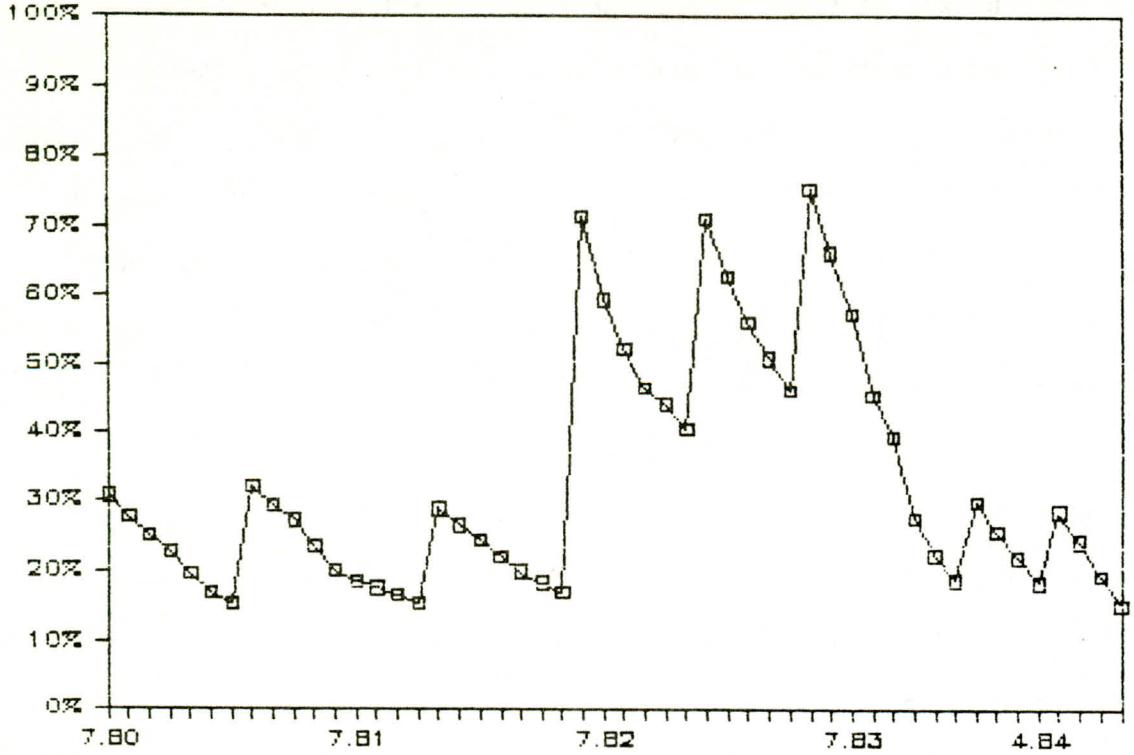
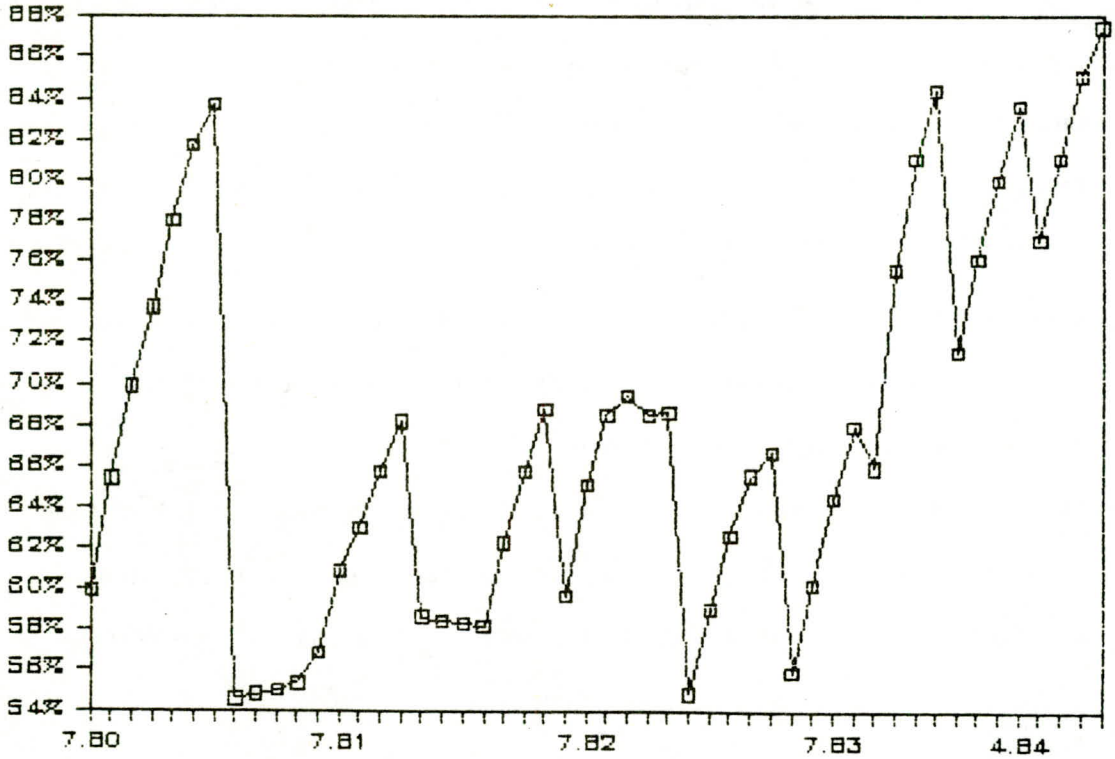


Figure 3.10: Owner's Share of Costs of 40 Square Meter Enlargement at $250 per Square Meter Costs As Per Cent of Costs of Enlargement at $350 per Square Meter Costs, July 1980 to July 1984



not seem to have extended to the enlargement program.

We can examine this issue closely by assessing monthly payment burdens on owners under existing and some alternative loan terms. Consider an enlargement costing $9,600 (say 32 square meters at $300 per square meter). The government chooses the size of its loan, the term of the loan, the interest rate, and the extent of linkage to the cost-of-living index. Any set of choices will imply a particular cost (possibly zero) to the government and a cost to the owner. Under the terms after the May 1984 adjustment, the owner could have qualified for an unlinked loan of 320,000 IS and a linked loan of 960,000 IS. In June 1984, the dollar value of such a loan was $5,900; in granting this $5,900 loan, the government was providing a subsidy of $3,036, $1,400 on the unlinked component and $1,636 on the linked component.

For the owner, the monthly payment burden on the government loans would be low, starting at about $20 per month but quickly falling to about $15 as the unlinked part of the payment erodes. However, the owner would also have to come up with the $3,700 for the enlargement costs not financed through government loans. If his savings were too low to cover this amount, he would have to borrow it. The terms of these loans might well be a 7.5 per cent linked loan for 10 years. Borrowing $1,900 of the $3,700 on this basis would add $22.55 to the owner's monthly payment burden; were the owner to borrow the full $3,700 on this basis, his payments would rise by $43.92 per month. Total initial payments would then equal almost $64 per month, soon fall to about $59 per month for almost 10 years, and go down to $14 for the remaining 15 years of the government's linked loan.

Now suppose that the government adopted an approach that minimized the subsidy cost of encouraging enlargements. The initial payment burden

above was between about $40-60 per month, depending on whether the owner borrowed $1,900 or $3,700 of the amount not financed by the government. At a monthly payment burden of $50 per month, the government could finance the entire $9,600 cost at zero subsidy by lending for 25 years at 4 per cent linked. In other words, the government could save the entire $3,036 in subsidy costs without raising the initial payment burdens on owners.[7] Alternatively, the government could provide some subsidies by lowering the real interest rate and thereby reducing monthly payment burdens. Assuming the loan of $9,600, a subsidy costing $975 would mean monthly payments of $45.52; a subsidy of $1,891 would bring payments to $40.69 per month. Finally, were the government to assume that all owners could afford to raise the initial $1,000, it could loan $8,600 at a 4 per cent linked rate for 25 years and leave owners with payments of only about $45 per month.[8]

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[7]Payment burdens on owners would rise substantially in years 11 through 25, since the private loan would have been repaid while the government loan would continue. This may not be a serious concern because of the real gains that are likely to take place by that time. If it is a concern, the government can provide subsidies that lessen the rise in the owner's future payment burden.

[8]Some might argue that providing higher loans with less generous terms would produce an infusion of credit into the economy, or increase the size of the government budget. Neither point is a sound objection to the policy shift. It is more stimulative when the government spends $1,000 (by granting unlinked or subsidized loans) than when it acts as an intermediary to borrow and lend $2,000 on the same terms. Further, the government budgetary position would be far more favorable were it to grant larger, unsubsidized loans instead of the existing, subsidized loans. The policy shift would lower budget deficits in a meaningful economic sense, because the rise in government liabilities would be less than the increased value of the government's assets (the present value of the owner's repayments).

3.3 The Level of Enlargement Activity by Neighborhood and Over Time

Even before Project Renewal, enlargements were relatively common in Israel. Between 1971 and 1978, 75,500 owners reported enlarging their units.[9] This means that enlargements took place in about 13 per cent of all owner-occupied dwellings. These facts are not surprising, since, as noted above, government building policies had probably substantially tilted the mix of housing substantially toward small units relative to what would have taken place in a free market setting.

On the basis of apartment size alone, one might have expected even higher than average enlargement activity in low income neighborhoods, such as those included in Project Renewal. But, according to our survey of physical project managers, only about 5 per cent of owned units in the neighborhoods had been enlarged prior to Project Renewal. Whether the limitations on prior enlargement activity related to the owner's inability to obtain planning assistance and building permits, to the difficulty and costs of borrowing, to low incomes, or to zoning problems, Project Renewal represented an effort to overcome barriers that had kept residents of low income neighborhoods in very small apartments.

Did it work? To what extent did Project Renewal stimulate enlargements? How did enlargement activity vary across neighborhoods? What factors accounted for these variations?

Initially, the pace of enlargements was slow, but the program has picked up considerable steam in the last two to three years. In all of 1979, Project Renewal supported only 231 enlargements. The pace increased gradually, rising to 569 in 1981 and 1181 in 1982. By 1983, owner enlargements were running at about 270 per month. During 1984, the level

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[9]See Survey of Housing Conditions: 1978, p.153.

has reached about 300 per month. As of July 1984, over 9,000 units had been enlarged or were in the process of being enlarged.

There is little doubt that Project Renewal is responsible for most of this activity. In a sense, the very low initial figures represent a kind of a measure of what enlargement activity would have been without the program. Over the intervening period, no important new circumstances other than Project Renewal took effect that could have been responsible for such a substantial upward shift. Conversely, the observed acceleration over time is what one would expect as people learn about the renewal program and see examples of successful enlargements by neighbors and as the program's administrators gain experience. Also, numerous activities undertaken by the program had been and would continue to be difficult for individual owners to do on their own. These include: the hiring of architects to plan joint enlargements; efforts to overcome zoning restrictions; the filing of proposals to alter town plans in order to permit various kinds of enlargements; the generation of broad changes in the neighborhood resulting in increased local confidence in the neighborhood; and the direct financial assistance.

More interesting than the question of <u>whether</u> Project Renewal affected enlargement activity is the question of <u>how</u> Project Renewal affected such activity. One interesting issue is whether the changes in enlargement activity responded to changes in the generosity of the loan terms. We did not analyze this issue, because of the absence of reliable data on enlargements by month before 1984 and because of the problem of controlling for the learning experience of residents.

Another way to learn about Project Renewal's impact on enlargements is to examine the patterns across neighborhoods. Until very recently,

this has meant looking simply at the absolute number of enlargements, since reasonably reliable data on the stock and composition of apartments by individual neighborhood were not available. Now, with data we have pieced together from our survey of physical project managers and other sources10, we can relate the number of enlargements to the size of the housing stock and thereby assess the rates at which owners enlarged across neighborhoods.

Table 3.3 shows the level and rates of enlargement activity for each neighborhood in Project Renewal. As of June 1984, in all renewal neighborhoods combined, nearly 9000 owners had participated in the enlargement program and had at least started building (most, of course, had already completed the construction). This means that about 125 enlargements had taken place in the average Project Renewal neighborhood. A look at Table 3.3 reveals striking variability across neighborhoods in the number of enlargements. Six neighborhoods have had no enlargements at all, while in each of two locations (Ramat Eliahu and Or Yehuda), Project Renewal has assisted over 1,000 owners to enlarge their dwellings.

Much of the variation in enlargement activity would be expected on the basis of differences in neighborhood size alone. To see whether resident responses to the program differed significantly across neighborhoods, one must examine enlargement activity in relation to the number of dwellings in the neighborhood, and to the number of owner-occupied dwellings. Both rates are of interest.11 The rate of owners enlarging is perhaps the single best indicator of the neighborhood's response to the program, because only

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[10]The primary other source is a survey of project managers conducted by the planning section of the Ministry of Housing. In using data from these and other sources, we have tried to exclude cases where the numbers are inconsistent with other known facts about the neighborhood.

[11]These enlargement rates are the most accurate available, but they are based on data on total dwellings and on private dwellings that are subject to error.

Table 3.3. Enlargements Levels and Rates by Neighborhood

	Number of Owner Enlargements	Private Stock	Percent, Private Stock Enlarged	Number Rent Units Enlg.	Total Stock	Percent of Total Stock Enlarged
TEL AVIV DISTRICT (14)	1323	19785	6.7%	66	25810	5.4%
City Subdistrict	106	8085	1.3%	17	10019	1.2%
Tel Aviv - HaTikva	71	3600	2.0%	0	4000	1.8%
Tel Aviv - Neve Eliezer	13	750	1.7%	5	850	2.1%
Tel Aviv - Neve Sharet	0	2240	0.0%	0	3200	0.0%
Tel Aviv - Yaffo Dalet	14	686	2.0%	12	1036	2.5%
Tel Aviv - Yaffo Gimel	8	809	1.0%	0	933	0.9%
Suburban Subdistrict	1217	11700	10.4%	49	15791	8.0%
B'nei Brak - Pardes Katz	133	1900	7.0%	0	3600	3.7%
B'nei Brak - Viznitz *	0	737	0.0%	0	768	0.0%
Herzlia - Neve Israel	144	466	30.9%	22	621	26.7%
Herzlia - Shaviv	110	1023	10.8%	1	1490	7.4%
Holon - Jesse Cohen	63	1650	3.8%	0	2400	2.6%
Holon - Tel Giborim *	7	1325	0.5%	0	1522	0.5%
Ramat Gan - Ramat Amidar	196	1426	13.7%	0	1650	11.9%
Ramat Gan - Ramat HaShikma	186	1500	12.4%	12	1700	11.6%
Ramat HaSharon - Morasha	378	1673	22.6%	14	2040	19.2%
CENTRAL DISTRICT (24)	4069	17811	22.8%	290	28976	15.0%
Sharon Subdistrict	531	3658	14.5%	94	5322	11.7%
Kadima	152	565	26.9%	4	825	18.9%
Kfar Yona *	83	980	8.5%	18	1157	8.7%
Netanya - Dora	147	1120	13.1%	0	1875	7.8%
Netanya - Sela	1	263	0.4%	55	605	9.3%
Tel Mond	148	730	20.3%	17	860	19.2%
Petah Tikva Subdistrict	399	3463	11.5%	112	5945	8.6%
Hod HaSharon - Giora, Gil Amal	69	775	8.9%	26	1082	8.8%
Kfar Saba - Kaplan, Yoseftal	144	840	17.1%	10	1440	10.7%
Petah Tikva - Amishav	1	306	0.3%	37	1223	3.1%
Petah Tikva - Yoseftal	83	1066	7.8%	0	1570	5.3%
Rosh HaAyin - Bet	102	476	21.4%	39	630	22.4%

Table 3.3 Continued

	Number of Owner Enlargements	Private Stock	Percent, Private Stock Enlarged	Number Rent Units Enlg.	Total Stock	Percent of Total Stock Enlarged
Ramle Subdistrict	1490	4764	31.3%	25	9024	16.8%
Lod - Neve Zayit	99	812	12.2%	10	2483	4.4%
Lod - Ramat Eshkol *	0	645	0.0%	0	1240	0.0%
Or Yehuda - Amidar & Histadrut	1072	2225	48.2%	11	2696	40.2%
Ramle - Old City	217	437	49.7%	4	1660	13.3%
Yehud - Center	102	645	15.8%	0	945	10.8%
Rehovot Subdistrict	1649	5926	27.8%	59	8685	19.7%
Bet Dagan	37	114	32.5%	0	453	8.2%
Kiryat Ekron	247	1090	22.7%	10	1260	20.4%
Nes Tziona - Yad Eliezer *	35	172	20.3%	0	410	8.5%
Rehovot - Kfar Gevirol *	0	262	0.0%	0	484	0.0%
Rehovot - Kiryat Moshe	40	869	4.6%	2	1539	2.7%
Rishon LeTzion - East *	125	848	14.7%	0	1063	11.8%
Rishon LeTzion - Ramat Eliahu	1110	2454	45.2%	30	3200	35.6%
Rishon LeTzion - Sela	55	117	47.0%	17	276	26.1%
JERUSALEM DISTRICT (7)	378	5142	7.4%	48	8822	4.8%
Bet Shemesh - North	19	248	7.7%	7	650	4.0%
Jerusalem - Bukharim	0	?	0.0%	0	?	0.0%
Jerusalem - Ir Ganim	143	1832	7.8%	11	3296	4.7%
Jerusalem - Katamon	30	780	3.8%	0	2000	1.5%
Jerusalem - Morasha	185	597	31.0%	28	637	33.4%
Jerusalem - Shmuel HaNavi	0	851	0.0%	2	1150	0.2%
Jerusalem - Stern Street	1	834	0.1%	0	1089	0.1%
HAIFA DISTRICT (8)	720	6969	10.3%	36	11681	6.5%
Haifa Subdistrict	416	4305	9.7%	2	7649	5.5%
Haifa - Neve David	55	1038	5.3%	1	1676	3.3%
Haifa - Neve Yosef	10	490	2.0%	0	668	1.5%
Haifa - Wadi Nisnas	0	?	0.0%	0	?	0.0%
Kiryat Ata - HaRakafot	190	1352	14.1%	0	3347	5.7%
Nesher - Tel Hanan	5	651	0.8%	1	1027	0.6%
Tirat HaCarmel - Bialik, etc.	156	774	20.2%	0	931	16.8%
Hadera Subdistrict	304	2664	11.4%	34	4032	8.4%
Hadera - Giv'at Olga	254	2264	11.2%	23	3132	8.8%
Or Akiva - Center	50	400	12.5%	11	900	6.8%

Table 3.3 Continued

	Number of Owner Enlargements	Private Stock	Percent, Private Stock Enlarged	Number Rent Units Enlg.	Total Stock	Percent of Total Stock Enlarged
NORTHERN DISTRICT (10)	756	5743	13.2%	47	16193	5.0%
Western Subdistrict	390	2303	16.9%	18	4775	8.5%
Acco - East	256	1530	16.7%	1	2500	10.3%
Ma'alot / Tarshiha	10	71	14.1%	1	536	2.1%
Nahariya - Katznelson	112	585	19.1%	16	861	14.9%
Shlomi *	12	117	10.3%	0	878	1.4%
Eastern Subdistrict	366	3440	10.6%	29	11418	3.5%
Afula - Upper, Giv'at HaMoreh	165	2115	7.8%	0	4549	3.6%
Bet Shean - Eliahu	19	188	10.1%	27	1251	3.7%
Hatzor HaGlilit	107	543	19.7%	2	1985	5.5%
Kiryat Shmona - Shprinzak	38	188	20.2%	0	1243	3.1%
Safed - Canaan	33	266	12.4%	0	836	3.9%
Tiberias - Dalet	4	140	2.9%	0	1554	0.3%
SOUTHERN DISTRICT (17)	1658	14572	11.4%	213	37289	5.0%
Ashkelon Subdistrict	521	7195	7.2%	19	17089	3.2%
Ashdod - Aleph, Bet	158	1030	15.3%	4	2694	6.0%
Ashkelon - Giv'at Tzion *	39	1396	2.8%	0	1878	2.1%
Ashkelon - Migdal	0	428	0.0%	1	736	0.1%
Ashkelon - Shimshon	43	3000	1.4%	0	7500	0.6%
Gan Yavneh *	18	174	10.3%	0	270	6.7%
Kiryat Gat - HaNevi'im *	9	641	1.4%	0	2209	0.4%
Kiryat Malakhi - Kib. Galuyot	173	436	39.7%	4	842	21.0%
Yavneh - Ramot Weitzman	81	90	90.0%	10	960	9.5%
Beer Sheba Subdistrict	1137	7377	15.4%	194	20200	6.6%
Beer Sheba - Dalet North	42	800	5.3%	21	2700	2.3%
Beer Sheba - Gimel	257	2265	11.3%	30	3490	8.2%
Dimona - HaArava *	23	421	5.5%	0	1053	2.2%
Dimona - Shiv'at HaMinim	29	375	7.7%	8	1160	3.2%
Eilat - Yaelim	214	810	26.4%	4	1062	20.5%
Netivot	177	651	27.2%	30	2676	7.7%
Ofakim	111	1000	11.1%	34	3500	4.1%
Sderot	106	651	16.3%	24	2676	4.9%
Yeruham	178	404	44.1%	43	1883	11.7%
NATIONAL TOTALS (except Nisnas & Bukharim)	8904	70022	12.7%	700	128771	7.5%

Note: Percent of total stock enlarged is equal to owner plus rental enlargements divided by the total stock. The neighborhoods with * are those added to Project Renewal in 1982.
Sources: Ministry of Housing and data compiled by authors.

owners can participate in the main enlargement program.[12] The percentage of units enlarged indicates the program's overall impact on housing within the neighborhood. The overall rate includes responses by residents who buy a public rental unit and subsequently take advantage of the enlargement loans.

By June 1984, 13 per cent of all owners in Project Renewal neighborhoods had begun enlarging. Since owner-occupied dwellings constitute just over half of all dwellings, this meant that enlargements had been undertaken in about 7 per cent of all housing units. The enlargement rates were particularly high in towns near Tel Aviv within the Ramle and Rehovot subdistricts. In Or Yehuda's Amidar and Histadrut neighborhoods and Rishon's Ramat Eliahu, which together accounted for nearly one-quarter of enlargements in the entire country, over 45 per cent of owners had undertaken enlargements. Some other centrally located neighborhoods also showed high enlargement rates; these include: Neve Israel (where 30.9 per cent of owners enlarged); Bet Dagan (32.5 per cent enlarged); Kadima (26.9 per cent enlarged); Ramle (49.7 per cent enlarged); and Rishon's Sela neighborhood (47 per cent enlarged). In Tel Aviv itself, enlargement activity was minimal in all of the neighborhoods, apparently because zoning restrictions made it infeasible to enlarge most units. Enlargement rates were also extremely low in several neighborhoods near Tel Aviv, including those in Holon, Petah Tikva, Rehovot, and B'nei Brak.

In areas near Jerusalem and Haifa, enlargement rates were lower than in the suburban areas of Tel Aviv (including those in the Central district). Within Jerusalem, although tight zoning restrictions reduced enlargement

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[12]The Housing Ministry did finance some enlargements in public rental units, but these constituted only a small proportion of the total enlargement activity. Our analysis concentrates on the enlargement program for owners.

activity, enlargement rates were high in Morasha (31 per cent) and moderate in Ir Ganim (7.8 per cent). Tirat HaCarmel was the Haifa area's only neighborhood showing a high enlargement rate (20.2 per cent).

Surprisingly, rates of enlargement among owners were relatively high in the Southern and Northern areas, including those which are far from the main centers. In fact, the percentage of private owners who enlarged was higher in the outlying areas (13.2 per cent in the Northern District and 15.4 per cent in the Beersheba Subdistrict) than in the country as a whole (12.7 per cent of all owners enlarged). While many of these neighborhoods had a low absolute number of enlargements, the number and proportion of privately owned dwellings were also low in these areas. Similarly, in several development towns, a moderate percentage of owners enlarged their units, but this had little effect on the neighborhood's housing stock since so few residents owned their units. For example, 10 per cent of Bet Shean's owners and almost 20 per cent of Hatzor's owners enlarged, but these enlargements altered only 1.5 per cent of all units in Bet Shean and only 5 per cent of all units in Hatzor. In Yeruham, where 44 per cent of owners enlarged, less than 10 per cent of the town's units were affected.

The distribution of neighborhood enlargement rates is one way to summarize the information. Note in Table 3.4 that, in 30 per cent of the neighborhoods, less than 5 per cent of owners enlarged while the enlargement rate was over 20 per cent in about one-quarter of the neighborhoods. The zoning restrictions were no doubt responsible for some of these differences. Although such limitations were particularly strict in Tel Aviv and in parts of Jerusalem and Haifa, a large number of units throughout the country could not be enlarged because of zoning rules. Nearly 75 per cent of the

Table 3.4. Distribution of Neighborhoods by Percent of Private Dwellings Enlarged by Private Owners

Percent of Private Dwellings Enlarged	Number of Neighborhoods	Percent of Neighborhoods
Zero	6	7.9%
up to 5%	17	22.4%
5-10%	10	13.2%
10-15%	15	19.7%
15-20%	9	11.8%
20-25%	7	9.2%
25-30%	3	3.9%
30-40%	4	5.3%
40% +	5	6.6%
Total	76	100.0%

Note: The two Or Yehuda neighborhoods were classified as one.

46 physical project managers who responded to our questionnaire reported that zoning rules prevented many owners from enlarging their units. What other factors accounted for the striking differences across neighborhoods?

In general, enlargement activity should depend on the owner's demand for added space and his opportunity to enlarge. Influences on owners to demand an enlargement include:

1) housing conditions: apartment size, density, and conditions;

2) owner's personal and economic status: age, family size, family status, income and wealth;

3) the incentive to invest: the increased apartment value associated with the enlargement; this, in turn, depends on the location of the apartment, the condition of the apartment building, and the owner's expectation of the future of the neighborhood;

4) the cost to the owner of the enlargement; and

5) the owner's knowledge of the costs and benefits of an enlargement.

Several factors influence the opportunity to enlarge, including:

1) the town plan and zoning rules;

2) the town's encouragement to enlargement activity, by granting waivers for small departures from zoning rules and by providing building permits in a timely manner;

3) the amount of time the neighborhood has been in Project Renewal; and

4) the willingness of adjacent neighbors to enlarge.

Project Renewal program components could have affected these factors in ways that vary across neighborhoods. The loan terms differ by location; the rate at which public housing tenants responded to Project Renewal loans by purchasing their dwellings and the level of overall and social investments by the Jewish Agency and government ministries varied widely across neighborhoods. Both the purchase rate and Project Renewal spending on infrastructure and social services would be expected to influence owners' confidence in the neighborhood and in the value of their dwellings. For

example, by financing a large number of external renovations in a neighborhood, Project Renewal could give owners the confidence they need to invest their own money in their dwelling. Perhaps most important is the leadership and effectiveness of the neighborhood's physical project manager. As noted above, the project manager is the one who can encourage owners to enlarge by motivating neighborhood residents about the need to take their own action to upgrade the area, providing good information, coordinating enlargements of groups of owners, advising on the type of enlargement to undertake, and eliciting cooperation from town officials to take a liberal attitude about zoning and planning obstacles to enlargements.

It is possible to isolate the impact of some of these factors; but, for many, no estimates were possible either because of the difficulty in defining the concept in quantitative terms (e.g., the leadership of the project manager) or because of the absence of data.

To estimate the influence of various factors, we ran regressions on the determinants of the percentage of each neighborhood's owners who enlarged their dwelling under Project Renewal (through July 1984). Data were available on 77 neighborhoods for some regressions and on 40-45 neighborhoods for others.[13] The variables tested were:

- a dummy variable for new neighborhoods (added to renewal in 1982);
- expenditures per household by the Jewish Agency;
- expenditures per household by the Housing Ministry (except for loans to owners)
- the share of dwellings in buildings with external renovations;

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[13]The less comprehensive data came from our survey of physical project managers. Responses to the survey provided much worthwhile information; but, unfortunately, many managers did not complete the questionairre.

- the share of dwellings not owned by a public company;
- a dummy variable for Haifa, Jerusalem, or Tel Aviv;
- a four-level variable representing accessibility to main centers;
- the share of the housing stock that was privately owned;
- the share of elderly in the neighborhood;
- the share of fathers with less than an eighth grade education;
- the number of months the project director had been in the neighborhood;
- the share of households of 6 or more persons; and
- a dummy variable representing the existence of zoning or town plan limitations on enlargements (as reported by project managers).

A few variables turned out to exert an impact that was consistently significant. The rate at which individuals bought public rental units had a positive and significant impact on the enlargement rate. A one percentage point rise in the purchase rate (the mean rate was 6.7 per cent) was associated with a one-half percentage point increase in the enlargement rate. This impact might have taken place because those buying public units made their purchases in order to enlarge or because the high purchase rate gave existing owners added confidence about the direction of their neighborhood. Another possibility is that high enlargement rates caused high purchase rates rather than the other way around. Finally, a third factor not captured by our quantitative measures--such as the degree of enthusiasm generated among residents by Project Renewal--might have stimulated both enlargements and purchases. The results in Chapter 4 (see Table 4.3) are consistent with these latter two explanations.

In general, high rates of external renovations were associated with high enlargement rates, but this impact was not statistically significant in several specifications. The number of months the project director had

been in the neighborhood turned out to have a discernible, but small impact on enlargement rates. The presence of zoning limitations (as reported by project managers) outside of Tel Aviv, Jerusalem, and Haifa also had a negative effect on enlargement rates, but one that was less than one-tenth of a percentage point. Controlling for other neighborhood differences, we found that new neighborhoods and neighborhoods in Tel Aviv, Jerusalem, and Haifa had sharply lower than average enlargement rates. While the average enlargement rate was 14.6 per cent of private dwellings, the rate fell 8.5 points in new neighborhoods and 12.0 points in the three largest cities.

Several variables expected to affect enlargement rates turned out to exert little or no impact. The amounts spent per household by the Jewish Agency and the Ministry of Housing varied enormously across neighborhoods, but neither variable induced a significant impact on enlargement rates.[14] Other variables showing no significant effect on enlargement rates included: accessibility to main centers, the share of the housing stock that was privately owned, the share of elderly in the neighborhood, the share of households of 6 or more persons, and the share of fathers with less than an eighth grade education. Taken as a whole, the variables noted here could explain only about 20 per cent of the variation in enlargement rates across neighborhoods.

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[14]The precise figures showing the distributions appear end of this chapter, as Tables 3.9 and 3.10. Excluding those neighborhoods placed in Project Renewal during 1982, the Jewish Agency had spent less than $1,000 per household in 24 neighborhoods, but over $2,100 per household in 16 neighborhoods (5 received over $3,000 per household). Variability in Ministry of Housing allocations per household (not including loans) was also very high. Again, excluding neighborhoods placed in Project Renewal in 1982, the bottom 11 neighborhoods received less than $1,000 per household from the Ministry of Housing while the top 14 neighborhoods received over $4,000 per household.

The limited effect of many variables is surprising. For example, one would expect that accessibility would stimulate enlargements; since apartment prices rise with accessibilty, enlarging the size of apartments should add more (in absolute terms) to the unit's value in places near main centers than elsewhere. Because apartment values tend to be lower in neighborhoods with high proportions of public rental units, one would expect high percentages of public dwellings to reduce the share of owners wanting to enlarge. Yet, neither accessibility nor the proportion of public housing affected the rate of enlargements.

The limited explanatory power of the regressions suggests that other factors--which could not be included in the regressions--influenced the rate at which owners undertook enlargements. Among the factors most likely to have exerted an impact are: the effectiveness of the project manager, the extent of crowding prior to renewal, the ease with which some types of apartments can be enlarged, and the attitudes of owners about the neighborhood's future.

3.4 The Distribution of Enlargements by Apartment Size and Density

A primary purpose of the enlargement program was to relieve high density housing within Project Renewal neighborhoods. At the same time, by having the loan program available to all owners (with the size of the loans related to initial apartment size and family size), the program encouraged families in conditions of moderate density to upgrade their housing and sought to increase their incentive to remain in the neighborhood. Did making the loans available to all owners limit the program's ability to target on those living in the smallest, highest density apartments? Or did most of those taking enlargement loans live in highly crowded conditions? What

were the sizes and densities of apartments after the enlargements were completed? To what extent did the program stimulate owners to invest their own money in enlarging their unit?

To answer these questions, we drew partly on data from the survey of physical project managers, but mostly from data on individual records of enlargements in four neighborhoods that accounted for a large segment of total enlargement activity--Ramat Eliahu in Rishon LeZion, the Amidar and Histadrut neighborhoods in Or Yehuda, and the Ramat Hashikma neighborhood in Ramat Gan. The data gathered to analyze the size composition of units enlarged also provided information on the extent to which owners undertaking enlargements had to finance some of the costs with their own resources.

The project manager survey indicated that enlargements were concentrated in small dwellings, at least in the 41 of the 80 neighborhoods where project managers responded. These managers reported that, while dwellings of less than 41 square meters accounted for only about 9 per cent of all units in their neighborhoods, 28 per cent of enlargements took place in these small units. As a result, in these 41 neighborhoods, Project Renewal helped about 25 per cent of owners of small units to enlarge their dwellings. The enlargement rates were much lower for owners of larger units. Few (3.5 per cent) owners of dwellings 75 squre meters or more enlarged; their enlargements accounted for about 6 per cent of all enlargements in the neighborhood.

Information on enlargements by apartment size is interesting but does not capture program effects on the density of dwellings. To examine whether most enlargments took place in crowded apartments, as measured by apartment size (in square meters) divided by the number of persons living in the dwelling), we tabulated data from individual records in four neighborhoods.

Table 3.5 shows the distribution of enlargements by initial density for a sample of 399 families who enlarged in Ramat Eliahu, Or Yehuda, and Ramat Hashikma. Over half (52 per cent) of the families enlarging lived in units with 15 or fewer square meters per person. For a family of four, this would mean a unit of 60 square meters or less. At the other extreme, 23 per cent of owners enlarging were initially at moderate density levels of 20 or more square meters per person. These moderate density units were nearly all under 55 square meters in size. Density was moderate because family size was low; all of these low to moderate density units housed families of 1 or 2 persons.

The enlargements sharply reduced the initial densities. While 38 per cent of families lived in 12.5 or less square meters before the enlargement, only 4 per cent did so after the enlargements. About two-thirds of families who enlarged attained space of 20 or more square meters per person.

The pattern of enlargements by initial and final apartment size appears in Table 3.6. Note that about two-thirds of the units enlarged were initially 55 square meters or smaller. Only 7.5 per cent were over 70 square meters. After the enlargements, over 70 per cent of the apartments reached levels of between 80 and 100 square meters. Only 16 per cent exceeded 100 square meters after the enlargements; families in these apartments averaged about five members.

In general, these figures indicate that the enlargement loans went mostly to those in high density conditions. To determine whether the densities of units actually enlarged were higher than average would require data on the density of owner-occupied units not enlarged in these neighborhoods. Although such data are not available for these neighborhoods,

Table 3.5. Distribution of Enlargements in Or Yehuda, Ramat Eliahu, and Ramat HaShikma, by Initial and Final Density

Density in Square Meters Per Person	Households Before Enlargement	Percent of Total	Households After Enlargement	Percent of Total
Under 10.0	68	17.0%	7	1.8%
10.0-12.5	84	21.1%	8	2.0%
12.5-15.0	56	14.0%	31	7.8%
15.0-17.5	60	15.0%	42	10.5%
17.5-20.0	35	8.8%	49	12.3%
20.0-25.0	24	6.0%	72	18.0%
25.0-30.0	29	7.3%	60	15.0%
30.0-35.0	17	4.3%	29	7.3%
35.0 and over	26	6.5%	101	25.3%
Total Sample	399	100.0%	399	100.0%

Source: Random sample of enlargement records drawn by authors from records at offices of physical project managers.

Table 3.6. Distribution of Enlargements in Or Yehuda, Ramat Eliahu, and Ramat HaShikma, By Initial and Final Apartment Size

Size Class of Apartments (square meters)	Households Before Enlargements	Percent of Total	Households After Enlargements	Percent of Total
Under 45	16	4.0%	4	1.0%
45-50	110	27.6%	0	0.0%
50-55	131	32.8%	0	0.0%
55-60	52	13.0%	2	0.5%
60-70	60	15.0%	4	1.0%
70-80	28	7.0%	44	11.0%
80-90	0	0.0%	144	36.1%
90-100	2	0.5%	138	34.6%
100-110	0	0.0%	48	12.0%
110 and over	0	0.0%	15	3.8%
Total	399	100.0%	399	100.0%

Source: Random sample of enlargement records drawn by authors from records at offices of physical project managers.

we did calculate the distribution of densities in 12 other low income neighborhoods (11 of which were added to Project Renewal in 1982). The results indicate that the units enlarged were considerably denser than the average for similar neighborhoods. For example, 38 per cent of enlargements were in apartments where residents had only 12.5 or less square meters per person; such high density units made up only about 16-18 per cent of comparable low income neighborhoods.

Another way of assessing the targeting of Project Renewal's loan program is to examine whether, among those taking loans, the size of the subsidy embodied in the loans varied with initial density. Evidence on this point comes from data on loans actually taken by a samples of families who enlarged their apartments in Or Yehuda and Ramat Eliahu. In spite of Housing Ministry formulas designed to channel more generous loans to those living in the highest densities, it turned out that average enlargement sizes were similar by initial density. As shown in Table 3.7, enlargements averaged about 30 square meters for families living at 0-12 square meters per person, at 12-18 square meters per person, and at more than 18 square meters per person. More striking is the fact that government subsidies were similar regardless of initial density. Note in Table 3.7 (where we assume a constant building cost of $300 per square meter) that, while total government subsidies were highest among families living at the highest densities and smallest apartment sizes, per unit subsidies differed little by density and were actually lower to families in moderate densities than to families living in less crowded dwellings. The financial cost borne by owners for each square meter enlarged was virtually identical for groups of households in different circumstances. These results are somewhat surprising. One explanation may be that those living at low initial densities or in moderate

Table 3.7. The Financial Burden on Owners and the Government For Enlargements in Ramat Eliahu and Or Yehuda, by Initial Size of Apartment and Initial Density Level

Initial Size Of Apartment	Number of Units	Percent of Units	Average Amount Enlarged	Average Final Size	Owner's (Gov't) Financial Burden	Burden Per Square Meter
40-45	7	3.9%	46.4	89.4	$8,064 ($5,856)	$173.69
45-50	37	20.4%	35.4	82.9	$5,595 ($5,025)	$158.22
50-55	49	27.1%	31.0	84.2	$4,300 ($5,000)	$138.75
55-60	24	13.3%	29.6	86.3	$3,656 ($5,224)	$123.67
60-65	34	18.8%	34.3	96.1	$4,516 ($5,774)	$131.57
65-70	21	11.6%	31.3	98.2	$4,362 ($5,028)	$139.43
70-90	9	5.0%	24.9	98.4	$3,515 ($3,955)	$141.22
Total	181	100.0%	32.7	89.0	$4,634	$140.93

	Or Yehuda			Ramat Eliahu		
Initial Density (Square Meters per person)	Owner's (Government) Financial Burden	Average Amount Enlarged	Burden/ Square Meter	Owner's (Government) Financial Burden	Average Amount Enlarged	Burden/ Square Meter
Under 12.5	$4,418 ($4,822)	30.8	$143	$5,355 ($5,745)	37.0	$145
12.5-17.9	$4,112 ($4,678)	29.3	$140	$4,794 ($5,466)	34.2	$140
18 and over	$4,649 ($4,711)	31.2	$149	$4,565 ($5,635)	34.0	$134

Note: All the calculations assume that the total cost of the enlargements were $300 per square meter. The owner's financial burden includes the real cost of his loan repayments plus the out-of-pocket outlays required to the extent that enlargement costs exceeded the total loan amount. The government burden is the total cost minus the owner's financial burden.

Source: Sample drawn and collected by authors from enlargement records at offices of physical project managers.

size apartments timed their enlargement so as to obtain loans on more favorable terms than did families living in small units or at high density levels.

Thus, targeting of Project Renewal loans resulted from the fact that the group taking loans had more serious density problems than other owners within renewal neighborhoods and not from the higher subsidy payments to the enlarging families living at higher initial densities.

The numbers in Table 3.7 also reveal the sizable amount of money that owners invested in the enlargement effort. Using the assumption that total costs amounted to $300 per square meter, owners financed about half the costs of enlargements, with investments averaging over $4,600.

3.5 The Costs and Benefits of the Enlargement Program

One may analyze the costs and benefits of the enlargement program from several perspectives. The primary goal of the program was to help low income families relieve their housing density. By providing loans to nearly 9,000 such families, the government did lessen density in about 13 per cent of owner-occupied dwellings in Project Renewal neighborhoods. Moreover, the evidence is that the aid was reasonably well-targeted toward those families living in the densest housing. While the government might have been able to lower the subsidy component without affecting the primary goal by raising the level and the linkage of loans (as noted in section 3.2), the program did stimulate a considerable amount of self-investment on the part of owners.

A program's success depends not only on its ability to aid low income families, but on its effectiveness in doing so in constructive ways. A common problem in providing aid to low income families is that by relating

support payments to income deficiencies, programs give families a disincentive to work or an incentive to engage in activities that make it easy to misreport income. As a result, one may end up raising the incomes of poor families by less than the costs to taxpayers. A second potential problem is that recipient families may use the funds to buy goods that are of little long-run benefit to the family.

The enlargement program has the capacity to avoid both sets of problems. By limiting aid to upgrading housing in ways that would not have occurred in the absence of the program, the Ministry of Housing did insure that the aid went for a socially laudable purpose. The more complex issue is whether the value gained for these families was worth the costs borne by taxpayers and the families themselves.

The government's major role in initiating, financing, building, and distributing housing in the country as a whole, and particularly in low income neighborhoods, produced a housing stock with a high share of small apartments. Although the government's share of residential construction has declined in recent years, the hangover of past building policies remains in the form of a high share of small units. Dwellings of 1 or 2 rooms comprised nearly one-quarter of Israel's 1981 housing stock.

Had the market reached an equilibrium in the distribution of unit sizes, the market value of extra size would be no more than the cost of the additional space. In fact, the evidence indicates that market prices in Israel increase more than linearly with size. For example, of units sold in 1982, the prices of 3.5 to 4.0 room units were 62 per cent higher than 2.5 to 3.0 room units even though the size differentials are about 36 per cent. These facts suggest that enlarging a 50 square meter unit to 85 square meters might add more in value than the cost of the enlargement.

On the other hand, because absolute prices of units tend to be low in Project Renewal neighborhoods, an enlargement could cost more than the increase in the dwelling's market value even if the price of a large unit were double the price of a small one.[15]

To determine the costs and benefits of enlargements in Project Renewal neighborhoods, we assembled information on construction costs and on the market values of increases in square meters. Two difficulties complicated the analysis. First, the estimates of the construction costs per square meter varied widely. Although project managers and Ministry of Housing officials estimated costs at about $350 per square meter or more, some architects mentioned that basic additions to space could be accomplished at a lower cost (perhaps $250 per square meter). A second difficulty is to separate the effects of pure additional space from the renovations that nearly always are part of the enlargement process.

Ideally, we would have liked to compare the market value of units prior to enlargement with their values after enlargement. Given the absence of this information, our estimates of benefits per added square meter come from analyzing how market prices vary for apartments that are similar except for size. As discussed in Chapter 5, we assembled data on market prices of units sold over the period between mid-1979 and early 1984 in several Project Renewal neighborhoods. We then estimated the effect of additional square meters on private units sold, holding constant for neighborhood, for the year the unit was built, and for the date of sale. These calculations yield estimates of the increase in market value of an average additional

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[15]Consider a 90 square meter dwelling priced at $14,000 and a 60 square meter unit priced at $7,000. Assuming construction costs of $350 per square meter, the cost of enlarging a unit from 60 to 90 square meters would be $10,500, or $3,500 above the $7,000 increase in market value.

square meter.

The procedures used to derive the increased value of an added square meter are subject to some biases. On the one hand, since the enlargements pay for new square meters while the estimates cover mostly used square meters, the market value numbers understate the added value of the square meters financed in the enlargement program. On the other hand, the units sold in the market (on which our estimates are based) may be unrepresentative of the kinds of apartments that were enlarged. If, for example, the quality of the average unit sold were higher than the quality of the average unit enlarged, then the values of extra square meters would be overstated by our approach. A third issue has to do with whether to estimate the effect of an added square meter on market value in absolute or percentage terms.

Notwithstanding these limitations, the estimates do provide concrete measures of how the housing market valued additional square meters in individual neighborhoods. Table 3.8 indicates that in most neighborhoods, values were about $300 higher for each added square meter, although the variation across neighborhoods was substantial. Some of the estimates were surprising; for example, the increases were somewhat lower in two Project Renewal neighborhoods near high priced housing (Neve Israel and Shaviv in Herzlia) than in two neighborhoods (in Beersheba) where land and housing values are lower. Increased values per square meter of public units were well under those in private units.

These estimates suggest that the differences in market values between large and small apartments were nearly as high as the direct construction costs of enlarging a small unit into a large one. However, as noted above, the price differences may well understate the increased value resulting from an enlargement since the enlargement adds new square meters and often

Table 3.8. Estimates of Increased Apartment Prices Per Square Meter Increase in Unit Size

Neighborhood or Grouping of Neighborhoods	Change in Dollar Price Per Unit Change in Square Meters
Private Units in:	
Or Yehuda and Ramat Eliahu (1983-84)	$305
Neve Israel and Shaviv (1983-84)	200
Hatikva	299
All Units in:	
Jesse Cohen	359
Beersheba Dalet and Gimmel	336
Renewal Neighborhoods in Southern Development Towns	305
Public Units	
in Central Region	180

Source: Price regressions calculated by authors. See Chapter 5.

involves some renovation. The enlargement effort also induced indirect costs and benefits. As discussed in Chapter 2, the main indirect benefit has been the added confidence that families have in their neighborhoods, as they and their neighbors upgrade their apartments. A potential indirect cost has been the increased neighborhood density. To capture these and other effects of Project Renewal requires an analysis of changes in overall housing values over time. Chapter 5 undertakes such an analysis.

Table 3.9 Outlays and Renovations Per Household In Project Renewal Areas

	External Renovations PerHHold	Housing Ministry Outlays PerHHold	Jewish Agency Outlays PerHHold	Total Outlays PerHHold
TEL AVIV DISTRICT (14)	23.7%	$2,037	$1,179	$3,216
City Subdistrict	31.9%	$2,853	$2,086	$4,939
Tel Aviv - HaTikva	12.6%	$3,006	$2,772	$5,778
Tel Aviv - Neve Eliezer	92.7%	$6,151	$2,848	$8,999
Tel Aviv - Neve Sharet	24.8%	$1,179	$698	$1,878
Tel Aviv - Yaffo Dalet	44.0%	$4,040	$2,963	$7,003
Tel Aviv - Yaffo Gimel	69.9%	$3,611	$2,237	$5,848
Suburban Subdistrict	18.5%	$1,519	$604	$2,124
B'nei Brak - Pardes Katz	15.2%	$781	$245	$1,027
B'nei Brak - Viznitz *	0.0%	$214	$0	$214
Herzlia - Neve Israel	61.8%	$4,095	$2,411	$6,506
Herzlia - Shaviv	8.3%	$1,240	$883	$2,123
Holon - Jesse Cohen	25.0%	$2,789	$610	$3,398
Holon - Tel Giborim *	6.3%	$247	$3	$250
Ramat Gan - Ramat Amidar	7.3%	$1,074	$443	$1,516
Ramat Gan - Ramat HaShikma	47.5%	$3,322	$920	$4,241
Ramat HaSharon - Morasha	12.2%	$1,047	$1,021	$2,068
CENTRAL DISTRICT (24)	25.9%	$2,524	$1,060	$3,585
Sharon Subdistrict	31.1%	$2,480	$1,002	$3,482
Kadima	19.6%	$2,397	$1,230	$3,627
Kfar Yona *	0.0%	$466	$0	$466
Netanya - Dora	49.3%	$1,840	$1,413	$3,252
Netanya - Sela	47.6%	$5,968	$1,279	$7,246
Tel Mond	32.8%	$4,209	$1,041	$5,251
Petah Tikva Subdistrict	24.1%	$3,363	$1,041	$4,404
Hod HaSharon - Giora, Gil Amal	8.3%	$2,364	$1,105	$3,469
Kfar Saba - Kaplan, Yoseftal	20.8%	$2,037	$703	$2,741
Petah Tikva - Amishav	55.2%	$7,616	$1,216	$8,832
Petah Tikva - Yoseftal	5.1%	$1,416	$664	$2,080
Rosh HaAyin - Bet	45.9%	$4,706	$2,299	$7,005
Ramle Subdistrict	28.8%	$3,024	$1,269	$4,294
Lod - Neve Zayit	60.3%	$2,914	$564	$3,478
Lod - Ramat Eshkol *	0.0%	$165	$1	$165
Or Yehuda - Amidar and Histadrut	17.9%	$3,231	$1,040	$4,271
Ramle - Old City	24.6%	$4,412	$2,551	$6,963
Yehud - Center	22.1%	$4,039	$3,189	$7,228

Table 3.9 Continued

	External Renovations PerHHold	Housing Ministry Outlays PerHHold	Jewish Agency Outlays PerHHold	Total Outlays PerHHold
Rehovot Subdistrict	21.1%	$1,457	$893	$2,350
Bet Dagan	15.9%	$2,779	$2,810	$5,589
Kiryat Ekron	7.8%	$1,747	$2,403	$4,150
Nes Tziona - Yad Eliezer *	48.8%	$1,289	$1	$1,290
Rehovot - Kfar Gevirol *	0.0%	$605	$0	$606
Rehovot - Kiryat Moshe	2.5%	$1,088	$703	$1,792
Rishon LeTzion				
East *	0.0%	$317	$1	$318
Ramat Eliahu	39.4%	$1,481	$690	$2,171
Sela	58.0%	$5,888	$577	$6,465
JERUSALEM DISTRICT (7)	73.4%	$2,514	$1,727	$4,241
Bet Shemesh - North	18.5%	$3,276	$1,882	$5,158
Jerusalem				
Bukharim				
Ir Ganim, Kiryat Menahem	97.1%	$1,342	$535	$1,877
Katamon	52.0%	$2,220	$3,280	$5,500
Morasha	44.6%	$10,700	$3,716	$14,416
Shmuel HaNavi	64.3%	$3,109	$1,393	$4,502
Stern Street	100.0%	$727	$1,582	$2,309
HAIFA DISTRICT (8)	25.5%	$1,794	$790	$2,584
Haifa Subdistrict	29.7%	$1,946	$715	$2,661
Haifa - Neve David	25.6%	$2,029	$500	$2,529
Haifa - Neve Yosef	86.2%	$4,826	$476	$5,302
Haifa - Wadi Nisnas				
Kiryat Ata - HaRakafot	18.3%	$566	$370	$937
Nesher - Tel Hanan	46.3%	$2,418	$1,589	$4,008
Tirat HaCarmel				
Rambam, Brener, Bialik	19.3%	$4,165	$1,550	$5,716
Hadera Subdistrict	17.5%	$1,506	$933	$2,439
Hadera - Giv'at Olga	18.3%	$1,340	$602	$1,942
Or Akiva - Center	14.7%	$2,084	$2,084	$4,168
NORTHERN DISTRICT (10)	8.6%	$1,493	$1,205	$2,698
Western Subdistrict	2.7%	$1,288	$1,131	$2,419
Acco - East	1.8%	$771	$451	$1,222
Ma'alot / Tarshiha	0.0%	$3,573	$5,858	$9,431
Nahariya - Katznelson	8.4%	$2,188	$1,318	$3,506
Shlomi *	1.4%	$480	$0	$480

Table 3.9 Continued

	External Renovations PerHHold	Housing Ministry Outlays PerHHold	Jewish Agency Outlays PerHHold	Total Outlays PerHHold
Eastern Subdistrict	11.0%	$1,578	$1,236	$2,815
Afula				
Upper Afula, Giv'at HaMoreh	11.8%	$557	$484	$1,041
Bet Shean - Eliahu	11.0%	$1,830	$1,817	$3,647
Hatzor HaGlilit	5.2%	$887	$1,450	$2,338
Kiryat Shmona				
Shprinzak, Eilat, Moshava	12.9%	$3,039	$1,553	$4,592
Safed - Canaan	8.1%	$2,274	$2,512	$4,787
Tiberias - Dalet	16.2%	$3,705	$1,760	$5,465
SOUTHERN DISTRICT (17)	27.5%	$1,019	$921	$1,940
Ashkelon Subdistrict	25.1%	$900	$947	$1,847
Ashdod - Aleph, Bet	36.7%	$409	$900	$1,310
Ashkelon - Giv'at Tzion *	6.9%	$161	$0	$0
Ashkelon - Migdal	24.5%	$7,633	$13,177	$22,116
Ashkelon - Shimshon	22.2%	$88	$0	$0
Gan Yavneh *	0.0%	$900	$0	$900
Kiryat Gat - HaNevi'im Quarter *	0.0%	$58	$0	$58
Kiryat Malakhi - Kibbutz Galuyot	77.7%	$3,806	$2,382	$6,188
Yavneh - Ramot Weitzman	70.4%	$4,300	$2,138	$6,438
Beer Sheba Subdistrict	29.6%	$1,119	$899	$2,018
Beer Sheba - Dalet North	22.1%	$1,434	$503	$1,938
Beer Sheba - Gimel	43.7%	$1,670	$666	$2,335
Dimona - HaArava *	25.6%	$21	$0	$21
Dimona - Shiv'at HaMinim	31.7%	$2,251	$919	$3,170
Eilat - Yaelim	74.2%	$2,379	$3,583	$5,962
Netivot	10.4%	$271	$826	$1,097
Ofakim	15.2%	$362	$406	$768
Sderot	23.8%	$448	$1,297	$1,745
Yeruham	51.8%	$2,416	$1,334	$3,750
TOTAL	28.3%	$2,283	$1,348	$3,642

Table 3.10 Housing Ministry and Jewish Agency Outlays
In Project Renewal Neighborhoods

	Housing Ministry Investments 1977-1983	Jewish Agency Expenditures Through 3-84	Total Dollars Invested
TEL AVIV DISTRICT (14)	$52,574,799	$30,440,185	$83,014,984
City Subdistrict	$28,582,999	$20,899,667	$49,482,666
Tel Aviv - HaTikva	$12,025,918	$11,087,383	$23,113,301
Tel Aviv - Neve Eliezer	$5,228,418	$2,420,916	$7,649,334
Tel Aviv - Neve Sharet	$3,773,560	$2,234,529	$6,008,089
Tel Aviv - Yaffo Dalet	$4,185,891	$3,069,643	$7,255,534
Tel Aviv - Yaffo Gimel	$3,369,212	$2,087,196	$5,456,408
Suburban Subdistrict	$23,991,800	$9,540,518	$33,532,318
B'nei Brak - Pardes Katz	$2,813,302	$883,360	$3,696,662
B'nei Brak - Viznitz *	$164,602	$0	$164,602
Herzlia - Neve Israel	$2,543,231	$1,497,071	$4,040,302
Herzlia - Shaviv	$1,847,698	$1,316,302	$3,164,000
Holon - Jesse Cohen	$6,692,992	$1,462,921	$8,155,913
Holon - Tel Giborim *	$375,345	$4,528	$379,873
Ramat Gan - Ramat Amidar	$1,772,020	$730,150	$2,502,170
Ramat Gan - Ramat HaShikma	$5,646,620	$1,563,193	$7,209,813
Ramat HaSharon - Morasha	$2,135,990	$2,082,993	$4,218,983
CENTRAL DISTRICT (24)	$73,140,385	$30,726,020	$103,866,405
A. Sharon Subdistrict	$13,196,484	$5,332,876	$18,529,360
Kadima	$1,977,230	$1,014,866	$2,992,096
Kfar Yona *	$539,575	$0	$539,575
Netanya - Dora	$3,449,280	$2,648,755	$6,098,035
Netanya - Sela	$3,610,430	$773,606	$4,384,036
Tel Mond	$3,619,969	$895,649	$4,515,618
B. Petah Tikva Subdistrict	$19,994,267	$6,186,260	$26,180,527
Hod HaSharon - Giora, Gil Amal	$2,558,358	$1,195,522	$3,753,880
Kfar Saba - Kaplan, Yoseftal	$2,933,693	$1,012,725	$3,946,418
Petah Tikva - Amishav	$9,314,640	$1,487,360	$10,802,000
Petah Tikva - Yoseftal	$2,222,852	$1,042,012	$3,264,864
Rosh HaAyin - Bet	$2,964,724	$1,448,641	$4,413,365

Table 3.10 Continued

	Housing Ministry Investments 1977-1983	Jewish Agency Expenditures Through 3-84	Total Dollars Invested
Ramle Subdistrict	$27,292,307	$11,453,415	$38,745,722
Lod - Neve Zayit	$7,235,510	$1,401,065	$8,636,575
Lod - Ramat Eshkol *	$204,430	$697	$205,127
Or Yehuda - Amidar	$8,711,101	$2,802,831	$11,513,932
Or Yehuda - Histadrut	$0	$0	$0
Ramle - Old City	$7,324,303	$4,235,097	$11,559,400
Yehud - Center	$3,816,963	$3,013,725	$6,830,688
Rehovot Subdistrict	$12,657,327	$7,753,469	$20,410,796
Bet Dagan	$1,258,693	$1,273,127	$2,531,820
Kiryat Ekron	$2,201,230	$3,027,957	$5,229,187
Nes Tziona - Yad Eliezer *	$528,397	$509	$528,906
Rehovot - Kfar Gevirol *	$293,040	$135	$293,175
Rehovot - Kiryat Moshe	$1,674,703	$1,082,590	$2,757,293
Rishon LeTzion East *	$336,601	$1,181	$337,782
Ramat Eliahu	$4,739,462	$2,208,729	$6,948,191
Sela	$1,625,201	$159,241	$1,784,442
JERUSALEM DISTRICT (7)	$22,176,543	$15,236,337	$37,412,880
Bet Shemesh - North	$2,129,532	$1,223,251	$3,352,783
Jerusalem Bukharim	$804,888	$506,363	$1,311,251
Ir Ganim, Kiryat Menahem	$4,422,691	$1,762,609	$6,185,300
Katamon	$4,440,397	$6,559,004	$10,999,401
Morasha	$6,816,076	$2,367,224	$9,183,300
Shmuel HaNavi	$3,575,894	$1,601,939	$5,177,833
Stern Street	$791,953	$1,722,310	$2,514,263
HAIFA DISTRICT (8)	$20,955,037	$9,231,062	$30,186,099
Haifa Subdistrict	$14,882,743	$5,470,586	$20,353,329
Haifa - Neve David	$3,401,048	$837,626	$4,238,674
Haifa - Neve Yosef	$3,224,100	$317,799	$3,541,899
Haifa - Wadi Nisnas	$40,092	$0	$40,092
Kiryat Ata - HaRakafot	$1,895,836	$1,239,846	$3,135,682
Nesher - Tel Hanan	$2,483,774	$1,631,936	$4,115,710
Tirat HaCarmel Rambam, Brener, Bialik	$3,877,985	$1,443,379	$5,321,364
Hadera Subdistrict	$6,072,294	$3,760,476	$9,832,770
Hadera - Giv'at Olga	$4,196,593	$1,885,033	$6,081,626
Or Akiva - Center	$1,875,701	$1,875,443	$3,751,144

Table 3.10 Continued

	Housing Ministry Investments 1977-1983	Jewish Agency Expenditures Through 3-84	Total Dollars Invested
NORTHERN DISTRICT (10)	$24,169,499	$19,519,741	$43,689,240
Western Subdistrict	$6,148,314	$5,402,119	$11,550,433
Acco - East	$1,928,448	$1,127,423	$3,055,871
Ma'alot / Tarshiha	$1,915,077	$3,139,912	$5,054,989
Nahariya - Katznelson	$1,883,579	$1,134,784	$3,018,363
Shlomi *	$421,210	$0	$421,210
Eastern Subdistrict	$18,021,185	$14,117,622	$32,138,807
Afula			
Upper Afula, Giv'at HaMoreh	$2,534,538	$2,199,730	$4,734,268
Bet Shean - Eliahu	$2,289,061	$2,273,407	$4,562,468
Hatzor HaGlilit	$1,761,082	$2,879,004	$4,640,086
Kiryat Shmona			
Shprinzak, Eilat, Moshava	$3,777,487	$1,929,903	$5,707,390
Safed - Canaan	$1,901,352	$2,100,334	$4,001,686
Tiberias - Dalet	$5,757,665	$2,735,244	$8,492,909
SOUTHERN DISTRICT (17)	$37,983,210	$34,351,359	$72,334,569
Ashkelon Subdistrict	$15,384,969	$16,181,504	$31,566,473
Ashdod - Aleph, Bet	$1,102,574	$2,425,516	$3,528,090
Ashkelon - Giv'at Tzion *	$302,111		
Ashkelon - Migdal	$5,617,591	$9,698,321	$16,277,430
Ashkelon - Shimshon	$659,407		
Gan Yavneh *	$243,047	$0	$243,047
Kiryat Gat - HaNevi'im Quarter *	$127,643	$0	$127,643
Kiryat Malakhi - Kibbutz Galuyot	$3,204,590	$2,005,578	$5,210,168
Yavneh - Ramot Weitzman	$4,128,006	$2,052,089	$6,180,095
Beer Sheba Subdistrict	$22,598,241	$18,169,855	$40,768,096
Beer Sheba - Dalet North	$3,872,454	$1,358,892	$5,231,346
Beer Sheba - Gimel	$5,826,734	$2,323,556	$8,150,290
Dimona - HaArava *	$21,918	$0	$21,918
Dimona - Shiv'at HaMinim	$2,611,325	$1,066,062	$3,677,387
Eilat - Yaelim	$2,526,878	$3,804,851	$6,331,729
Netivot	$724,848	$2,211,707	$2,936,555
Ofakim	$1,266,827	$1,421,117	$2,687,944
Sderot	$1,198,504	$3,471,428	$4,669,932
Yeruham	$4,548,753	$2,512,242	$7,060,995
TOTAL	$230,999,473	$139,504,704	$370,504,177

Chapter 4

The Relationship Between Project Renewal and Public Rental Housing

Public rental housing has long been an important component of Israel's overall housing stock. In recent years, dwellings managed and rented to tenants by public companies have declined as a percentage of all housing units to about 10 per cent for the country as a whole. Nevertheless, they constitute a particularly high share of dwellings in low income areas. In Project Renewal neighborhoods, slightly over half of all dwellings are still publicly-owned and managed by AMIDAR, AMIGUR, or another public company.[1] Throughout the country, public rental units house about 40 per cent of low income Israeli families.

Given the large role of public rentals in the lives of low income Israeli families and in Project Renewal neighborhoods, understanding the impact of Project Renewal requires an examination of how the program has interacted with public rental housing as well as how the broader system of public housing has operated. In recent years, national policy toward public rentals has led to a continuation of past patterns, including:

- charging tenants rents well below market levels;
- undertaking limited maintenance and upgrading of existing units;
- selling a small share of units to tenants; and
- adding some units to the publicly-managed stock as new dwellings built by the Ministry of Housing go unsold.

The combination of poor maintenance by public companies, low rents that allow the dwellings to continue to be occupied, and the low incentive of tenants to invest in units they do not own has led to a deterioration

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[1]In some cities, local public companies, such as Halamish in Tel Aviv, manage the public rentals.

of the publicly-managed housing stock.[2] The resulting problems for the neighborhood have extended beyond the worsening physical condition of local dwellings; by fostering attitudes of dependency, the public housing system may have hampered efforts at neighborhood renewal, especially where there are large concentrations of public rental units. Without a change in the public housing system or a large increase in the share of families owning their dwellings, such neighborhoods cannot upgrade a large share of their poor housing; that fact may, in turn, influence the expectations of owners and limit the amount they invest in their own dwellings. The consequences affect not only Project Renewal, but also a major asset of the nation--its publicly-managed housing stock--now worth over $1 billion.[3] For all these reasons, encouraging tenants to purchase the units they currently rent from public companies was an extremely important component of Project Renewal.

This chapter takes up several questions involving the relationship between public rentals and Project Renewal. These include:

- what were the financial incentives provided to tenants who purchase their apartments? how did the incentives differ between renewal and non-renewal areas?
- what share of public rental units were purchased within Project Renewal neighborhoods? did the level of Project Renewal activity influence the purchase rates across neighborhoods? and, how did these rates compare to the purchase rates elsewhere in the same towns?

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[2]Evidence on the extent of deterioration was produced as a byproduct of our regressions on price trends across neighborhoods. Within the 15 neighborhoods analyzed, prices of public dwellings were generally about 50-60 per cent lower than private units of eqaul size (in square meters) sold in the same month. Although the government discount accounted for as much as a 25 per cent differential, the remaining 25 to 35 per cent indicates that public units were in worse condition than private units. See Chapter 5.

[3]The average price of units sold has been about $10,000. This figure may well overstate the value of the average publicly-managed unit. Still, using an average figure of $9,000 and a rented (and empty) stock of 125,000 yields an estimate of $1.125 billion for the value of the total stock.

- what factors are relevant to a family's interest in purchasing the apartment it rents from a public agency?
- how does the presence of large numbers of public rental units affect the project's ability to upgrade the neighborhood?

The next section describes the initiative to encourage public housing tenants to buy their dwellings and examines the financial incentives provided in renewal and non-renewal neighborhoods. In 4.2, we analyze the purchase rates. Section 4.3 reviews the assessments of project managers regarding the overall impact of public rental units on renewal activity.

4.1 Programs to Encourage Tenants to Purchase Their Dwellings

4.1.1 A Description of the Initiatives

Encouraging public housing tenants to buy their dwellings has been part of the Ministry of Housing's stated policy only for the last several years. But, many believe that a tension exists between those within government agencies favoring special efforts to sell public units and those arguing for a go-slow attitude. Evidence of opposition to a major sales effort comes from a January 1980 letter from a high Housing Ministry official describing the new purchase terms and restrictions to directors of public housing companies. The official remarked that a shortage of public rental units exists, and that apartments transferred to public companies are intended for rental purposes and tenants able to buy apartments should be referred to standard purchase programs. In addition, the official contended that giving special incentives for purchase of public units would worsen the problem of excess demand for rental of such units and might cause more able families to enter public rentals in order to buy, thereby depriving poorer families of a low cost rental unit.

Notwithstanding the view of this official, the Ministry of Housing

began in November 1981 to expand significantly the incentives for tenants to buy their dwellings. First, the government began to offer a 25 per cent discount on the assessed price of the unit, up to a maximum discount initially set (in November 1981) at 100,000 IS ($6,900). Next, in December 1982, the Ministry established a new loan program for tenants to finance the purchase of their dwellings. This program provided loan terms that were considerably more generous than those formerly available under conventional Ministry of Housing programs.

The special incentives to those living in Project Renewal neighborhoods took three forms: 1) the maximum discount was larger in renewal than in non-renewal neighborhoods; 2) the loan terms were more generous in renewal than in non-renewal areas; and 3) the minimum cash payment was sometimes set lower in renewal than in non-renewal neighborhoods. Table 4.1 summarizes these differences for recent periods.

In addition to providing more favorable purchase terms, Project Renewal has given tenants two other special reasons to buy. The first has been the opportunity to obtain financial and nonfinancial assistance to enlarge the apartment. This assistance has been available only to owners--not to renters. One would expect the enlargement opportunity to influence many tenants, since many public units are very small by today's standards (34 per cent of the nation's public rental dwellings were 54 square meters or less). Indeed, project managers generally viewed the enlargement assistance as a key incentive generating purchases. A second potential stimulus to purchase could arise from Project Renewal's overall impact in upgrading the neighborhood. The atmosphere generated under Project Renewal might be expected to give tenants the confidence to invest their limited resources in a unit in the neighborhood. In practice, what might

Table 4.1 : Loan Terms for Purchase of Amidar and Other Public Rental Apartments by Families Renting Them: August 1984

AREA and STATUS	Maximum Total Loan	Amount Not Linked	Amount Linked 0% Interest	Amount Linked 6% Interest	Initial Monthly Repayment
Jerusalem					
Renewal Area	4,750,000	1,350,000	2,500,000	900,000	18,825
	$15,323	$4,355	$8,065	$2,903	$61
Non-Renewal	4,600,000	300,000	2,150,000	2,150,000	23,460
	$14,839	$968	$6,935	$6,935	$76
Development Towns					
8 Towns	3,550,000	750,000	2,800,000	0	11,575
	$11,452	$2,419	$9.032	$0	$37
Others	3,300,000	450,000	2,250,000	600,000	13,140
	$10,645	$1,452	$7,258	$1,935	$42
Other Areas					
Renewal Area	3,750,000	900,000	2,000,000	850,000	15,455
	$12,097	$2,903	$6,452	$2,742	$50
Non-Renewal	3,800,000	200,000	1,750,000	1,850,000	19,690
	$12,258	$645	$5,645	$5,968	$64

Note: (1) All purchasers receive a discount on the assessed value of the unit of up to IS250,000 ($800) in Renewal areas and IS200,000 ($650) in other areas, not exceeding 25%.

(2) Purchasers in Renewal areas must pay 5% of the actual (after discount) price in cash, as opposed to 15% for purchasers in other areas.

(3) Of the 8 development towns whose residents receive the more generous purchase loans, 6 have Renewal neighborhoods. Of the 19 others, 13 have Renewal neighborhoods.

(4) In all development towns, families of 6 persons and more are eligible for additional loans.

have partially offset this potential incentive is the fact that even in those neighborhoods where tenants saw a major positive impact from Project Renewal, assessors might have raised their estimates of market prices and thereby increased the costs of purchasing in renewal neighborhoods.4

Another reason the incentives may have done little to stimulate purchases was the general absence of an administrative structure with a mission of encouraging tenants to buy and facilitating their purchases. Several physical project managers pointed out that neither Housing Ministry nor public housing company officials, particularly in AMIDAR, have actively directed local workers to pursue the purchase policy vigorously. This is in sharp contrast to the active role of central office and local managers in implementing the enlargement program.

In the absence of an administrative mechanism geared toward purchases, it is unclear whether tenants are aware of the various shifts in financial incentives and if they are, whether they understand what the terms would imply for monthly payments over time. Physical project managers suggested having teams of workers or volunteers go to each public tenant, explain the purchase terms, and discuss the advantages of buying over continuing to rent. The managers reported that their own staff and budget resources were too meager to conduct such efforts.

Transmitting information to tenants and explaining the reasons for them to buy their dwelling may be particularly important tasks, because of the complexity of the task of analyzing long-term payment burdens and of considering flows of rent payments, flows of loan payments, the costs

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[4]As noted in footnote 2, our empirical work showed that sale prices of public units were 50 to 60 per cent below prices of private units of same size and neighborhood. This evidence casts doubt on but does not directly refute the possibility that assessors overvalued public units in renewal neighborhoods.

of obtaining a cash payment, and the dwelling's current and future asset value.

4.1.2 Analysis of the Terms of Loans Provided for Purchasing Public Units

The purpose of this section is to determine how the loans specified in Table 4.1 translate into real burdens on owners, real subsidies from the government, and differences in monthly payments between those buying and those continuing to rent their public units.

Before looking at the financial burdens involved in purchasing specific units, it is worth examining recent trends in the relative size of the linked and unlinked portion of loans. As Figure 4.1 reveals, the levels of unlinked loans were equal (varying between inflation adjustments from about $2,000-$3,000) in and outside Project Renewal neighborhoods until two dramatic shifts took place in December 1982. Unlinked loans jumped to over $7,000 in renewal areas and fell to zero outside renewal neighborhoods. Although inflation and policy shifts away from providing unlinked loans have narrowed the gap between neighborhoods, it remains substantial. With prices of public units often no higher than $7,500, an unlinked loan of about $3,000 implies a direct subsidy of nearly 40 percent of the purchase price. Figure 4.2 shows recent trends in maximum loans (linked and unlinked) along with the current dollar value of the flow of payments in renewal and nonrenewal neighborhoods. The loan maximums have been equal in all areas and sufficient to finance units sold at relatively high prices. At the same time, the repayment burdens in nonrenewal areas have been substantially higher than those in renewal neighborhoods.

To illustrate these implications of the purchase terms, one must make several assumptions. The first concerns the prices of public dwellings. We decided on two prices--$7,500 and $15,000--on the basis of data on actual

Figure 4.1: Maximum Unlinked Loans to Purchase Public Rental Dwellings in Project Renewal and Non-Renewal Neighborhoods: July 1980 to July 1984

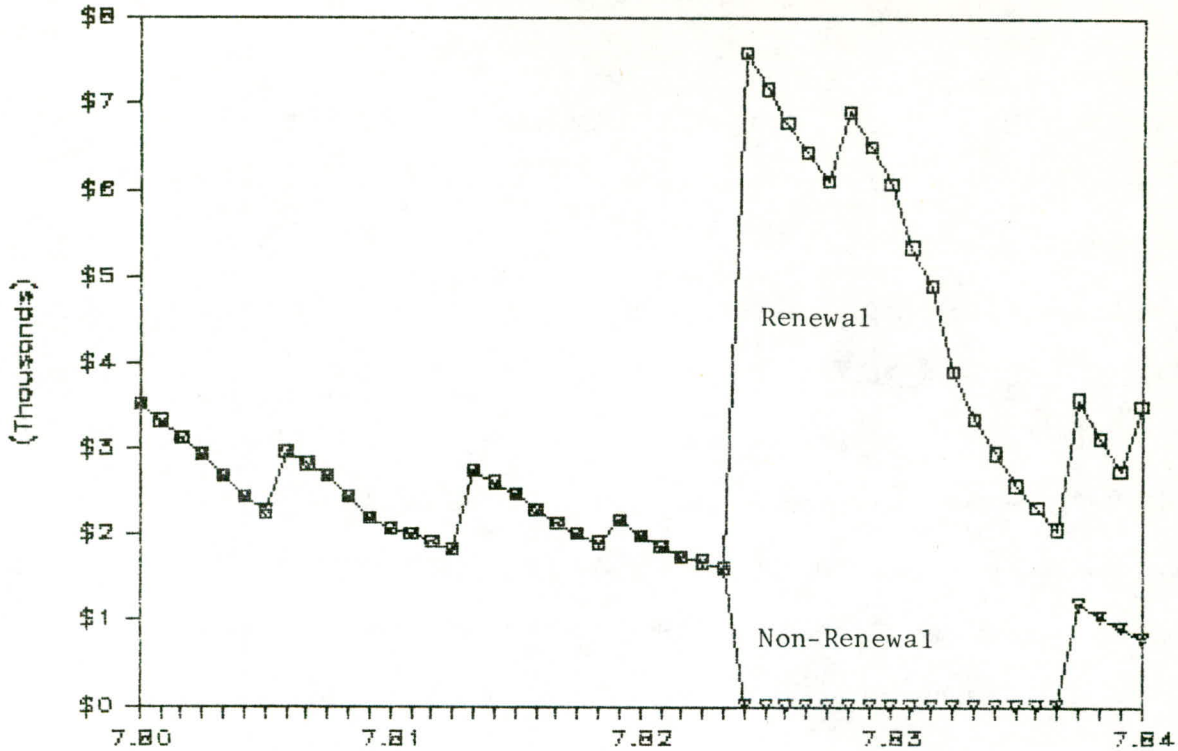
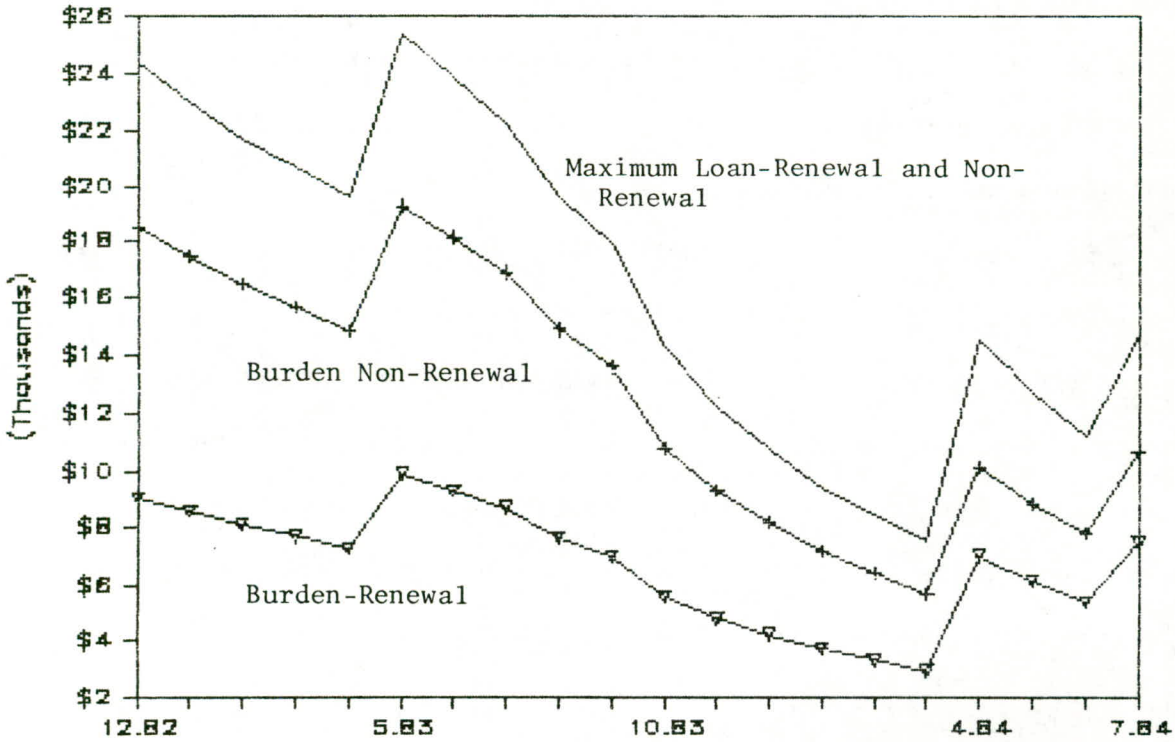


Figure 4.2: Maximum Loans and the Buyer's Financial Burden of Maximum Loans in Renewal and Non-Renewal Neighborhoods: December 1982 to July 1984



prices of public units observed in several neighborhoods.[5] The mean price (over the 1979-1984 period) of public units in the sample was $10,250. This figure is higher than the average for the country as a whole, since most of the prices came from neighborhoods not far from Tel Aviv. Nearly 30 per cent of the units sold for about $7,500 or less while about 15 per cent sold for $15,000 or more. While the $15,000 price represents only a minority of units, using $7,500 and $15,000 in the examples allows us to illustrate outcomes at the low and high ends of the price range.

A second assumption is the interest rate used to translate flows of future payments into present values. As noted in Chapter 3, this assumption is particularly important in Israel because of the wide gap between the interest rate at which the government can borrow and the interest rate private borrowers must pay for medium-term or long-term loans. In developing most of the examples, we assume a 6 per cent real interest rate; in some cases, we assumed interest rates range from 4 to 7.5 per cent.

Third, one must make some assumption about how tenants finance the cash payment portion of the price. Even if tenants take the cash out of savings or other consumption, they bear the opportunity cost of a reduced return on savings or the absence of other goods and services. This is a real burden that, however difficult to value, must be taken into account in the calculations. Our usual approach is to assume that owners obtain a subsidiary loan (or lose interest) at a 6 per cent real interest rate.

The graphs in Figures 4.3 through 4.8 illustrate the owner's ultimate burden of purchasing the unit in two ways. One set shows the present value of current and future payments by owners as a proportion of the price of the dwelling. To understand the calculations, consider an owner who pays

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[5]For details on the nature of these price data, see Chapter 5.

shekels worth $1,200 as a cash payment at the time of purchase and payments worth $40 per month for 25 years. The present value of the monthly payments is well under $40 times the 300 payments because the ability to earn interest makes future dollars worth less than current dollars. Assuming an interest rate, one can bring future dollars in any month into an equivalent current dollar. The present value of the monthly flow plus the owner's cash payment is equal to his total burden. We have computed this total burden for each month of purchase, taking into account the loan values and terms applicable that month. Dividing each month's burden by the price (say $7,500 or $15,000) yields the percentage figures highlighted in Figures 4.3, 4.4, 4.5, and 4.6.

The owner's repayment burden as a percent of the purchase price has varied substantially over time, both because of inflation and policy shifts. From Figures 4.3 and 4.4, one can see how the liberalization of purchase terms in October 1981 and November 1982 caused a striking decline in the financial burdens placed on Project Renewal residents purchasing public units. During the last part of 1983 and the beginning of 1984, there was a substantial erosion of the real value of loans, thereby raising financial burdens on owners. Still, the burdens on those buying low price units reached only 25 per cent of the purchase price by July 1984.

Figures 4.5 and 4.6 permit comparisons of these burdens that faced purchasers of public units in Project Renewal neighborhoods with burdens for purchasers in non-renewal neighborhoods. The difference between the burden of purchasing in a non-renewal rather than in a renewal area was enormous soon after the special loan program was initiated in December 1982. Since then, the differentials have narrowed substantially, but a sizable advantage has prevailed through July 1984 for those living in renewal neighborhoods.

Figure 4.3: Present Value of Current and Future Outlays To Buy Public Dwelling as Per Cent of Price: Dwelling Price of $7500, December 1982 to July 1984

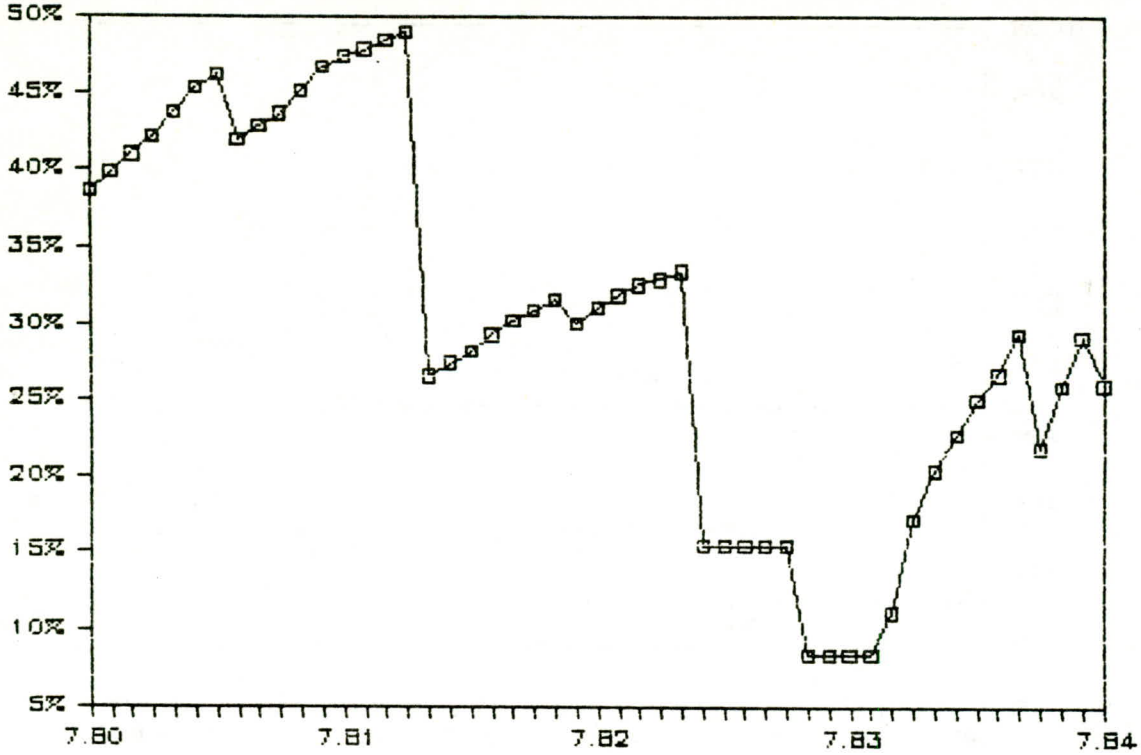


Figure 4.4: Present Value of Current and Future Outlays To Buy Public Dwelling As Per Cent of Price: Dwelling Price $15,000, December 1982 to July 1984

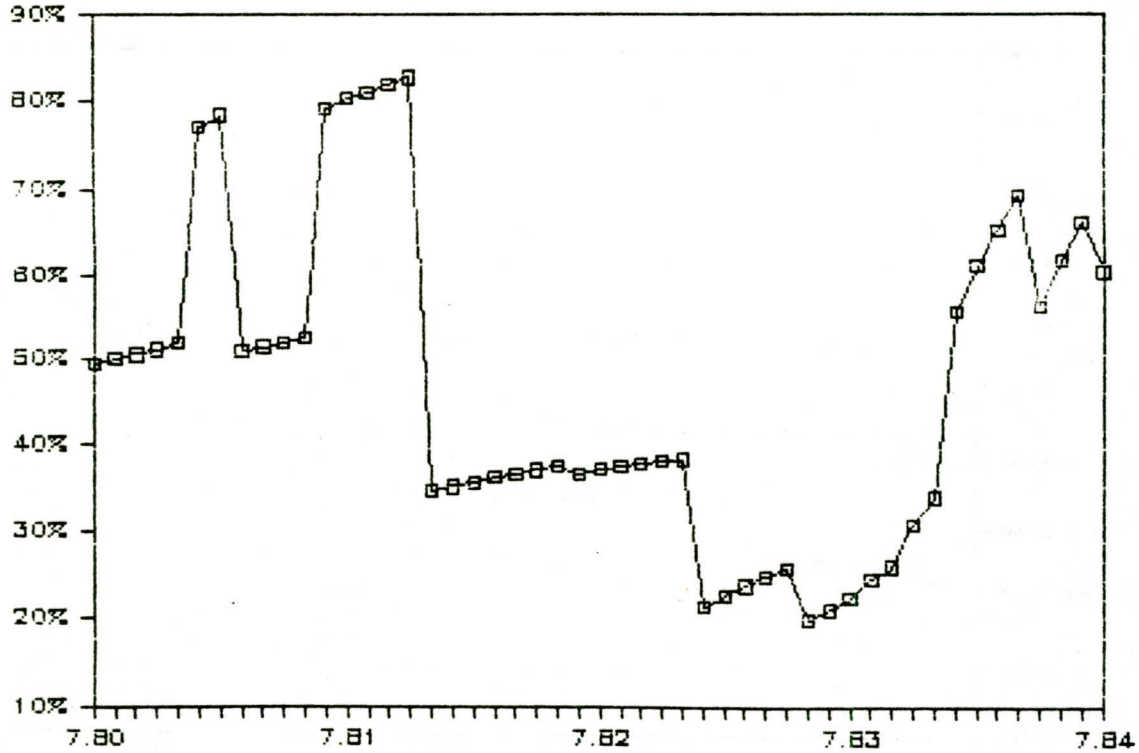


Figure 4.5: Value of Buyer's Costs as Share of Purchase Price in Renewal and Non-Renewal Neighborhoods: Dwelling Price of $7500, December 1982 to July 1984

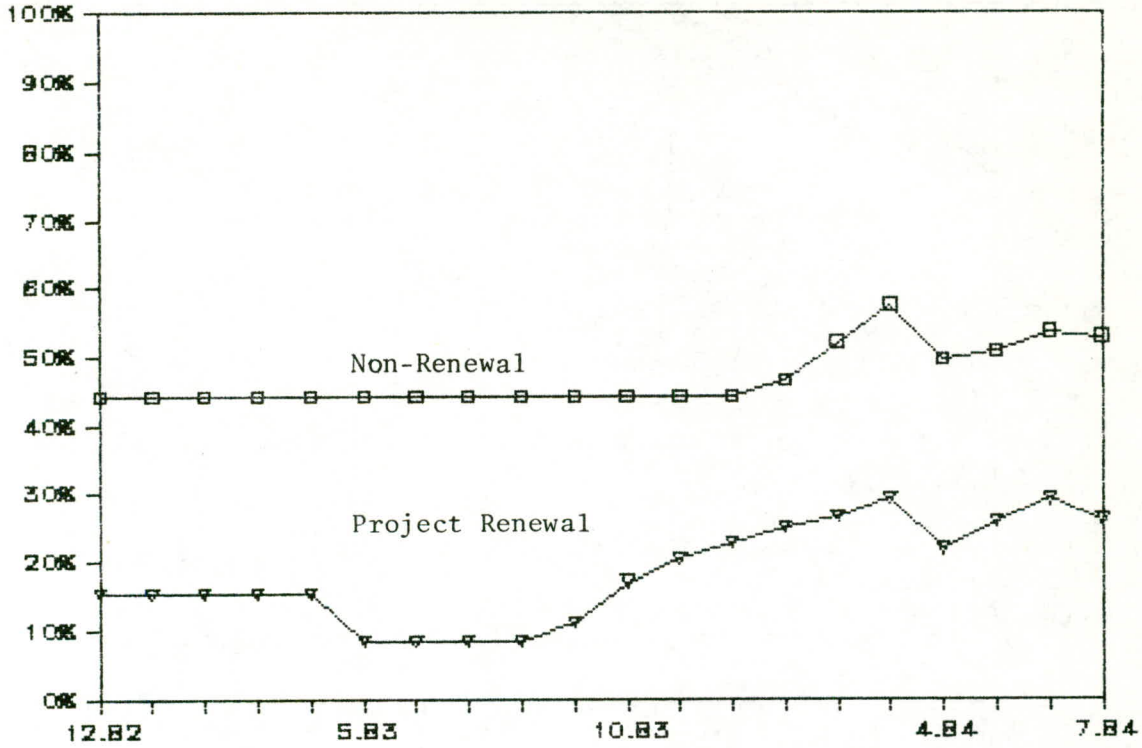
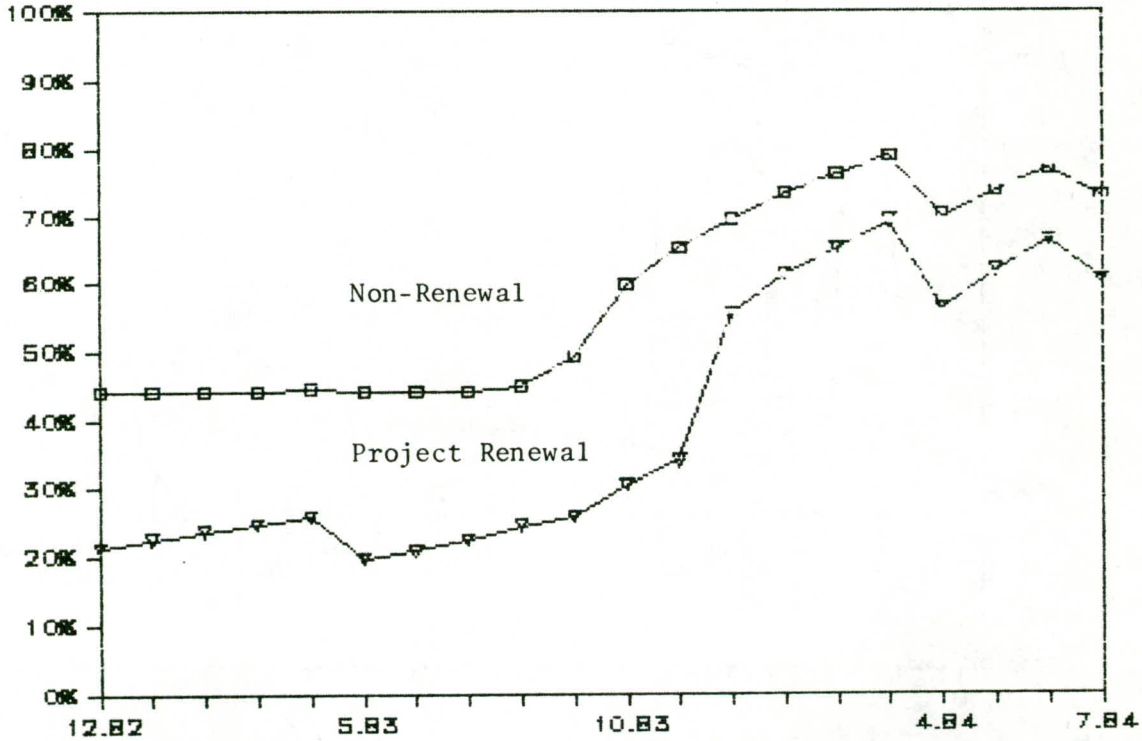


Figure 4.6: Value of Buyer's Costs as Share of Purchase Price in Renewal and Non-Renewal Neighborhoods: Dwelling Price of $15,000, December 1982 to July 1984



A second way of looking at the purchaser's ultimate burden is to translate the total burden back into monthly payment terms and to compare such payments to the rent payments charged to public tenants. The monthly burdens of purchase shown in Figures 4.7 and 4.8 are not the actual payments in any particular month. Instead, they represent the constant monthly amount required to pay off a 25 year loan (typically at 6 per cent real interest) that financed the entire value of the owner's burden. Although this is a hypothetical construct, it is a more accurate reflection of the true, long-term costs of buying than is any single month's actual payments. The reason is that the actual payments vary dramatically over time because of the size of the unlinked loan and vary with the borrower because of differences in the way owners assemble the cash payment.

A common view concerning purchases of AMIDAR and other public apartments is that rents are far too low to motivate tenants to purchase their dwellings. Figures 4.7 and 4.8 permit us to examine this contention for recent years in renewal and nonrenewal neighborhoods. As noted above, the monthly purchase burdens shown in the figures translate the owner's overall burden into monthly terms by assuming he is paying off a 25 year loan at 6 per cent real interest for his entire burden. Usually, monthly purchase burdens have exceeded rents, especially in non-renewal neighborhoods; on this basis, tenants would not gain directly from buying their dwelling. In some periods, rents were about the same or actually higher than purchase burdens, a situation which allowed tenants to buy their apartment while lowering their monthly housing outlays. Moreover, even when purchase burdens well exceeded rents, a financial advantage could still accrue to purchasers because they obtain an asset worth more than the value of their cash payments plus debts.

Figure 4.7: Monthly Rents in Comparison to Monthly Burden to Purchase Public Dwelling in Renewal and Non-Renewal Neighborhoods: Price $7500, December 1982-July 1984

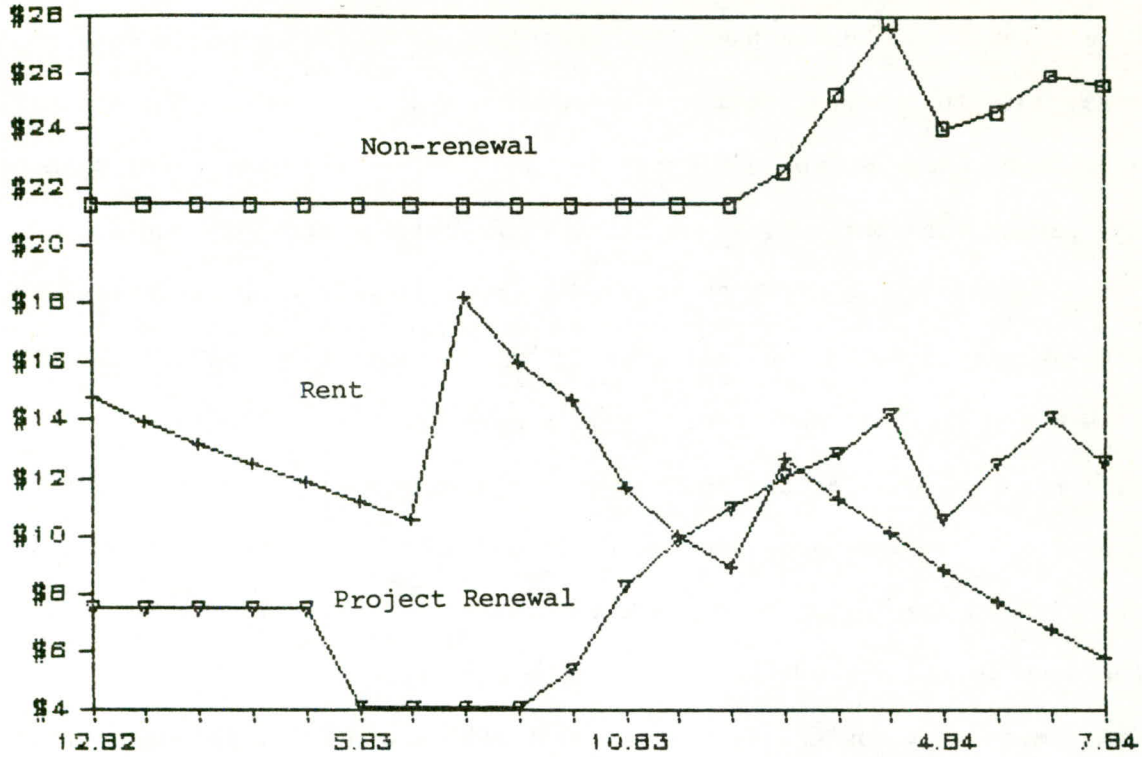
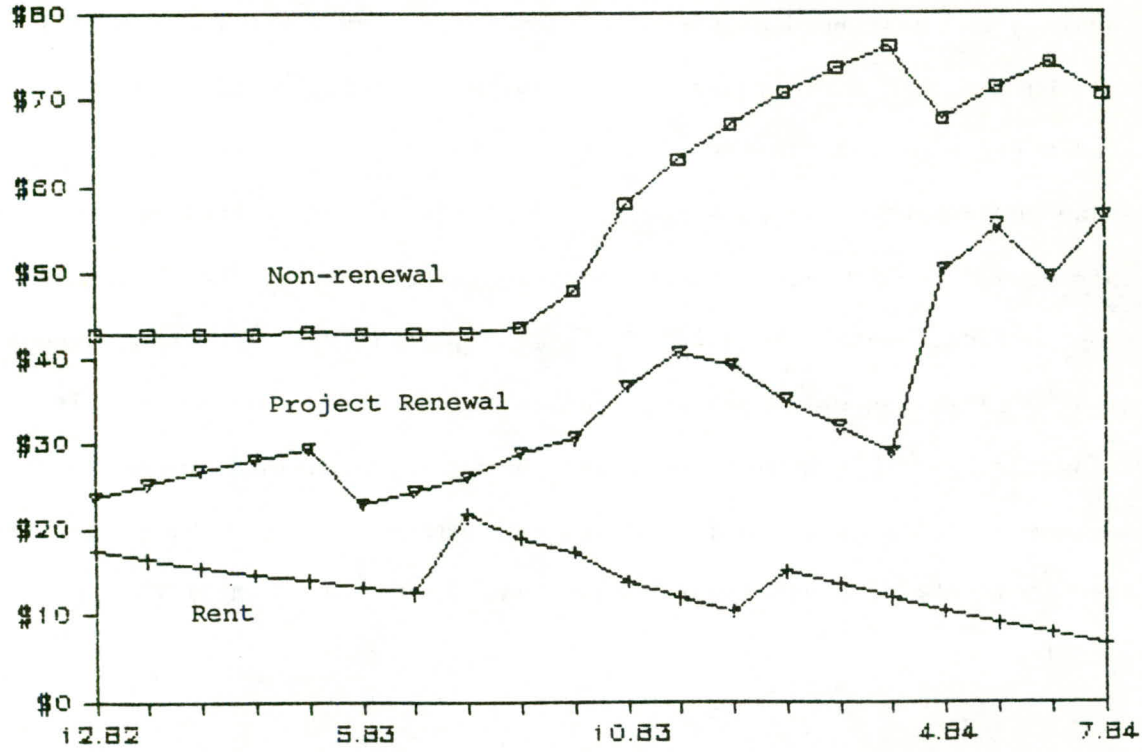


Figure 4.8: Monthly Rents in Comparison to Monthly Burden to Purchase Public Dwelling in Renewal and Non-Renewal Neighborhoods: Price $15,000, December 1982-July 1984



To many prospective buyers, the Project Renewal enlargement loan program has enhanced the value of public units in renewal neighborhoods. Figure 4.9 shows the combined financial burden of buying a $7500 public dwelling and enlarging the unit by 25 square meters (at $350 per square meter) from July 1980 through July 1984. The variations over time are similar to those displayed above. In recent periods, buying and enlarging the public unit would have required about $4000 in cash and would have paid an additional $4000 in loan repayments.

4.2 Purchase Activity in Renewal and Non-Renewal Neighborhoods

Did the generous purchase terms available, especially in Project Renewal neighborhoods since December 1982, stimulate public tenants to buy their dwellings? Or, did the absence of a coordinated administrative effort leave purchase activity at relatively low levels? To answer these questions in detail, we would need detailed data on the time pattern of purchases across neighborhoods as well as information on the nature of the administrative structure by area. Although these data were not available, we were able to assemble data on purchases by tenants as a percentage of the stock of public rental housing in 45 sites covering 57 neighborhoods. These purchase rates in renewal and non-renewal neighborhoods do yield evidence on the combined role of financial incentives and administrative effort. If financial incentives had a major impact in renewal areas, it should show up in high purchase rates.

The purchase rates between April 1983 and March 1984 within Project Renewal neighborhoods and in the towns containing renewal neighborhoods appear in Table 4.2. Overall, there is little indication that Project Renewal stimulated tenants to buy their dwellings. Purchase rates averaged

Figure 4.9: The Cash Burden and Total Burden Placed on Those Buying a $7500 Public Rental Unit and Enlarging the Unit by 25 Square Meters

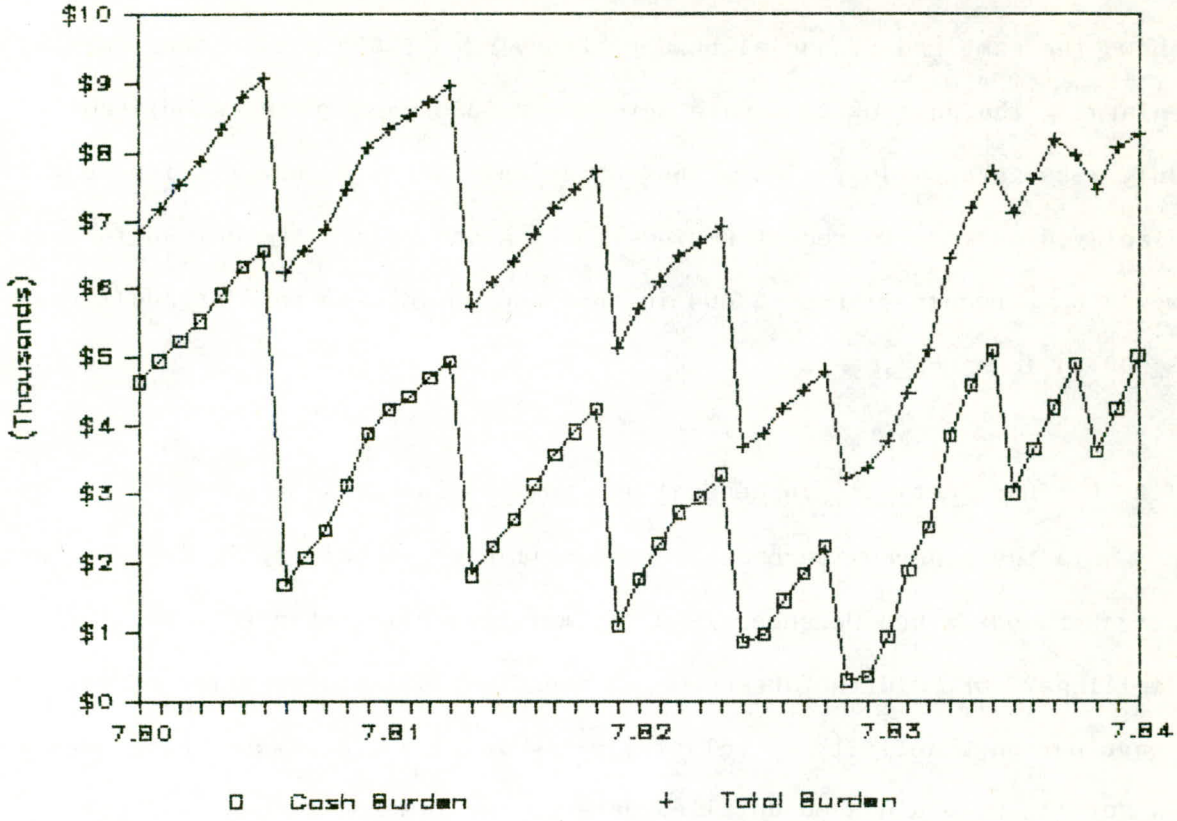


Table 4.2

Sales of Public Rental Units in Project Renewal Neighborhoods and in Adjacent Neighborhoods

	Estimate of Public Stock (1)	Public Stock/ Total Stock (2)	Project Renewal Sales 4.83-3.84 (3)	PR Sales/ Public Stock (4)	Non-PR Sales/ Non-PR Pub Stock (5)
TEL AVIV DISTRICT	1595	26.1%	122	7.6%	3.9%
Herzlia - Shaviv & Neve Israel	675	32.0%	53	7.9%	4.3%
Holon - Jesse Cohen	800	33.3%	52	6.5%	5.6%
Ramat Gan - Ramat Amidar	120	7.5%	17	14.2%	0.9%
CENTRAL DISTRICT	12911	43.5%	1091	8.5%	10.7%
Bet Dagan	378	79.6%	17	4.5%	
Hod HaSharon - Giora, Gil Amal	330	30.2%	20	6.1%	5.3%
Kadima	321	38.9%	58	18.1%	
Kfar Saba - Kaplan, Yoseftal	635	44.1%	35	5.5%	6.6%
Kfar Yona *	221	18.9%	21	9.5%	
Kiryat Ekron	180	14.3%	13	7.2%	0.0%
Lod - Neve Zayit & Ramat Eshkol	2332	62.6%	88	3.8%	23.1%
Nes Tziona - Yad Eliezer *	238	58.0%	14	5.9%	4.6%
Netania - Dora & Sela	1184	47.7%	87	7.3%	9.2%
Or Yehuda - Amidar & Histadrut	910	33.8%	438	48.1%	45.7%
Petah Tikva - Yoseftal & Amisha	1493	54.1%	71	4.8%	6.7%
Ramle - Old City	1240	74.7%	20	1.6%	15.6%
Rehovot - K. Moshe & Kf. Gvirol	910	44.7%	21	2.3%	6.6%
Rishon LeTzion - 3 Neighborhood	1580	34.8%	160	10.1%	3.6%
Rosh HaAyin - Bet	160	25.4%	6	3.8%	11.5%
Tel Mond	149	17.3%	15	10.1%	
Yehud - Center	650	40.6%	7	1.1%	
JERUSALEM DISTRICT	435	66.9%	41	9.4%	8.9%
Bet Shemesh - North	435	66.9%	41	9.4%	8.9%
HAIFA DISTRICT	4323	42.8%	300	6.9%	6.1%
Hadera - Giv'at Olga	970	31.0%	102	10.5%	3.1%
Haifa - Neve David	700	41.8%	52	7.4%	11.7%
Kiryat Ata - HaRakafot	2070	61.9%	76	3.7%	5.3%
Nesher - Tel Hanan	415	40.4%	53	12.8%	5.1%
Tirat HaCarmel - Bialik etc.	168	18.1%	17	10.1%	5.1%

Table 4.2 Continued

	Estimate of Public Stock (1)	Public Stock/ Total Stock (2)	Project Renewal Sales 4.83-3.84 (3)	PR Sales/ Public Stock (4)	Non-PR Sales/ Non-PR Pub Stock (5)
NORTHERN DISTRICT	8788	64.2%	677	7.6%	4.9%
Acco - East	1050	42.0%	83	7.9%	4.1%
Afula -Upper Afula,Giv'at HaMor	2599	57.1%	132	5.1%	8.1%
Bet Shean - Eliahu	1117	89.3%	52	4.7%	7.9%
Hatzor HaGlilit	1442	72.6%	243	16.9%	
Kiryat Shmona - Shprinzak	1075	86.5%	25	2.3%	5.6%
Ma'alot (W/O Tarshiha)	500	93.3%	50	10.0%	0.2%
Nahariya - Katznelson	300	34.8%	84	28.0%	3.9%
Shlomi *	705	91.9%	8	1.1%	
SOUTHERN DISTRICT	21018	60.5%	1057	5.0%	4.2%
Ashdod - Aleph, Bet	1740	64.6%	54	3.1%	3.5%
Ashkelon - 3 Neighborhoods	5466	54.2%	293	5.4%	2.2%
Beer Sheba - Gimel & Dalet Nort	3200	51.7%	172	5.4%	4.3%
Dimona-Shiv'at HaMinim & HaArav	1450	65.5%	33	2.3%	2.0%
Eilat - Yaelim	300	28.5%	69	23.0%	9.7%
Gan Yavneh *	96	35.6%	8	8.3%	
Kiryat Gat- HaNevi'im Quarter*	1568	71.0%	177	11.3%	8.3%
Netivot	1445	73.4%	34	2.4%	
Ofakim	2200	62.9%	102	4.6%	
Sderot	2044	76.4%	75	3.7%	
Yeruham	1509	80.5%	40	2.7%	
Totals	49070	51.7%	3288	6.7%	5.8%

Note: Column (2) displays the percentage of each neighborhood's dwellings that are public rental dwellings; column (3), the sales of public rental dwellings between April 1983 and March 1984; column (4), the 1983-84 sales of public rental dwellings as a percentage of the neighborhood's stock of public dwellings; and column (5), the percentage of public dwellings that were sold in the 1983-84 period in areas not part of Project Renewal but are part of the same town.

Sources: Data compiled by authors from AMIDAR reports, project manager survey, and Ministry of Housing data.

over all renewal neighborhoods were somewhat higher than rates in the entire towns, but the absolute size of the difference was small and unsystematic. Moreover, the 6.7 per cent purchase rate was below the national rate at which public units were purchased. This evidence does not prove the absence of an impact from renewal, but it certainly points to the lack of a major effect.6

A close look at Table 4.2 reveals marked variation in purchase rates across neighborhoods. In several Project Renewal neighborhoods, a large share of tenants bought their dwellings. The standouts were Or Yehuda, Eilat, Nahariya, and Hatzor HaGlilit. Indications are that the high purchase rates in these neighborhoods were linked to the onset of Project Renewal and not simply a spontaneous interest in buying by local tenants. In all four neighborhoods, enlargement activity was well above average. This activity as well as independent evidence suggests that administrative effort was high in these areas. Thus, although purchase rates in Project Renewal neighborhoods did not show a dramatic response to the generous loan terms offered by the Ministry of Housing, the success of four neighborhoods demonstrates the possibility of stimulating purchases with a combination of purchase incentives, enlargement loans, and an active effort to encourage tenants to buy.

To assess the overall role of these factors, we examined the impact of the neighborhood differences in the level of renewal activity on purchase rates. With data on 45 locations (covering 57 neighborhoods or groups of neighborhoods), we estimated the effect on purchase rates of the following variables:

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[6]Data on purchase rates in prior years would have permitted a more detailed analysis of renewal impacts, but such data were not available.

- the proportion of homeowners who enlarged their dwelling under the Project Renewal program;
- the proportion of dwelling units in buildings in which Project Renewal undertook external renovations;
- amount spent per household by the Ministry of Housing and by the Jewish Agency under Project Renewal;
- the proportion of public rental dwellings in the neighborhood's housing stock; and
- the size of the neighborhood (as measured by its total housing stock).

The results in Table 4.3 show significant statistical impacts on purchase rates from enlargement rates and from the neighborhood's proportion of public rental units (of its total housing stock), but not from the level of Project Renewal spending (per household) nor the renovation rate. The size of the enlargement rate is large: each 1 percentage point rise in the share of owners enlarging was associated with a .25 percentage point rise in purchase rates. While this evidence indicates that Project Renewal's stimulus to enlargements also stimulated purchases of public units, the causation could have been reversed: high purchase activity could have led to increased enlargements.[7] Yet, even if purchase activity took place prior to enlargements, it could well have been the prospect of enlargement loans that persuaded many to buy a public rental unit.

4.3 Effects of Public Rental Dwellings on Low Income Neighborhoods

Does the concentration of public rental dwellings in Project Renewal neighborhoods constitute a barrier to upgrading the quality of life in such neighborhoods? With apartments managed by AMIDAR, AMIGUR, and other public companies making up over half the housing stock in renewal

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[7]In a second set of regressions explaining differences in enlargement rates, the purchase rate exerted a positive, significant impact.

Table 4.3

Determinants of the Percentage of Public Rental Units Sold Between April 1983-March 1984 in Project Renewal Neighborhoods

Explanatory Variables	Coefficient	T-Value
Constant	.132	3.51
Enlargement Rate	.250	2.38
Dwellings Externally Enlarged Under Project Renewal As Per Cent of All Dwellings	-.041	-0.56
Ministry of Housing Expenditures per Household	-.000	-0.30
Jewish Agency Expenditures per Household	.000	0.39
Public Rental Dwellings As Per Cent of All Neighborhood Dwellings	-.158	-2.76

R^2 = .22
N = 45 neighborhoods or groups of neighborhoods

Source: Regressions computed by authors.

neighborhoods, this is an important question. Problems resulting from high shares of public rental housing could arise from several sources. One has to do with the composition of the population of public housing tenants; they tend to have especially low incomes, high rates of welfare assistance, and a higher than average incidence of social problems. A second set of potential problems concerns the way the apartments are managed. As noted above, public companies receive rents and budget allocations that are too low to assure proper maintenance. The result can be a deterioration of a large segment of a neighborhood's housing stock.

A deeper problem relates to the difficulty of encouraging the self-help concept that is central to Project Renewal's general strategy, especially among families in public rental units in particular. Unlike private owners, families in public rentals may expect that they need not contribute much to the upgrading of their dwellings. They may hold the public companies responsible for proper maintenance of the apartment, for paying the unit's share of renovating the building's exterior, and even for enlarging apartments in which families are living in dense conditions. Although most families will be disappointed in these expectations, the possibility that the public company will bear the costs of upgrading their units may deter renters from financing their own improvements.

To examine how the public housing tenants differ from owners in low income neighborhoods, we drew on data from a household survey of 12 neighborhoods, 10 of which were included in Project Renewal in 1982.[8] Surprisingly, public housing tenants were similar in income, age, and housing

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[8]The Project Renewal neighborhoods in the survey included: Tel Giborim (in Holon), Viznitz (in B'nei Brak), Kfar Yona, Kfar Gevirol (in Rehovot), Ramat Eshkol (in Lod), Rishon LeTzion East, HaNevi'im (in Kiryat Gat), Shlomi, HaArava (in Dimona), and Gan Yavneh; neighborhoods in Migdal Haemek and Mevassaret Zion were also surveyed.

density to private owners within these 12 neighborhoods. About one-quarter of owners and public housing tenants reported net incomes amounting to under 9,000 IS per month (less than $300 in early 1983). Similarly, about 15 per cent of owners and public housing tenants had incomes in the highest two categories--over 21,000 IS per month (or over about $700). Public housing tenants were a somewhat older population than owners, but the differences were small: 25 per cent of families in public housing were headed by someone over 60, as compared to 22 per cent of families in owner-occupied dwellings. The incidence of severe housing density was also similar for both groups. About 1 in 5 households had 12.5 square meters per person or less space. On one indicator--car ownership--private owners showed an advantage over public housing tenants (about 25 per cent of private owners but only 15 per cent of public renters reported owning a car).

These data cast doubt on the notion that the population of public renters is inherently a more problematic group in terms of ability to upgrade housing. However, they are far from conclusive. In particular, these limited pieces of information say nothing about possible differences in attitudes between owners and public tenants nor about the problems arising from the incentives built into the system of public housing.

According to results reported in Table 4.3, high concentrations of public rental units in neighborhoods did limit the success of Project Renewal's sales program. Estimates from the regressions indicate that a 10 percentage point higher share of public rental units was associated with a neighborhood having 1.5 percentage point lower rate of sales of public units. This is a high response, given that the average purchase rate was only about 7 per cent and that the share of public rentals varied

widely.

To examine the attitudinal and structural problems possibly underlying the high concentrations of public units in renewal neighborhoods, we asked physical project managers whether the existence of such units made it more difficult for them to upgrade their neighborhood. Of the 40 managers who responded to the questions (covering 42 neighborhoods), 35 managers (involving 37 neighborhoods) reported that indeed, public rentals did create barriers to turning around the neighborhood.

Managers cited several specific problems. More than one-third pointed to difficulties related to tenant attitudes and norms, especially in their dependency on others. About one of four managers mentioned the negative impact of public housing tenants on the enlargement program. Since public housing tenants often live adjacent to individual families or groups of families who want to enlarge, their non-participation in the enlargement effort can raise the average cost of the other enlargements or lower the aesthetic quality of the enlargements or prevent them entirely. Our analysis in Chapter 3 indicated that a neighborhood's having a high share of public units did not affect the rate at which private owners enlarged. However, the neighborhoods with high concentrations of public units tended to have a smaller share of the total housing stock upgraded.

A third problem cited by managers was the impact on do-it-yourself external renovations. Recently, the Ministry of Housing has altered its approach to financing external renovations. In the past, the Ministry used a discretionary approach that required only low contributions from residents; now, the Ministry focuses virtually all of its assistance for external renovations on buildings in which residents are willing to pay for about half the costs. Although this new approach has apparently

stimulated increased efforts on the part of neighborhood residents and has been viewed as a fairer way to allocate resources, problems do arise when the willingness of private owners to finance their share of assistance is frustrated by the unwillingness or inability of public tenants to do so. While only six of the 40 managers mentioned this specific problem, this may understate its true incidence both because we did not ask a direct question about such problems and because the shift toward do-it-yourself renovations is relatively recent.

The problems mentioned most frequently by project managers concerned the way the public companies managed their operations in renewal neighborhoods. The main examples cited were: the lack of aggressiveness in promoting residents to buy their units, the poor maintenance of dwellings, bureaucratic impediments, and the absence of any special effort to coordinate their activities in renewal areas with Project Renewal's comprehensive neighborhood approach.

Chapter 5

The Impact of Project Renewal on Housing Prices

Through the Project Renewal strategy of addressing problems of low income Israelis on a neighborhood basis, the Government of Israel and the Jewish Agency have financed a wide range of projects in renewal neighborhoods. The hope has been that the impact of the overall program would have value beyond the benefits derived from such individual components as better roads, local community centers, and special education programs. While no one would discount the importance of helping families by providing specific goods and services, the larger aim was to generate new confidence in the neighborhood and to stimulate self-help activities by neighborhood residents.

There is evidence from other studies and from individual accounts that such effects have taken place.[1] Many neighborhood residents participate on local steering committees; others have contributed their own labor to renovating the exterior of their buildings; about 9,000 owners have invested their own money in enlarging their apartments; and a high share of renewal residents report that various aspects of community life have improved in the few years that Project Renewal has operated.

The documentation of these and other activities provide one way of evaluating the impact of Project Renewal. A more comprehensive and concrete approach is to assess the effect of Project Renewal on the housing prices in renewal neighborhoods. The differences in market prices of apartments by neighborhood are perhaps the best indicators of how people view the desirability of living in various neighborhoods. Locational differences

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[1]See the 1984 report of the International Committee for the Evaluation of Project Renewal.

are no doubt the main factor accounting for differences in prices of units of similar size and physical condition.

If Project Renewal were to exert a large impact on a neighborhood's quality of life, one would expect to observe neighborhood housing prices to be higher than they would have been in the absence of Project Renewal. Established families would be more likely to stay in the neighborhood; young people from the neighborhood who are forming families would be more likely to live in the area; and some from outside the neighborhood would be more likely to move into an area that has low house prices relative to the neighborhood's desirability. In the short run, one would expect these influences to raise the demand for housing and, in turn, the price of housing. Were the increased demand to generate an increase in the suppl of housing, the effects on prices would be lower than in the absence of a supply response. Yet, the demand shift should nevertheless cause an increase in the neighborhood's equilibrium price.2

This chapter estimates price trends in selected renewal neighborhoods and in some non-renewal neighborhoods. Although these results shed light on the program's overall impact on neighborhood desirability, it is not easy to interpret the results. Perhaps the most difficult problem is findi the appropriate basis for comparison. A simple comparison of renewal and non-renewal price trends does not necessarily show the impact of Project Renewal, since, in the absence of Project Renewal, prices in renewal neighborhoods might have risen faster, slower, or at the same rate as price in non-renewal neighborhoods.

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[2]An improved quality of life resulting from Project Renewal should shift the demand curve upward, causing it to move to a higher point on the supply curve. Assuming some upward slope to the supply curve, the equilibrium price will rise.

The next section discusses the price data and the methodology used in the price analysis. Section 5.2 discusses the results.

5.1 The Methodology and the Data

One confronts several problems in developing precise estimates of Project Renewal's impact on housing values. Ideally, we should determine Project Renewal's influence on the value of all dwellings in the neighborhood; however, data are available only on market prices on the units actually sold. Since the composition of units sold may be unrepresentative of the composition of the neighborhood's entire stock of dwellings, the trend in these prices may not accurately reflect the trend in overall housing values. The problem could be particularly serious when analyzing trends in low income neighborhoods. Suppose that prior to Project Renewal, very few units were valuable enough to be marketable but that, after a few years of renewal activity, a larger share of the stock could be sold. A look at trends in average prices could then prove misleading because the average price in the first period would have covered a smaller segment of the housing stock than the average price during the subsequent period.

One partial way to deal with the changing composition of units sold relative to the stock of all units is to control for such differences in the characteristics of units as size, year of construction, and whether the unit was a publicly-managed or privately owned dwelling. Our analysis

does control for these differences in the case of several neighborhoods.[3]

A second problem concerns finding the appropriate basis for comparing price trends in renewal and in non-renewal neighborhoods. In the absence of Project Renewal, would prices in renewal neighborhoods have declined relative to prices in other areas or would renewal neighborhood prices have maintained their relationship to prices elsewhere? Since renewal neighborhoods are low income areas that were declining before the program, one might suspect that renewal prices would fail to keep pace (in percentage growth terms) with prices outside renewal areas. On the other hand, house prices in renewal areas were well below prices in adjacent areas before Project Renewal and might not have worsened in relative terms without renewal.

A related issue is how to group renewal and non-renewal neighborhoods. On the one hand, estimates for each individual neighborhood are most revealing of renewal's true impact. On the other hand, the number of transactions is low in several neighborhoods, thus making it difficult to assess properly the reliability of the precise estimates.

A final methodological issue was the specification of the multivariate analysis. Because we were trying to determine how prices for specific kinds of units changed over time within neighborhoods, we related the prices (in percentage terms using the ln) to characteristics of the apartments and to the date of sales. We used the following two specifications of the price regression:

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[3]To go further and insure that the changing composition of sales did not bias estimates of price trends, one would first estimate the determinants of the probability of whether a particular unit was sold or not (over each period); and second, estimate the impact of time trends on prices, taking account of the possibility of a shifting composition of units sold. Carrying out such an analysis would require data on the characteristics of all units in the neighborhood and whether the units were sold or not. Since we did not have access to these data, we could not take account of this selection problem.

(1) Ln Price = a_0 + a1SQM + a2YR + a3PUB + a4MONTH, and

(2) Ln Price = b_0 + b1SQM + b2YR + b3PUB + b4M7980 + b5M8182 + b6M8384,

where Ln price is the ln of price in dollars;[4] SQM is the apartment size in square meters; YR is the year of construction; PUB is equal to 1 if the unit was sold by a public authority and 0 otherwise; and MONTH is the month number beginning in January 1979 as 1; and M7980, M8182, and M8384 are spline variables that represent months during 1979-80, 1981-82, and 1983-84.[5]

The use of spline terms in addition to the simple month variable was desirable for two reasons. First, it yielded separate results for the percentage change in prices by month during three discrete periods. Second, it helped deal with the fact that prices observed in some neighborhoods were concentrated in different periods from prices observed in other neighborhoods. Suppose, for example, prices drawn on neighborhood A were largely from the 1979-81 period while those from neighborhood B came mostly

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[4]The prices are in current dollars; that is, dollars at each month's date. Usually, this meant converting the shekel price into dollars by adjusting for the specific month's rate of exchange; in some cases, prices were recorded in dollar terms.

[5]The definition of the splines is as follows:

$$\text{M7980} = \begin{cases} \text{the month the transaction took place (1 = January 1979) for units sold from January, 1979 to December 1980;} \\ \text{25 (25th month) for units sold after December 1980;} \end{cases}$$

$$\text{M8182} = \begin{cases} \text{0 for units sold from January 1979 to December 1980;} \\ \text{(transaction month - 24) for units sold from Jan.1981 to Dec.1982;} \\ \text{20 for units sold after December 1982;} \end{cases}$$

$$\text{M8384} = \begin{cases} \text{0 for units sold from 1-79 to 12-82} \\ \text{(transaction month - 48) for units sold after 12-82.} \end{cases}$$

from 1982-84. Using only a simple month variable covering 1979-84 might indicate neighborhood B experienced a more positive price trend than neighborhood A when in fact the observed difference might have resulted from the more favorable national price trends in the 1982-84 period.

The results yielded estimates for all neighborhoods of monthly price trends over the entire 1979-1984 period and of monthly price trends during three periods: the pre-renewal (or early renewal) period of 1979-80; the period of 1981-82 (early renewal for most neighborhoods); and the period after 1983 (through much of the renewal activity to date). These outcomes reflected the interaction of supply and demand forces within and outside renewal areas. Most of the increases in the supply of housing in renewal neighborhoods came about as the project's enlargement program helped owners transform small dwellings into large ones. Little new housing was built in renewal neighborhoods, according to our survey of physical project managers.

The most time-consuming difficulty was to obtain data on adequate numbers of house values. Ideally, the data should have covered a representative sample of neighborhoods in Project Renewal, a matched sample of similar neighborhoods, and perhaps national or regional data. Unfortunately, we were not able to gain access to data on values of all units nor on transaction prices on all neighborhoods; thus, we had to adjust our approach and assemble data only on selected neighborhoods. Although our choice of neighborhoods was limited, we were able to include several neighborhoods where we knew extensive Project Renewal activity had taken place and several neighborhoods in which little enlargement activity had occurred. Finally, although most of the neighborhoods included are in the central district of the country (where most Project Renewal households

are), we did obtain data on 6 renewal neighborhoods in the southern district.

The data came from individual records of transactions in 18 renewal and 5 non-renewal neighborhoods as well as data published by the Central Bureau of Statistics on average prices of units sold by region and by room size. In the Tel Aviv region, we gathered and analyzed data on the following neighborhoods: Amidar and Histadrut (in Or Yehuda); Ramat Eliahu (in Rishon LeTzion); Ramat HaShikma (in Ramat Gan); Hatikva (in Tel Aviv); Jesse Cohen (in Holon); Neve Israel, Shaviv, and an adjacent non-renewal neighborhood of Herzlia; Ashdod Aleph and Bet and an adjacent non-renewal neighborhood (Ashdod Gimmel); Kiryat Ekron; and Tel Mond. The records drawn from transactions in these neighborhoods included information on the unit's size in square meters; the year the building was built; the date of the sale; and whether the unit was sold through a public company, such as AMIDAR or AMIGUR.

The data from the Southern district covered: Beersheva (Dalet, Gimmel, and a non-renewal neighborhood called Aleph); four development towns in Project Renewal (Netivot, Ofakim, Sderot, and Yeruham); and Arad, a development town that is not part of Project Renewal. Information on transactions in these areas included only size in square meters, date of transaction, and price.

5.2 Price Trends In Renewal Neighborhoods and In Areas Outside Renewal

The price trends across neighborhoods formed a complex pattern that is not easy to summarize. Tables 5.1 and 5.2 presents the results from 20 regressions on prices in 15 renewal neighborhoods, in four non-renewal neighborhoods, in three regions, and in the entire country. The monthly trends noted in Table 5.1 represent the average percentage change per month

between January 1979 and mid-1984. Assuming the monthly trends were constant over time, we derived an index showing the neighborhood price level in June 1984 as a ratio of the January 1979 price level (times 100). In Table 5.2, the numbers are somewhat more complex to interpret. The coefficients for M1979-1980 are estimates of the percentage change in prices during each passing month over the period between January 1979 and December 1980; thus, in the Gush Dan region, each month over this period reduced prices by an average .19 of 1 per cent; during the 1981-82 period, each passing month raised prices by 1.01 per cent. In Table 5.2, the value of the indices as of mid-1984 was derived by assuming constant monthly trends within each of the two year periods between 1979 and 1984.

The trends in Table 5.1 show that prices in renewal neighborhoods in the central region of the country rose much faster than average prices in the Tel Aviv, Central, or Gush Dan districts or than the nation as a whole. However, when prices in renewal neighborhoods are compared to adjacent non-renewal neighborhoods, the differences in trends appear smaller and less consistent. Note that prices in Bat Yam, a non-renewal neighborhood near Tel Aviv, rose much faster than prices in the Tel Aviv, Central, or Gush Dan areas. Still, all but one of the renewal neighborhoods in the same region experienced higher increases in prices than did Bat Yam. In Herzlia, prices in Neve Israel kept pace with price increases in an adjacent non-renewal neighborhood, but prices in Shaviv did not. On the basis of overall trends, prices in Ashdod's renewal neighborhood increased much more rapidly than prices in an adjacent non-renewal neighborhood.

In contrast to these positive results, prices in renewal neighborhoods in the South region did the same or worse as non-renewal areas. Prices actually declined over the 1981-1984 period in each of the six renewal

Table 5.1 Price Trends Between January 1979 and Mid-1984 by Area and by Selected Renewal and Non-Renewal Neighborhoods

Area, Neighborhood	Mean Price	Monthly Trend	Index of Change (January 1979=100)
National	$43,185	0.43%	132
Tel Aviv	56,611	0.56%	143
Central	38,640	0.46	134
Gush Dan	43,603	0.40%	129
Neighborhoods in Central District			
Project Renewal			
Or Yehuda	17,053	1.05%	195
Ramat Eliahu	21,784	0.95%	183
Private Units: Or Yehuda and Ramat Eliahu	21,737	1.06%	196
Jesse Cohen	22,662	0.73%	159
Hatikva	16,362	1.33%	233
Hashikma	25,193	1.36%	237
Non-Renewal Comparison			
BatYam	28,683	0.92%	180
Herzlia Project Renewal:			
Shaviv	24,406	0.70%	156
Neve Israel	21,083	1.98%	351
Herzlia Not PR	36,851	2.00%	355
Ashdod Pr Renewal	13,108	2.62%	523
Ashdod Not Renewal	15,960	1.53%	264

Table 5.1 Continued

Area, Neighborhood	Mean Price	Monthly Trend	Index of Change (January 1979=100)
Project Renewal: Rural Area in Central District			
Kiryat Ekron	$19,861	0.89%	176
Public Units in Central Project Renewal Areas	9,474	1.61%	215
Overall South	27,044	0.28%	120
BeerSheba Project Renewal:			
BeerSheba Gimmel	18,725	-0.20%	92
BeerSheba Dalet	15,504	-0.32%	87
BeerSheba Not Pr Renewal			
BeerSheba Aleph	25,045	-0.22%	91
Project Renewal			
Netivot	26,276	-0.66%	76
Ofakim	23,331	-0.25%	90
Sderot	22,222	-0.59%	78
Yeruham	21,150	-1.12%	62
Not Project Renewal			
Arad	31,975	-0.00%	100

Source: Regressions results based on equation (1), with data from sources described in Chapter 5.

neighborhoods in the South.

The results in Table 5.2 allow a more detailed assessment of price trends than the overall trends noted in Table 5.1. Looking first at the trends within the central district, one sees that price trends in the selected Project Renewal neighborhoods were about the same as in other places during 1979-80 period. Prices in renewal areas improved relative to non-renewal areas during 1981-82, but did no better (and in some places worse) than non-renewal areas over the 1983-84 period. The prices of private units in the Amidar and Histadrut neighborhoods of Or Yehuda and in the Ramat Eliahu neighborhood of Rishon LeZion are of major interest because of the extensive amount of renovation and enlargement activity in these neighborhoods. Over the 1979-80 period, prices did not change significantly in dollar terms in these areas. If anything, prices declined relative to prices elsewhere in the central district. In the 1981-82 period, however, these renewal neighborhoods experienced price increases that well exceeded the gains taking place in the central district as a whole. Prices continued to rise in Or Yehuda and Ramat Eliahu through the 1983-84 period, but at rates somewhat below those in the central district or in a specific non-renewal area, Bat Yam.

Using the indices from Table 5.2 based on the two year trends, one finds that price growth in renewal neighborhoods in the central region well exceeded national or regional increases. However, the advantage of these renewal neighborhoods disappears when their price trends are compared with those in Bat Yam.

In the two cities where direct comparisons of renewal and non-renewal price trends were possible, the results were mixed. Both during the 1981-82 period and the 1983-84 periods, prices in one renewal neighborhood in Herzlia

Table 5.2 Price Trends In Three Periods, by Area and Neighborhood

Area, Neighborhood	Months 1979-1980 COEFF	T-STAT	Months 1981-1982 COEFF	T-STAT	Months 1983-1984 COEFF	T-STAT	INDEX (1979=100)
National	-0.12%	-0.73	0.84%	5.18	1.41%	2.62	120
Tel Aviv	0.26%	1.22	0.85%	4.55	0.19%	0.61	134
Central	0.01%	0.03	1.06%	6.39	1.41%	2.55	115
Gush Dan	-0.19%	-1.16	1.01%	6.34	1.21%	2.28	113
Neighborhoods in Central District							
Project Renewal							
Or Yehuda	.00%	.00	1.41%	2.98	1.10%	0.94	167
Ramat Eliahu	1.22%	1.68	1.60%	3.87	-0.34%	-0.54	185
Private Units: Or Yehuda and Ramat Eliahu	-0.61%	-0.78	1.64%	4.90	1.19%	2.16	154
Jesse Cohen	-0.59%	-0.76	0.82%	1.97	3.33%	2.29	178
Hatikva	-0.77%	-0.25	2.96%	1.85	-0.50%	-0.21	154
Hashikma	0.72%	1.13	1.85%	4.59	0.45%	0.32	198
Non-Renewal Comparison							
BatYam	-0.11%	-0.36	1.35%	6.66	1.61%	3.61	174
Herzlia Project Renewal:							
Shaviv	0.78%	0.79	1.46%	3.06	-1.24%	-1.62	140
Neve Israel	0.04%	0.01	2.45%	2.83	2.54%	1.11	269
Herzlia Not PR	0.90%	0.40	1.96%	2.42	-0.66%	-0.58	221
Ashdod Pr Renewal	-5.53%	-3.37	2.11%	1.92	5.82%	2.02	104
Ashdod Not Renewal	-2.33%	-1.93	2.03%	3.79	-0.08%	-0.06	91

Table 5.2 Continued

Price Trends Based on Area and Neighborhood Regressions

Area, Neighborhood	Months 1979-1980 COEFF	T-STAT	Months 1981-1982 COEFF	T-STAT	Months 1983-1984 COEFF	T-STAT	INDEX (1979=100)
Project Renewal: Rural Area in Central District							
Kiryat Ekron	0.38%	0.44	1.46%	2.90	-0.17%	-0.19	151
Public Units in Central Project Renewal Areas	0.61%	0.73	2.55%	2.91			146
Overall South	-0.17%	-0.84	0.93%	5.36	0.77%	-2.70	106
BeerSheba Project Renewal:							
BeerSheba Gimmel			0.05%	0.03	-0.53%	-0.93	93
BeerSheba Dalet			0.37%	0.14	-0.94%	-1.19	94
BeerSheba Both			0.10%	0.07	-0.61%	-1.34	93
BeerSheba Not Pr Renewal							
BeerSheba Aleph			2.28%	2.04	-0.89%	-1.91	149
Project Renewal							
Development Towns in South			0.95%	1.17	-1.00%	-3.02	107
Netivot			3.06%	2.44	-1.58%	-2.79	160
Ofakim,Sderot,Yeruham			0.08%	0.07	-0.83%	-2.11	91

Source: Regressions results based on equation (2), with data from sources described in Chapter 5.

(Neve Israel) and the renewal neighborhoods in Ashdod increased faster than non-renewal neighborhoods in the same cities. In contrast, prices in another renewal area of Herzlia (Shaviv) neither rose as fast during 1981-82 nor fell as slowly during the 1983-84 as prices in non-renewal sections of Herzlia.

In the Southern district neighborhoods, where Project Renewal did not exert a positive impact on prices, the 1981-82 and 1983-84 subperiods differed significantly. All of the decline in prices took place in the 1983-84 period. In Beersheva, prices declined in the renewal and non-renewal areas at nearly the same rates during the 1983-84 periods, but the renewal neighborhoods did not experience the sharp price increases that occurred in a non-renewal Beersheva neighborhood. The development towns, especially Netivot, had favorable price trends during 1981-82 but also faced significant reductions in prices over the most recent period.

To summarize, the results indicate that Project Renewal's impact varied by region. In the central region, the presence of Project Renewal probably raised the value of dwellings above what would have taken place in the absence of the program. The gains for renewal neighborhoods were especially striking in the 1981-82 period and in three neighborhoods (Ramat Eliahu, Ramat Hashikma, and Neve Israel) where Project Renewal activity was extensive. In the Southern district, Project Renewal appeared to exert virtually no positive effects on prices. Only in one renewal location, Netivot, did prices rise faster than average prices in the South during the 1981-84 period.

CHAPTER 6: SUMMARY AND RECOMMENDATIONS

Project Renewal encompasses a group of programs aimed at improving the quality of life of Israelis living in low income neighborhoods. Begun in 1977, the renewal initiative has been unusual in attacking problems on a neighborhood as opposed to an individual or family basis; in providing a framework for generating new programs and invigorating existing ones; in emphasizing the interaction between social and physical factors; and in increasing self-help and resident participation in decisions affecting the allocation of funds by the government. With special funding from the Government of Israel and the Jewish Agency, the program has supported a range of activities, including the rebuilding of streets and sewers, the renovations of exteriors of apartment buildings, the building of community centers, and the enriching of educational programs. The program's neighborhood committees have served as a way of involving residents in planning and carrying out infrastructure improvements, such as fixing streets and lighting, as well as social and educational programs.

This evaluation examined directly one part of the renewal effort - the Ministry of Housing programs to stimulate the purchase of public rental units and to help private owners enlarge their dwellings. These programs addressed several genuine problems, such as:

* the chronic inability of the system of public rental housing to maintain dwellings in good condition and to bring small, old units up to the norms of standard housing;

* the high concentrations of public rental units in specific neighborhoods, a situation that often results in social problems, complicates renewal efforts, and causes owners to have low expectations about the future of the neighborhood; and

* a large number of small and crowded owner-occupied dwellings; this was mostly the result of government building policies that gave higher priority to expanding the number of apartments than to building units that would remain adequate in the future.

In addition to studying Project Renewal's housing programs, the report developed estimates of one indicator of Project Renewal's overall effectiveness - changes in housing prices in renewal neighborhoods relative to changes in other areas. Were Project Renewal's efforts to upgrade the social and physical quality of neighborhood life successful, one would expect to find fewer families leaving (including newly formed families of youth from the area) and more families entering the neighborhood. These factors should raise the demand for housing and ultimately increase prices faster than would have been the case without Project Renewal.

A major difficulty involved in conducting the analysis was the scarcity of accurate data on program activities and neighborhood characteristics. In a time-consuming effort that was aided by Ministry of Housing officials and others, we assembled a substantial amount of program and socioeconomic data on each neighborhood as well as housing price trends for selected neighborhoods. The report draws heavily on these data and presents much of the data directly in tables.

Until Project Renewal, housing policies in Israel had developed along three lines: planning and building of new neighborhoods; aiding specific groups of eligible families to buy or rent housing; and managing an existing stock of publicly-owned dwellings.

Housing asssistance was primarily aimed at two groups: families forming new households (mainly young couples and new immigrants) and who did not own their own dwellings, or families whose dwellings were

dwelling overcrowded (2.5 or more persons per room) or dilapidated. Underlying the housing assistance programs has been the idea of "housing solutions". This approach oversimplifies reality. Housing conditions vary enormously among those families defined as already having a solution. A family placed in a solution in the past may now be living far below today's norms of acceptable housing size and conditions. Other families may live at adequate or high levels, because they received more valuable aid in earlier periods, because they were placed in higher value communities, because they upgraded their own units, or because they lived in a public dwelling that happened to be well-maintained.

Whatever the definitions of housing need in traditional Ministry of Housing programs, it was clear that a substantial share of families in Project Renewal neighborhoods lived in housing that fell far below the norms of the nation. There was a concentration of high density apartments in apartment buildings that were often in poor condition. About half of renewal area families were renting public housing units, as compared to about 15 percent for the nation as a whole. Because the public housing companies were not maintaining these units effectively (in part due to the extremely low rent revenues available) and because tenants had little incentive to invest in them, many families were living in units that were deteriorating. All these factors meant not only poor housing conditions for individual Project Renewal families, but they also represented a problem for neighborhood families living in adequate housing. Living adjacent to a poor quality housing stock would naturally affect an owner's expectations and willingness to maintain and invest in his home.

In spite of these problems, the Ministry of Housing placed little

emphasis on helping those in existing, low quality housing, unless the families were in extremely crowded conditions. Most programs aided eligible families to buy housing, rather than upgrading existing housing.

The policies underlying Project Renewal suggest that the government has come to recognize that serious problems may beset individual families, even if they are not in one of the program categories presently eligible for housing loans and grants. For example, most families living in Project Renewal neighborhoods who already own an apartment have qualified for enlargement loans; this is true even though their housing conditions and density levels - while below national norms - were not so severe as to qualify for aid under conventional Ministry programs. The renewal policy not only takes account of individual housing problems that do not fit within standard categories, but also represents a shift toward the rehabilitation of existing housing. Adopting the renewal approach also implies an acceptance of the notion that some housing problems are neighborhood-wide and cannot be attacked simply on an individual basis. There is even a recognition that some of the neighborhood problems may have resulted from past government mistakes in the planning and building of entire communities.

We summarize the findings of the report concerning the loan terms for the enlargement program and the program to stimulate purchases of rented public dwellings, review the workings and success of these programs, and conclude with findings on the impact of Project Renewal on neighborhood housing prices.

6.1 THE LOAN TERMS

In our detailed analyses of the enlargement and purchase loan programs in Chapters 3 and 4, we found:

* the terms and value of the loan varied dramatically over time;

* some of the variability came about because of infrequent adjustments for inflation and some because of policy changes;

* the policy changes in the structure of the loans altered the burdens of different groups of owners for no apparent reason; the changes did not result from well-developed criteria for choosing the best way to allocate the costs of enlargements and for limiting the government cost of financing a particular level of subsidy;

* the combination of inflation and policy changes meant that owners enlarging at different times received vastly different subsidies; the level of subsidies began at moderate levels in 1980, increased substantially from mid-1982 to mid-1983, and declined sharply since mid-1983;

* estimates based on enlargements undertaken in Or Yehuda and Rishon Lezion indicated that, in spite of generous loans, at least half the financial burden of enlargements costing about $10,000 - $12,000 fell on owners and half represented a government subsidy;

* those interested in enlarging their dwelling or buying a public rental unit faced a high degree of uncertainty over the loan terms; with virtually no advance notice, the size of loans could rise by 40 to 50 percent or the adjustment could reduce the proportion of the total loans that were linked to the price index;

* the director of Project Renewal within the Ministry of Housing and his staff played virtually no part in decisions affecting loan levels and often were subject to the same uncertainty as residents; this meant that neighborhood project managers had little basis on which to advise residents about prospective changes in terms; and

* a shift from subsidized toward unsubsidized loans along with an increase in the overall loan level could have lowered substantially the cost to the government while having only a moderate impact on those enlarging their own home or buying a public rental unit.

6.2 THE ENLARGEMENT PROGRAM

Project Renewal stimulated a substantial number of enlargements. The rate of enlargements in renewal neighborhoods jumped from 231 in all of 1979 to 270 every month in 1983. By mid-1984, 9,000 owners - nearly 13 percent of all owners in renewal neighborhoods - had undertaken enlargements through the renewal program. Chapter 3 presents several findings about the distribution of enlargements across neighborhoods and individuals, including:

* enlargements took place in 7 percent of all dwellings in renewal neighborhoods constituting nearly 13 percent of all owner-occupied dwellings;

* the proportion of owners who enlarged (the enlargement rate) was highest in towns near Tel Aviv, Or Yehuda and Rishon LeZion, where almost half of owners enlarged, accounted for about one of four enlargements throughout the country;

* enlargment rates were generally low in renewal neighborhoods in Haifa, Jerusalem, and Tel Aviv, apparently because of restrictive zoning policies;

* suprisingly, accessibility to main centers seemed to have little independent effect on enlargement rates; the enlargement rate among owners in Northern and Southern development towns was above the national average; however, because of the high proportion of public rental units in these towns, the program's impact on the overall housing stock was small;

* the connection between enlargement rates and other components of Project Renewal varied; on the one hand, the enlargement rate was positively associated with the rate at which residents bought public rental units, with the proportion of dwellings in buildings that were externally renovated, and with the number of months that the current project manager had been in the neighborhood; on the other hand, the large variations in spending (per household) by the Jewish Agency and Ministry of Housing had no impact on neighborhood differences in enlargements;

* as intended, the enlargement program had its biggest impact on small dwellings; data from 41 of 80 neighborhoods revealed that 28 percent of enlargements took place in dwellings of less than 41 square meters, even though such units made up 9 percent of owned dwellings in the neighborhood; this meant that Project Renewal subsidies helped about 25 percent of owners of very small units to enlarge;

* among owners who enlarged, the level of government subsidies was similar, regardless of initial density: this is suprising, given the attempt to make loan programs most beneficial to those in the most crowded circumstances; still, Project Renewal subsidies were reasonably well-targeted because the owners taking any loan lived in much smaller units than owners who did not participate at all;

* owners generally invested a substantial amount of their own money in the enlargement; assuming that enlargements cost $300 per square meter, the present value of the owners' payments for enlargements in two large renewal neighborhoods was about $4,600 - $5,000;

* the increased values of dwellings resulting from the enlargements were similar to the costs of the enlargements in most neighborhoods; thus, the resource costs of the programs were largely offset by the added value of the country's housing stock.

6.3 ENCOURAGING TENANTS TO PURCHASE PUBLIC RENTAL UNITS

Our findings concerning Project Renewal's initiative to encourage the purchase of public rental units revealed:

* in spite of the availability of loans on terms that were especially generous in Project Renewal neighborhoods, the program did little to stimulate tenants to buy their apartments; the rate of purchase was slightly higher in renewal neighborhoods than in adjacent non-renewal neighborhoods, but the size of the difference was small (6.7 percent versus 5.8 percent) and unsystematic;

* a significant renewal impact on purchases did appear to take place in Or Yehuda, Eilat, Nahariya and Hatzor HaGlilit; in all four neighborhoods, the high purchase rates coincided with the onset of Project Renewal and enlargement activity was well above average;

* the possible effects of other elements of Project Renewal on the extent of purchases was also examined; the findings were that enlargement rates were positively associated with purchase rates, but that expenditures per household by the Jewish Agency and Ministry of Housing had no impact whatever; and,

* high concentrations of public dwellings appear to pose barriers to neighborhood rehabilitation efforts; one indication was that the higher the proportion of public dwellings, the lower were the purchase rates; more important, project managers reported that the presence of public rental units added to attitudes of dependency and complicated Project Renewal's enlargement and renovation programs.

6.4 THE IMPACT OF PROJECT RENEWAL ON HOUSING VALUES

The results of our analysis of housing prices in selected renewal and non-renewal neighborhoods in Chapter 5 revealed that:

* in several renewal neighborhoods near main centers, prices rose faster than in adjacent non-renewal neighborhoods between 1979 and mid-1984; the most striking relative price increases in renewal neigborhoods took place during the 1981-82 period;

* in renewal neighborhoods in the Southern district, prices either kept pace or fell behind prices in adjacent non-renewal neighborhoods; the exception was Netivot, a renewal area in which prices increased at a rate that exceeded the average increase for the South as a whole;

* thus, Project Renewal apparently did enough to increase the relative attractiveness of many neighborhoods near main centers; in Southern renewal areas, improvements resulting from the renewal program did not translate into increase in neighborhood house values relative to values in adjacent areas.

6.5 RECOMMENDATIONS

We shall conclude this report with several recommendations for improving Renewal's housing components. Specifically, we suggest:

<u>On the loan terms</u>:

* consider altering the terms of the loan programs to eliminate the unlinked components while raising the total size of the loans so that they cover higher shares of the costs of enlargements or the prices of public dwellings;

* develop criteria for the appropriate structure of enlargement and purchase loans and for the level of subsidies and then make them a stable element of the program;

* improve the coordination between the Ministry of Housing's Office of Project Renewal and the officials within the Ministries of Housing and Finance who determine the levels and structure of the loans;

On the enlargement program:

* build on the success of the enlargement program by continuing to make loans available within a clearer policy framework, while improving the administrative support provided to owners interested in enlargements;

* examine alternative options for relieving density and for renovating existing dwellings, such as allowing enlargement loans to be used for the purchase of adjacent apartments and joinings of adjacent apartments; in some neighborhoods, including those in outlying development towns, permit enlargement loans to cover new construction;

* retain the policy of making owners responsible for hiring and monitoring the building contractor, but widen the help provided to owners to assure that enlargements are built at an acceptable standard; examples include offering standard contracts that owners might use or adapt, adding supervisors to examine the quality of work, and developing an arbitration board to hear complaints and issue penalties for faulty work;

* examine samples of individual enlargements to assess quality, to improve the estimates of the minimum costs of construction, and to uncover other aspects of the operation of the program;

* have Project Renewal officials lobby in a responsible way for liberal zoning rules concerning enlargements; however, do not push towns to alter provisions of importance to them.

On the initiative to stimulate purchases of public rental units:

* raise the priority attached to the effort to stimulate purchases of public rental units;

* expand the administrative support provided to the purchase program at both the neighborhood and central office levels; require that officials at AMIDAR and other public companies do more to stimulate purchases and to work with neighborhood project managers to overcome problems in the purchase program;

* develop and announce a schedule for raising rents over time so that the public companies can maintain dwellings at higher levels and so that tenants have an increased incentive to buy their units;

* consider new approaches to overcoming the problems resulting from high concentrations of public rental units, including the possiblity of selling blocks of public units to developers who would pay the subsidized price, compensate existing tenants, and still develop profitable uses for the properties; and,

* require that AMIDAR and other public companies provide annual estimates of the changes in values of government-owned property; this could call attention to dimensions of the decline in an

enormous government asset.

On other aspects of Project Renewal's housing initiatives:

* develop and test new components that could address the particular needs of outlying development towns; the enlargement program is not especially appropriate for these areas;

* improve the data base for analyzing developments in Project Renewal neighborhoods; unfortunately, often basic data on purchases and on the stocks of private and public dwellings have been unavailable or inaccurate; at little cost, the Ministry of Housing could develop an accurate body of data, as well as extract data from its ongoing loan and construction programs taking place in renewal neighborhoods; these numbers are essential for any serious monitoring effort;

* monitor price changes in all renewal neighborhoods and in adjacent non-renewal areas in the assessment of the overall effects of each neighborhood's renewal program; while price trends are only one of several indicators, policy and administrative officials should pay special attention to areas with declining relative prices; and,

* hold formal meetings or forums at which specific issues in the renewal program are addressed by evaluators, managers and policy officials.

Implementing these recommendations could - without raising the program's overall cost to the government - lead to a significant improvement in the results of Project Renewal's housing initiatives. However, an overall effort to raise housing quality for low income Israelis requires addressing aspects of the nation's housing system that fall outside the scope of renewal itself. Most important are the problems embedded in the system of publicly-managed rental units, the economic stagnation of many outlying development towns, inefficiencies in the system of financing the purchase or upgrading of housing, and problems involved in government-initiated new housing. An important next step should be to undertake new analyses of how these policies affect housing conditions and of what changes in policy would improve the housing situation in renewal areas and throughout Israel.

The study demonstrates that Project Renewal's housing initiatives addressed real needs in a workable way, one that also proved cost-effective. It demonstrates the dramatic impact of Project Renewal in a number of neighborhoods where there was a fundamental revitalization of housing stock, with positive consequences for housing values and quality of life. At the same time, the uneven progress across neighborhods also emerges; indeed, the very successes emphasize what might still be accomplished in the remaining areas.

ג'וינט ישראל
מכון ברוקדייל לגרונטולוגיה
והתפתחות אדם וחברה בישראל

JOINT (J.D.C.) ISRAEL
BROOKDALE INSTITUTE OF GERONTOLOGY
AND ADULT HUMAN DEVELOPMENT IN ISRAEL

יוזמות הדיור של פרוייקט שיקום השכונות
והשלכותיהן על תנאי הדיור וערך הדירות

דפי דיון

רוברט לרמן
אליהו בורוכוב
דן עברון

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המכון

הוא מכון ארצי למחקר, לניסוי ולחינוך בגרונטולוגיה והתפתחות אדם וחברה. הוא נוסד ב-1974 ופועל במסגרת הג'וינט האמריקאי (ועד הסיוע המאוחד של יהודי אמריקה), בעזרתן של קרן ברוקדייל בניו-יורק וממשלת ישראל.

בפעולתו מנסה המכון לזהות בעיות חברתיות ולהציב להן פתרונות חילופיים בשירותי הבריאות והשירותים הסוציאליים בכללם. אחד מיעדיו הוא להגביר שיתוף הפעולה של מומחים מהאקדמיות והממשלה, עובדי ציבור ופעילים בקהילה כדי לגשר בין מחקר לבין מימוש מסקנות מחקר הלכה למעשה.

דפי דיון

נכתבים על-ידי חברים מצוות המכון ומתפרסמים להתייחסותם של אנשי מקצוע ומתמחים במדעי החברה וההתנהגות, עובדי ציבור ונבחרי ציבור, המשתתפים בעיצובם של המדיניות והשירותים החברתיים.

הכוונה היא להפנות תשומת לב לסוגיות חברתיות בעלות חשיבות לאומית לשם העשרת הדיון הציבורי לקידומם של המדיניות, ההסדרים והשירותים החברתיים.

המימצאים והמסקנות המוצגים בדפים הם של המחבר או המחברים וללא כוונה ליצג את אלה של המכון או של פרטים וגופים אחרים הקשורים למכון.

יוזמות הדיור של פרוייקט שיקום השכונות
והשלכותיהן על תנאי הדיור וערך הדירות

רוברט לרמן

אליהו בורוכוב

ודן עברון

דו"ח מחקר המוגש לועדה הבינלאומית להערכת פרוייקט שיקום השכונות. המחקר מומן בידי הסוכנות היהודית וממשלת ישראל.

ד"ר לרמן מרצה בבית-הספר ללימודים מתקדמים ברווחה חברתית ע"ש הלר באוניברסיטת ברנדייס, והיה חוקר אורח במכון ברוקדייל לגרונטולוגיה והתפתחות אדם וחברה בישראל. ד"ר בורוכוב מרצה באוניברסיטת תל אביב. דן עברון עובד עם מכון ברוקדייל.

תוכן העניינים

רשימת הלוחות

רשימת השרטוטים

שרטוט 4.4: הערך הנוכחי של ההוצאות בהווה ובעתיד על רכישת יחידה ציבורית כאחוז ממחיר הדירה: מחיר של 15,000 דולר לדירה, דצמבר 1982 - יולי 1984

שרטוט 4.5: ערך הוצאות הרוכש כחלק ממחיר הרכישה בשכונות הפרוייקט ובשכונות שאינן נכללות בפרוייקט: מחיר של 7,500 דולר לדירה, דצמבר 1982 - יולי 1984

שרטוט 4.6: ערך הוצאות הרוכש כחלק ממחיר הרכישה בשכונות הפרוייקט ובשכונות שאינן נכללות בפרוייקט: מחיר של 15,000 דולר לדירה, דצמבר 1982 - יולי 1984

שרטוט 4.7: גובה שכר הדירה החודשי בהשוואה לנטל החודשי הכרוך ברכישת יחידת דיור ציבורית בשכונות הפרוייקט ובשכונות שאינן נכללות בפרוייקט: מחיר של 7,500 דולר, דצמבר 1982 - יולי 1984

שרטוט 4.8: שכר הדירה החודשי בהשוואה לנטל החודשי הכרוך ברכישת יחידת דיור ציבורית בשכונות הפרוייקט ובשכונות שאינן נכללות בפרוייקט: מחיר של 15,000 דולר, דצמבר 1982 - יולי 1984

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