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ISRAEL RESPONSE TO SOVIET IMMIGRATION

Report Based on Fieldwork
December 1990

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PREFACE

Over 200,000 Soviet Jewish immigrants arrived in Israel in 1990. If the Soviet Union continues its policy of granting exit visas easily, it is expected that the number of immigrants will continue high, and that within three years, Israel's population will have swelled by 25 percent, from 4.4 million to 5.5 million.

With sometimes from 1,500 to 2,000 immigrants arriving daily -- entire families, generally well trained in professional occupations but few with immediate prospects of jobs nor facility in Hebrew -- the country must deal with the emergency needs at the same time it embarks on new programs that provide long-term solutions. The impact on all sectors of Israel society is enormous, perhaps none more visible and immediate than in housing. To assist the Government of Israel face this challenge, U.S.A.I.D. will facilitate the provision of $400 million in Housing Guaranty loans.

This report was prepared to document and explore the issues confronting Israel's housing sector at this critical time. The fieldwork for this report was undertaken in December 1990, a time of dynamic changes in Israel's response to the rapidly increased pace of Soviet immigration. A second report, "Major Policy Issues, Problems and Recommendations Affecting the Housing of Soviet Immigrants in Israel", should be read in conjunction with this study as a supporting document.

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PRINCIPAL ACRONYMS AND DEFINITIONS

AID	U.S. Agency for International Development
Aliyah	Jewish immigration to Israel
BOI	Bank of Israel
Dunam	about four acres
GOI	Government of Israel
HG	Housing Guaranty
ILA	Israel Lands Administration
MOA	Ministry of Immigrant Absorption
MOCH	Ministry of Construction and Housing
MOF	Ministry of Finance
MOI	Ministry of Interior
NIS	New Israeli Shekel
Olim	immigrants to Israel

1. INTRODUCTION

1.1 HISTORICAL BACKGROUND

On May 14, 1948 the State of Israel came into being. The development pattern in Israel before 1948 was characterized by a highly organized rural society, directly connected through its marketing and consumption institutions to the main urban centers.

In the early 1950s, a large inflow of migration drastically transformed the entire structure of Jewish society in Israel: from a population of 650,000 in 1948, to 1,404,000 in 1951; from predominantly ex-European in 1948 to 400,000 ex-Asian and African Jews (Ashkenazi) in 1951. Israel new pattern of development emerged from a relatively economically homogenous society in the pre-state period to a society sharply divided into two socio-economic classes: rich ex-Europeans versus poor ex-Asians and Africans.

Since reclamation of the soil and development of arid areas are major national objectives, the government directed new immigrants to rural and new development areas and discourage urban agglomeration. The masses of new immigrants who arrived in the early 1960s offered an exceptional opportunity to settle the remote and underdeveloped part of the country. However, they often lacked appropriate skills and financial resources and were inadequately prepared to meet the challenge of new town development.

Israel is basically an urban society, with some 90 percent of its inhabitants living in over 100 urban centers and three major cities: Jerusalem, Tel Aviv, and Haifa. Some of the ancient towns form part of spreading new cities. Many villages have gradually developed into towns and cities. Urban areas developed since independence in 1948, mainly in underpopulated areas, have been planned to accommodate the growing population, to draw industry and services to developing areas, and to create an integrated urban/rural economy.

The success of these towns depended on the development of industries and the access to social services. A considerable proportion of public housing has been erected in such towns to provide people with an incentive for living there; priority has been given to construction of roads, schools, hospitals and other community facilities in these areas.

Because of the high share of new immigrants (specially from African and Asian countries) in new towns, there was no urban-rural division in the socioeconomic sense, but there was a significant difference between the early villages and the new villages founded by immigrants.

By 1976 the Jewish population was preponderantly urban; only 9 percent of the total Israeli population lived in rural areas. The new towns which were supposed to become the cultural and economic centers for the surrounding rural areas could not compete with the old settlements or with the large cities a relatively short distance away.

The economic viability and growth of development towns remained heavily dependent on government efforts in employment provision and direction of migrant streams and investment capital. Development towns typically lacked a diversified employment base and were particularly sensitive to cyclical downturns in the Israeli economy. As a result, many development towns experienced sporadic growth and remained politically and economically weak vis-a-vis the established metropolitan areas.

In terms of housing, due to Israel's unique land tenure circumstances, a large part of the nation's site development and design process is not integrated with the residential construction process.

Current government housing policy is directed at creating a building industry that will be responsive to market forces. Much has been achieved in aligning the housing industry with market forces. However, under current development practices the building industry can only produce about two-thirds of the product, namely the building. This situation can become a real constraint when demand for new housing units increases abruptly (e.g., current Soviet immigration).

While government sponsored housing now represents only one-third of total housing production, government sponsored site development probably accounts for about 90 percent of all building site activity. The remaining 10 percent occurs on privately owned land. Most of the private development is on a very small scale since very few large privately owned parcels are available for development.

1.2 RECENT EVENTS

A fundamental principal of the State of Israel is that any Jew has the right, and indeed is welcome and desired, to live in Israel. As a consequence, Israel's growth since its creation in 1948 has resulted from successive waves of immigration, first East Europeans in the late 40's, North Africans in the 50's, Soviets in the 70's and currently in very large numbers from the Soviet Union in 1989 and projected into the 90's.

From nearly 13,000 Soviet immigrants arriving in Israel in 1989, of which nearly 55 percent arrived in the fourth quarter alone, the pace has accelerated dramatically. In 1990, 17,537 Soviets arrived in the first quarter, 32,452 in the second quarter, 50,546 in the third quarter, and nearly 100,000 will have arrived in the fourth quarter. Thus, in 1990 alone, over 200,000 immigrants will have arrived. Given the economic and political situation in the Soviet Union, there is every reason to believe that the immigration will accelerate to 350,000 to 400,000 per year in 1991 and in 1992. Current estimates (and they have increased regularly throughout 1990) suggest that when the wave subsides, Israel will have experienced a 25 percent increase in its total population -- from 4.4 to 5.5 million persons -- in a period of three to five years.
The impact on the country as a whole is enormous -- on the economy, on job creation, on financial resources, on education, on health, on the entire social fabric of the society, and of course on housing.

The sequence of immigrant housing is first, being housed with friends and family, doubling and tripling up in rented units, or in absorption centers, then moving to their own rented units on the private market or in public housing, and ultimately purchasing their own unit (an apartment unit in a multi-unit condominium). The current pattern of housing Soviet immigrants, consistent with Israel's experience with the previous wave of Soviet immigrants, shows that most of any newly constructed units will not be occupied by the immigrants. When they do purchase a unit, the vast majority are unable to afford and indeed do not buy the more costly newly constructed units, but rather resale units as those become vacated by higher-income groups who improve their housing situation by buying new units.

Consequently, to accommodate the housing needs of the entire country, and in response to the demand for units swelled so dramatically by the new immigrants, about 300,000 units must be developed in the next three to five years.

The demand on housing production comes at a time when the construction industry -- having responded to earlier dramatic growth -- has suffered with greatly reduced demand and consequent bankruptcies. The construction industry's share of GNP fell from 17 percent in 1975 to 10 percent in 1989, and the housing share of the construction industry fell from 50 percent of construction activity in 1974 to 42 percent in 1989.

AID assisted the GOI during the 1970's by guarantying $200 million of HG loans (eight loans of $25 million each). That loan program was accompanied with technical assistance in selected policy areas that resulted in important changes in GOI housing policy.

As the magnitude of the current immigration became more apparent, the U.S. Congress authorized AID to utilize the HG program to guaranty $400 million in loans to be used in support of GOI programs to provide housing for the new immigrants.

1.3 REGIONS AND SETTLEMENT PATTERNS

The position of Israel at the eastern shore of the Mediterranean Sea and near the great desert belt of the earth forms the dominant feature of its climatic character: a zone of transition between Mediterranean and desert climate.

Israel is part of a subtropical zone which knows only two climatic seasons with short periods of transition: the warm and dry season (summer) and the cool and wet season (winter). The great differences in the distribution of temperatures and precipitation create a wide variety of climatic conditions within the relatively small area of the country, and sometimes sharp transitions from one region to another.

The soil of Israel reflects the climatic conditions of the country as well. Israel, in spite of its small size, offers a variety of landscapes. The reasons for this phenomenon are the relative proximity of the rift valley to the sea, the corresponding uplift of the intervening mountain block, and the climatic boundaries which cross the country from north to south as well as from east to

west. Secondary natural factors are the differences in rock type and the resulting differences in erosional forms.

The definition of regions in Israel in terms of natural conditions is predominant over any other characteristics of the social environment. Israel is a land of immigration from all parts of the world. There exists no ethnic regional grouping because the immigrants were dispersed over the settled areas without regard to their origin.

Four different regions can be defined in Israel:

- **The North** contains the bulk of Israel's Arab population. It includes the Jordan River and its valley; upper Galilee; Hills and basins of lower Galilee; the Yezre'el valley, the coast of Galilee, the Carmel Range, Haifa (Israel's main port). Its climate climatically belongs entirely to the Mediterranean zone, and no part of it is affected by arid conditions.

- **The Center** is divided into the occupied territories (65 percent) and the original Israeli territory (35 percent). It includes the Sharon Plain, the Conurbation of Tel Aviv, the Yarqon-Ayylon region, the Judean Plain, the Shefela, Jerusalem Corridor. This region contains all the Arab population of the former Jordanian territory and two thirds of all the population of Israel. Its climate is mainly Mediterranean, but in the south it is transitional to semi-arid, and its eastern fringe is arid.

- **The South** is the widest part of Israel, and its natural landscapes cover larger areas and distances. The dominant factor is the desert, and only on its northern fringe semi-arid conditions prevail. Topography, erosional forms, and vegetation reflect aridity, and human occupation is still groping for the best means of land utilization. This region includes the Northern Negev, the Central Negeg, the Rift Valley, the fold Mountains, the Dead Sea.

- **Areas of Mandatory Palestine**
  - Judea and Samaria
  - The Gaza Strip

1.4 POPULATION

Major Cities Population: (1989)

Jerusalem	493,000
Tel-Aviv -- Jaffa	318,000
Haifa	223,000
Holon	146,000
Petach-Tikva	134,000
Bat Yam	133,000
Rishon Lezion	124,000
Netanya	118,000
Ramat Gan	116,000
Beersheba	113,000
Bnei Brak	109,000

Population Density: 519 inhabitants per square mile (1987)
Population Distribution: 91.0% urban (1988)
High Income in Urban Areas: 78.3%
Population Growth Rate: 1.6% per year (1988)
Projected population for the year 2000: 5,238,000

Other Indicators

	25-30 years ago	15-20 years ago	Most recent estimate
Area-thou.sq.km.	-	-	20.77
Density per sq.km	123	166	211
Agricultural land-% land area	58.8	59.7	60.5
Forest and woodland-thou.sq.km.	0.99	1.16	1.10
Deforestation rate (net)-annual %	3.1	1.8	0

The present population in Israel is characterized by an early exodus of the Arab population after Independence, and by a continuous migratory flow to Israel. The Jewish population of the State of Israel on the day of its establishment was estimated at 650,000. The first population count taken on November 1948 showed the Jewish population of Israel as 716,700.

Since then the Jewish population of Israel has more than tripled within 20 years, the increase due mainly to immigration from all parts of the world. The strongest immigration wave immediately followed the creation of the State, doubled the Jewish population in 3 years.

The growth of population by net immigration accounted for more than half of the total population increase in the periods of high immigration, but only 2030 percent in years of low immigration.

Israel's 1988 population of 4.4 million people, by country of origin and religious background, in percent

Other European Jews	17.9%
African Jews	17.7
Native born Jews	17.5
Asian Jews	16.8
Moslem	14.2
Soviet Jews	6.5
North and South American Jews	5.3
Christian	2.3
Druse and Other	1.8

Population Data (thousands)

1968	2,803
1973	3,278
1978	3,690
1983	4,105
1988	4,444

2. INSTITUTIONS

Israel is an independent republic with a parliamentary form of government based on a multiparty system. Although Israel does not have a formal written Constitution, it relies on a number of basic laws, which taken together constitute the fundamental law, called the Knesset (a 120-member unicameral legislature).

The President, who is elected to a 5-year term by the Knesset, is the head of state. The President's functions are largely ceremonial, but they include negotiating with party leaders to resolve factional crises. Effective executive authority rests with the Prime Minister and the Cabinet, who are individually and collectively responsible to the Knesset and must retain the confidence of the majority in it. Because no party has ever had a majority in the Knesset, the Cabinets have all been coalition Governments, normally made up of 4 or 5 parties. The Knesset is elected by direct universal suffrage for a 4-year term.

Israel is a welfare state. The central premiss of the welfare state is that in certain situations it is the duty of the government to interfere in the spontaneous operation of the market. In Israel , for example, housing, free compulsory education, social and health security, etc. are all examples of such intervention.

2.1 MINISTRY OF FINANCE

The Ministry of Finance (MOF) is a cabinet-level entity that encompasses three critical functions, (1) budget planning and monitoring, (2) government contracting and borrowing, and (3) tax and other revenue raising activities. In addition, there are several regulatory boards or authorities that report to the Finance Minister, including the Commissioner of Capital Markets, Insurance and Savings and the Government Corporation Authority. The MOF is the primary agency for making contractual commitments for the GOI and is also responsible for formulating economic policy changes in conjunction with the central bank, the Bank of Israel.

The Budget Department is staffed primarily by analysts with a B.A. or an M.A. in economics. These people prepare a detailed budget for the coming year and monitor the expenditures under the current budget, much as OMB does in the United States. Because of the often punishing work schedule, low salaries and the valuable experience that working at the Ministry of Finance provides, most of the junior staff leave for the private sector within ten years of their starting.

The Office of the Accountant General oversees all of the contracting and debt financing of the government, exercising a general power of attorney to do the government's business. It is staffed primarily by people with MBAs and law degrees.

The Revenue Department oversees collections under the income tax, property tax, customs duties and the VAT.

The Commissioner of Capital Markets, Insurance and Savings oversees a relatively small department that has played an important role in liberalizing the financial markets in Israel since 1985. By progressively relaxing regulations that previously diverted nearly all funds to government control, the GOI has attempted to prepare the financial basis for the private sector to make most of the investment decisions associated with housing and employing the wave of immigrants.

All of these offices are staffed with capable and dedicated people. In fact, the general level of organization and performance matched that of comparable agencies in the U.S. and far exceeded that in most developing countries.

2.2 MINISTRY OF CONSTRUCTION AND HOUSING

2.3 MINISTRY OF IMMIGRANT ABSORPTION

2.4 LOCAL GOVERNMENT

Israel's local government system is based on that which was in force during the British Mandate. From centrally funded grants and locally generated taxes, local governments provide water supply, drainage, roads, sanitation, fire departments, parks, sports, and cultural facilities. In the case of the massive new construction planned, the MOCH will finance the basic on-site infrastructure. Health, education, and social welfare services provided by local governments are mostly financed by the national government. There are 40 municipalities and 137 local councils in Israel.

2.5 MINISTRY OF THE INTERIOR

2.6 ISRAEL LANDS ADMINISTRATION

The ILA administers the 93 percent of Israel territory that is owned by the government. The ILA registers and controls lands, carries out contracts, plans and develops land reserves, assigns land for public use, agricultural use, and community settlements. The ILA operates as an executive branch of the national administration, and is budgeted as a commercial enterprise. It has a Planning and Development Division, an Urban Land Division, and an Agricultural Division.

2.7 AMIDAR

2.8 AMIGOUR

2.9 THE JEWISH AGENCY

The main function of The Jewish Agency is to support the Aliyah. The Agency is funded from international Jewry, and receives nothing from the central government. It pays the airfare and freight costs of new immigrants. It finances 25 percent of the GOI absorption basket. It maintains 50 absorption centers around the country (with a capacity of 10,000 beds), in which it provides a wide range of social services to promote the full integration of immigrants into society. The Jewish Agency indirectly owns Amigour, which manages 27,000 public housing apartments.

2.10 MINISTRY OF INDUSTRY AND TRADE

This Ministry is responsible for the promotion of industry, facilitating capital investments internally and from abroad through a number of "promotion paths". The Ministry's programs are in response to the rapidly increasing demand for jobs, and the changing skills of the population. The Ministry's investment guaranty packages are tied to three development areas of the country, so that there is are incentives for investments in lesser populated areas where much of the vacant housing stock now exists, and where much of the new housing construction will take place.

3. PERFORMANCE OF THE HOUSING SECTOR

3.1 1948-1960

The development pattern in Israel before 1948 was characterized by a highly organized rural society with sparse and scarce population. This situation changed considerably when on May 14, 1948, the State of Israel came into being. Since then, Israel has received large migration flows, changing considerably the settlement pattern of the country. After only its first three years, the State of Israel doubled its population.

One of the main problems faced by the new State was the lack of housing. By 1954, the Ministry of Labor initiated a housing program for the first large migration. These units were compact and inexpensive, and were insufficient to match the demand.

Due to the scarcity of housing and the lack of resources of the immigrants to buy apartments, government agencies, not market demand, became the judges for the equitable distribution of the available units. Some of the apartments were sold, although the vast majority were rented, based on a substantial subsidy.

3.2 1960-1970

Through the 1960's, immigration decreased considerably. Government housing was built for families either still residing in transit camps or living in substandard housing (with no toilet facilities, shared kitchens, etc.).

During this period, the Ministry of Construction and Housing replaced the Ministry of Labor's Department of Housing. Apartments were distributed according to a series of criteria or by lottery. For example, families wishing to acquire an apartment had to visit various agencies and present their case, describing particular problems to the officials. Depending on the impression of the officials, families were selected and placed on an eligibility list.

3.3 1970-1980

During this period, two major factors increased the demand for new housing units:

- The first generation of native Israelis was being discharged from the Army (period of the Six Day War), getting married, and looking for housing.
- Large number of migrants, especially from the Soviet Union, arrived to Israel.

The vehicle used for formulating government housing programs was the construction of housing with government intervention at every stage. In order to comply with the supply side, housing aid was given to the developers for building the required units. Thus, the total supply became a function of the amount of public housing being built. The financial vehicles were both direct budget expenditures, and financing from banks and pension funds.

This strict government intervention caused serious distortions in the housing market. For example, in addition to money, a purchaser had to have certain characteristics (e.g., young couple, immigrant, family living in overcrowded conditions, etc.) in order to buy an apartment in certain areas. Also, eligible groups made housing decisions contrary to what they would have since government subsidies meant that purchasers did not face the real cost of construction. Effective demand continually rose because of the large subsidy inherent in purchasing publicly-built apartments.

These policies created severe constraints in the distribution of housing which perhaps led to shortages in housing in economic and political terms but at the same time allowed an increase in the housing stock of Israel during the mid 1970's. Thus, this period was characterized by over construction accompanying a sense of shortages. By the years 1971-1975, 127,000 households were created, while the number of apartments built reached 284,000.

In order to reverse those trends, new housing policies were adopted to respond to instead of lead demand: individuals were given financial backing through government sponsored mortgages enabling them to purchase apartments. The choice of the apartment bought, regarding location and price, was left to the recipients of the government mortgages. These policies were key elements for GOI programs adopted during the subsequent years.

Such programs can be summarized as follows:

- Housing projects for young couples. This program made the distribution of publicly-built housing less arbitrary for young couples since it was based on objective criteria.

- A point system was devised according to information provided by the applicant regarding family circumstances in order to reduce dependency of eligible couples on government programs.

- Under the new point system, everyone was eligible for some type of government housing assistance, in contrast to former programs which were meant to assist primarily the underprivileged.

- During this period, for the first time the government granted mortgages for resale apartments.

Although these principles were set out in new programs in the 1970's, the new policies were not well integrated into the planning process, land policies, and tax system; they still remained serious bottlenecks to housing production.

3.4 1980-1988

After 1975, the Israeli construction industry contracted steadily. During this period, the number of starts and completions fell about 60 percent (i.e. 52,000 in 1975 to 19,000 in 1989). This decline in the production of housing units can be associated with the large stock of housing created during the early 1970's; decreased immigration experienced after 1979; and the rise in the real cost of mortgages once these became fully index linked. Many firms, including several of the largest, failed to adjust to the new market conditions, and were even more severely hurt by the cutbacks in public spending that began in 1983.

In 1983, the government made a number of administrative changes to simplify the mortgage programs. The entire process was standardized and a large part of the system shifted to many banking institutions which become responsible for processing applicants and giving mortgages. After introducing this measure, the Ministry of Housing became only responsible for determining the criteria for eligibility, amount of mortgage, and subsidy elements.

During 1985-1988, the average number of units started was reduced to 20,000 per year. Public sector construction in particular, which previously comprised 40 percent of the construction activity, was dramatically reduced to only 3,000 units annually, about a 37 percent reduction.

A recovery of the industry began in 1986, especially in the upmarket areas of the major cities, but the outbreak of the intifada in December 1987 caused major damage to the construction sector which became dormant again.

These factors plus the levels of hyperinflation (up to 400 percent per year by 1985) experienced in Israel forced many construction firms (including several of the largest) into bankruptcy. Others were saved by government assisted rescue packages, although their sizes were significantly scaled down. This period was characterized by a deep decline in the construction industry, and government contracts fewer and harder to implement.

3.5 1989-1990

In spite of the number of changes taken over the years by the GOI to improve the process of selling and purchasing housing units, serious constraints still affect the housing sector in Israel.

At present, Israel is confronting great pressure to provide housing to the most rapid flow of migration ever received by the country. This is taking place while the country lacks a strong construction industry as a result of the trends of the past decade. It has been estimated that Israel must increase its housing stock by 50 percent during the next three years in order to cope with the projected pace of Soviet immigration.

A period of transformation is occurring in the housing sector in Israel. Due to the pressing needs resulting for the large flow of Soviet migration, the GOI has adopted dramatic changes in their planning, contracting, and licensing processes.

Traditionally, conventional construction has taken about two years from conception to completion. Such a lengthy construction period under the present circumstances will increase the gap between demand and supply to unmanageable levels. Also, conventional construction is too expensive for purchase by either young Israeli couples or new olim and has made investment for rental uneconomic for investors.

3.6 GOI POLICIES AND OBJECTIVES

One of the main objectives of the GOI programs is to accelerate the rate of construction and to rebuild private sector participation in the construction industry. The average period of construction in Israel has been approximately 24 months per unit for the past several years. The average time needed to complete a dwelling unit in Israel depends not only upon construction management, availability of labor, scheduling and technological considerations, but also on fluctuation in the level of sales during the construction period. This is because a considerable proportion of units are sold on a pre-production basis; thus when sales slacken, developers are apt to slow the pace of construction in order to prevent a situation in which construction costs outpace revenues.

The Ministry of Finance and the Ministry of Housing have established a number of incentives oriented to increasing the participation of the private sector in the housing sector and to reduce the period of housing completion:

- The construction period is to be shortened through simplification of licensing and industrialized building practices.
- The Government has approved liberalizing of the rules for the allocation of land and the granting of building permits.
- More land will be made available for development.
- Tenders for construction of housing in the private sector are to be opened to entrepreneurs from Israel and abroad.
- Incentives are being offered to contractors to encourage construction of housing, including incentives for quick completion, guaranteed purchase, and financing. The amount of 1,000 shekels will be granted for every apartment which has been commenced within three months from the date of the Memorandum of Agreement or from the date of signing the 1990 Program Contract, which ever is earlier; commencement of construction within two months will entitle the contractor to 2,000 shekels for every apartment which was commenced.

GRANTS FOR THE REDUCTION OF CONSTRUCTION TIME

Amount of Grant (shekels)	Construction Time Countrywide	Construction Time Jerusalem
30,000	7	9
27,000	8	10
24,000	9	11
21,000	10	12
18,000	11	13
14,000	12	14
10,000	13	15
7,500	14	16
4,000	15	17

4. HOUSING FINANCE SYSTEM

The entire financial sector in Israel has been undergoing rapid changes for the last five years. The impetus for these changes comes from both the extreme inflation and financial dislocations of 1983 to 1985 and from the need to encourage economic growth after an 18 year period of stagnation. The fact of renewed massive immigration has increased the urgency and pace of reforms that were already under consideration.

The housing sector has benefitted from these reforms. As government has withdrawn from near-total control of long-term lending, the variety and cost of mortgage borrowing has improved and mortgage lending institutions have adopted a private-sector, customer service attitude. However, there remain problems, including the poor status of real estate as collateral, the difficulty of obtaining construction finance, and a poorly developed system of rental housing finance.

4.1 OVERALL FINANCIAL SYSTEM

Fortunately for Israel, the private sector has a strong propensity to save, generally in the range of 20 to 25 percent of GNP. This high rate of savings financed rapid growth in the 1950's and 60's. After 1973, increased defense spending created higher government deficits and absorbed a greater share of private savings. Large government deficits persisted until 1985.

As of 1985, the financial system in Israel was designed around the government. Most capital funds flowed into the government through various private and governmental entities, and then were allocated to borrowers by the government, sometimes through the same financial institutions. The purpose was not only to expedite the financing of government debt, but also to control the allocation of capital in the economy.

Since 1985, the government has steadily reduced its direct intervention into capital markets. Banks had been required to deposit over 90 percent of the funds gathered by longer-term savings plans (3 to 8 years in maturity) with the government. Provident funds, the primary retirement savings vehicle, faced a similar requirement. Life insurance funds were fully invested through the government. As of late 1990, the requirements on banks and provident funds had been reduced to 50 percent, and insurance companies have been given leeway to invest in a variety of areas, including mortgages.

The structure of the financial system as of the end of 1989 is indicated on the following table. Of the total of 162 billion NIS, about two-thirds is invested in government debt or deposited with the government.

FINANCIAL ASSET HOLDINGS OF THE PUBLIC, DECEMBER 31,1989 (NIS million)

Unindexed Short Term Assets	
Currency, Demand Reports	5,238
Time Deposits, C.D.'s etc.	11,603
Foreign Currency Deposits	8,647
Tradeable Bonds	8,908
Equity Shares	15,423
Indexed Deposits	30,825
Pension Funds, Provident Funds, Life Insurance	74,637
Other	7,135
Total	62,434

Source: Bank of Israel, Annual Report, 1989

4.2 MORTGAGE FINANCE FOR NON-IMMIGRANTS

Recent immigrants are eligible for large low-cost mortgages from government funds. All other Israelis are subject to a patchwork quilt of subsidized and market rate loans depending on family size, marital status, location of unit and other factors. Often special loans are "blended" with market-rate loans to help complete the financing package. Even with partial subsidization, however, most home buyers cannot afford mortgage financing for more than 50 percent of the cost of the house, because of the high cost of housing relative to incomes.

4.2.1 Mortgage Financing Institutions

The great majority of mortgage finance is through the "mortgage banks." A typical mortgage bank finances most of its lending out of its own funds, although it will also act as originator for government-funded loans. It raises funds by competing with other mortgage banks and the government itself for long-term funds available from provident funds, non-profit institutions and a few private individuals. Most of the funds are raised through long-term illiquid deposits, although some may also be raised through the sale of tradeable debentures.

In some ways, an Israeli mortgage bank operates similarly to a savings and loan in the U.S. It takes deposits and originates loans on which it is taking all credit risks. Mortgages are not sold off in "pass-through" packages to investors nor are there any explicit government guarantees on most mortgages, deposits, or other bank debt. However, the mortgage banks differ from the Savings and Loans in that they take in only long-term deposits and tailor their fund raising to match the maturity structure of their loan portfolio. The banks do not take on any interest rate risk.

Currently, there are nine mortgage banks in Israel. All but three of them are fully owned by a commercial bank and these six institutions hold over 87 percent of the total mortgage debt. Moreover, these commercial banks are all government-owned, because of government purchases of shares under a plan for bailing out speculators in bank shares in the mid-1980's. There are plans to sell these shares to the public and some of the mortgage banks could be sold separately at that time.

Insurance companies recently have made some efforts to originate mortgages directly. There are some indications that this has heightened competition in the field, although their share of the market remains small. The level of competition even between the major three mortgage banks (which encompass 73 percent of the market) appears to be fairly high, with mortgage design innovation and heavy advertising being the primary tools. Gross spreads and profit margins remain relatively high, especially considering the low administrative costs of raising funds from institutional investors.

4.2.2 Mortgage Designs and Rates

Israel has had a long history of relatively high rates of inflation (e.g., 23 percent compound rate from 1960 to 1980). Thus, it is not surprising that, over ten years ago, mortgage lenders, including the government, adopted indexation as the backbone of their mortgage design. Today, all mortgage loans are "linked" to the Consumer Price Index (CPI). Once the CPI is issued (about the fifteenth of the month, with a two month lag), all loan amounts are updated overnight and the new amount of principal and interest payment is calculated for automatic withdrawal from the borrower's bank account on the first of the month. Since all salaries are also partially or fully indexed on a monthly basis, payment shock is not a problem.

Mortgages can vary in term from ten to thirty years. Only government funded loans carry a term of 30 years, while most unsubsidized loans are for 10 to 20 years, and carry a fixed real rate of interest. Recently, mortgages have been offered which carry a rate adjustable after as little as one year, which could permit the mortgage bank to offer shorter-term deposits. (There are no plans to take on any interest rate risk.)

Long-term real interest rates have trended down in the last few years. Rates on unsubsidized loans have fallen even more because of the increase of lendable funds as the government permitted institutions to invest in other than government debt. Market real rates as low as 5 percent are available, but the average rate on longer-term, fixed-rate mortgages originated in September 1990 was 5.7 percent.

These rates seem fairly high, especially considering that neither real nor nominal (i.e., including indexation) interest is deductible for income tax purposes. This may be one reason why the conventional wisdom in Israel is to borrow as little as possible and to pay down a loan as soon as possible. Another reason is that the nominal rates available on shorter-term savings deposits are always negative in real terms, i.e., less than the rate of inflation.

It is important to note that, because mortgage banks wish to bear no interest rate risk, prepayment penalties are common. They are designed to reimburse the bank for any unexpected losses due to having borrowed long-term at a fixed rate and having the funds repaid early and at a time that rates on new loans may be lower. Essentially, borrowers cannot escape the rate at which they initially borrowed, even if they sell their house.

4.2.3 Underwriting Procedures

Until June 1989, the mortgage banks were making most of their loans using government funds and at terms dictated by the government. Thus, they have relatively little experience in establishing underwriting standards and procedures which balance the need for meeting customer needs against default avoidance. Competitive pressures have prompted some liberalization, but the Supervisor of Banks apparently stands ready to deter any significant erosion of the cautious standards of the past.

Underwriting has always centered around the securing of personal guarantors on a mortgage, not on the collateral value of the mortgaged property. The reason is that foreclosure takes significant time (about two years) and money, and ultimately may be stymied by the inability to evict the defaulter from the property. Guarantors have been used in a number of developing countries for similar reasons and with similar effect. If the borrower falls behind, even by a month, the guarantors are contacted by the lender and are expected to apply pressure to the borrower to pay. The borrower and all of the guarantors are subject to imprisonment for failure to pay. Because of this, delinquencies run less than one percent and unremedied defaults are very rare indeed.

Normally, five personal guarantors are required, usually drawn form the borrower's circle of friends and relatives. The guarantors must have good credit histories and monthly incomes at lease three times the loan repayment amount. The system leads to many people being guarantors for many different loans, and thus the system would fail in the event of a major economic contraction. But in the day-to-day course of dealing with unemployed or recalcitrant borrowers, the guarantor system is very effective.

Loan-to-value ratios tend to be no higher than 50 to 60 percent, both because of the high cost of houses and because bank branches cannot approve higher LTV's without review by higher supervisors.

The other major limitation is the payment-to-income ratio. For loans made from the bank's own funds, this ratio is usually limited to 25 percent of income net of taxes. This is low by U.S. standards, particularly since U.S. lenders look at gross income and because taxes in Israel may easily run 30 percent or more of income. However, this conservative approach may be warranted because the loans are indexed, which means that the payment-to-income ratio will not fall rapidly over time and could even rise in a period of declining real wages.

Loans are only made to borrowers with formal sector (i.e., verifiable) incomes. This excludes many smaller tradesmen and others with major unreported incomes. In addition, mortgage banks normally will not make loans with their own funds for

housing in the occupied territories (not including East Jerusalem). Loans in settlements are made only under special government programs.

4.2.4 Loan Terms

As noted above, the interest rate, maturity, and loan amount varies according to a large number of factors. A complete listing of all special government subsidized mortgage terms would be unnecessarily tedious. Those mentioned here encompass well over 90 percent of all such lending and are the ones relevant to the issue at hand.

a. **Market Rate**. This is the last, not the first, source of funding sought by an Israeli for a home purchase. However, market rate funding is extremely important, both as an indicator of the degree of subsidy that special government loans convey, and because many borrowers must supplement their entitlement under various government-subsidized plans with a market rate loan.

   Currently, such loans are available in any amount at linked rates between 5 and 6 percent, depending on the maturity (no more than 20 years), and possible variability, if any, in the interest rate. The underwriting criteria are as noted above, including five personal guarantors and a payment-to-income ratio not to exceed 25 percent on a net income basis. Payments include hazard insurance, but not property taxes.

b. **Young Couples**. The bedrock of the mortgage finance system is the "young couples" loan. The primary qualification is having been married after October 1970 ("older couples" are treated separately). It is a one-time entitlement that neither spouse can have taken advantage of previously. The loan can be transferred to another house if the couple moves and can be supplemented with a market rate loan.

   Within the young couples category, there are twenty different combinations of family circumstances and locations which determine the interest rate and amount of the loan. Most couples fall into the lowest category, with an entitlement of 39,000 NIS at 4.5 percent for 20 years.

   Special terms apply to couples with greater needs. Need is measured by a point-system, where points are based on time since marriage, number of children, and number of siblings of both spouses (competing for parents' assistance). Moderate amounts of points can boost the loan amount to 46,500 NIS. However, 37 percent of all couples garner enough points to get loans up to 78,500 NIS on much better terms: 0 percent real interest over 30 years. These terms result in a much lower monthly payment, essentially less than half that per NIS borrowed than at 4.5 percent for 20 years.

   Young couples buying a home in Jerusalem and certain agricultural cooperatives are entitled to 3,000 NIS additional to cover higher

construction costs. Young couples in which neither spouse has served in the Army (a small number, but including most Arabs) receive only two-thirds of the normal entitlement.

With most house prices being over 150,000 NIS and most couples entitled to special loans of only 39,000 NIS, it is customary for there to be a supplementary loan at the market rate, or a "location" loan (discussed below) to help bridge the gap. Even with this, it is relatively rare that more than 50 to 60 percent of the purchase price is mortgage financed.

The government subsidy is handled differently depending on whether it is shallow (4.5 percent loans), or deep (0 percent loans). The 4.5 percent loans are originated by the mortgage banks from their own funds. At that time, the government calculates the present value of the difference between the subsidized interest rate and the most recent market rate on mortgages with terms between 12 and 15 years (e.g., at 5.7 percent market rate, the subsidy is about 10 percent of the loan amount). This present value is set aside from current budgetary funds, but given to the bank only as it earns it.

The deep subsidy loans are made directly from government funds, which, at the margin, are coming from government borrowing on the credit market. If the same procedure used for shallow subsidies were followed, the subsidy element would be over 50 percent of the value of the loan. The government instead intermediates the funds itself with borrowing at 2 to 2.5 percent, and pays the mortgage banks a fee to service the loan of 10.5 percent of each payment. The present value of this fee (at the government borrowing rate) is about 7 percent of the loan amount, for a total present value of the subsidy (at the government borrowing rate), of about 37 percent of the amount of the loan.

c. **Older Couples**. Some couples which were married before October 1970 are entitled to a higher amount of loan and at better terms. Those with no children are treated the same, but with one or more children, the interest rate is 0 percent, and the loan can be for as much as 101,000 NIS (for those with six or more children). The same modifications apply for houses in Jerusalem and agricultural cooperatives, and for those who did not serve in the Army.

d. **Single Individuals**. Young single individuals (aged 27 to 34 and who have not owned a home) can receive a loan for only 26,000 NIS at 4.5 percent. After age 34, this increases to 39,000, the same as for most young couples. Similar adjustments apply for higher cost locations and Army service. No provision is made for a needs test.

e. **Single-Parent Families**. A special provision is made for single-parent families, whether or not having borrowed before. A loan of 60,500 NIS is available at 0 percent real interest, with additional amounts for higher-cost locations and also if disabled.

f. **Development Towns and Moshavim**. The next important category of loan is for those settling in development towns. This category encompasses most towns in the Galilee and the Negev, many agricultural cooperatives (moshavim), and most settlements in the territories. The amounts available under this category are not always greater than under the regular program, but the terms are deeply subsidized, at 0 percent for 30 years.

The larger program is for the safer of the development towns, the more advanced cooperatives and most settlements (including Ariel, but not including Male Adumin, which apparently does not qualify). The mortgage amounts range from 27,500 NIS for an individual to 55,000 for a family with up to two children and up to 74,000 NIS if six or more children. The monthly payments on these loans are quite low, but additional market-rate funding from banks may be difficult to obtain. Still, because the house prices are also much lower than in the central region or Jerusalem, these mortgages can constitute a major incentive to settle in these less desirable areas. For example, for most young couples with one child, they will be able to borrow 16,000 NIS more than otherwise, enjoy an increased subsidy (a grant equivalent of about 26,000 NIS), and live in a larger house than otherwise. This is the basic housing-related locational incentive to draw people to the edges of the country and into certain parts of the territories.

There are even larger loans (88,000 to 96,500) at 0 percent real interest for certain qualifying agricultural cooperatives (moshavim), development towns in the most dangerous areas (e.g. Quiriat Shemona), and also some more isolated West Bank settlements, such as Shiloh. These amounts cover a significant portion of the cost of housing in these areas and thus provide an inducement to live there as well as put a larger part of the financial risks of ownership in such places on the government.

g. **Other loans**. In addition to the types of loans noted above, there are subsidized loans for Druze villages and for home improvements for those living in overcrowded or substandard housing conditions.

h. **Location Loans**. An important source of supplementary financing is what is called the "location loan." The loans are for up to 40,000 NIS for the purchase of an apartment in a project sponsored by the Ministry of Construction and Housing (MOCH) and subject to a purchase commitment from the MOCH. The interest rate varies with the category of borrower. First-time buyers, whether young couples or not, can borrow 20,000 NIS at 0 percent and another 20,000 at 4.5 percent. New immigrants can borrow this extra amount on the same terms. Even investors who intend to rent the unit can borrow 40,000 at 4.5 percent. Thee loans are not available in the territories.

4.3 MORTGAGE FINANCE FOR IMMIGRANTS

Recent immigrants receive the largest loans on the best terms of anyone under the Israeli mortgage system. This is a one-time eligibility and can be exercised at any time within five years of arrival and on any home. The amount of the loan is currently limited to 74,500 NIS for families with fewer than three children, rising to 106,000 for those with five or more children. This is not sufficient without a major downpayment to buy even a modest apartment in the Tel Aviv area, but may be enough in less attractive housing markets. The amount for a single individual, 33,250, is much less adequate, although there is nothing to prevent two singles from pooling their mortgages.

While the basic loan amount may not be sufficient alone to buy an apartment, an immigrant is eligible for an additional 40,000 NIS "location" loan to purchase MOCH-sponsored new houses being built in most areas outside of Tel Aviv (but excluding the West Bank). With this extra amount, an immigrant family can often finance the purchase price of such units, up to the maximum of 95 percent allowed.

These are very affordable mortgages because they carry a real interest rate of 0 percent and a term of 30 years for all but the last 20,000 of the 40,000 NIS "location" loan. Thus on a total loan of 114,500 NIS, the monthly payments start at only 389 NIS. Such an amount is less than market rents and only about a third of the minimum wage of about 1200 NIS per month.

The basic mortgages are financed fully out of government funds, with the bank serving only as agent for a fee of 10.5 percent of each repayment. Of the additional 40,000 location loan, half comes from the government and half from bank funds at a 4.5 percent real interest rate.

The explicit cost to the government of the subsidized interest rate is the spread between 0 percent and the cost of government long-term borrowing (about 2 to 2.5 percent), plus the fees paid to the banks for administration. The present value of these costs (discounted at 2.5 percent) total about 37 percent of the amount of the loan. However, from the point of view of the market cost of mortgage funds of 5.7 percent, the subsidy is 52 percent of the amount of the loan. This subsidy will be higher on future loans if real interest rates rise in the next few years.

This subsidized loan is a major incentive for an immigrant to buy a house, especially a MOCH-sponsored unit. Moreover, the qualifications for the loan are reduced from the normal eligibility requirements; essentially the borrower and one of the three guarantors have to have jobs. Thus many immigrants will probably be in the home purchase market after about a year in Israel. On the other hand, employment difficulties and the option of a significant rental subsidy for a few additional years may delay such a step for many. In the past, about half of all immigrants did not purchase a home within the five year window of eligibility.

4.4 FINANCING RENTAL HOUSING

About one-quarter of Israeli households report themselves to be renters (versus 36 percent in the U.S.). Just as in the U.S., most of these households have relatively low incomes, or are young and not settled down. Renting is the ideal housing solution for an immigrant family until its employment situation has solidified. Thus, expansion of the privately-held rental stock is another goal of government absorption policy.

Of the approximately 250,000 rental units, about 140,000 are private rentals not subject to rent controls. These units have absorbed much of the immigrant influx so far, with a consequent sharp rise in rents, displacement of marginal tenants (e.g., students), and frequent doubling up of households. These units derive primarily from three sources: (1) a previous home that is not sold, (2) a unit purchased as an investment and (3) homes temporarily vacant while the owner is absent.

Most of the other rental units (about 80,000) are owned by the government or its agents (Amidar and Amigour) and are either older units taken over from Arab owners in previous wars or units bought by the government under guaranteed purchase programs. Given the government link, rents are usually far below market and, thus, mobility from the more desirable units is very low. Other units have been in markets in which demand had been very weak and thus were unoccupied at the start of the influx of immigrants. Many of these units needed renovation before they could be occupied and thus have been becoming available in the last year as renovations were completed.

Expansion of the private rental sector is important not only because it is the best housing arrangement for immigrants, but also because many of the government-sponsored units now being rushed to completion will be bought by the government and rented out by Amidar unless either they are purchased as investments or bought for owner-occupancy by an Israeli who then keeps his former home as an investment.

It appears that there is some chance that the private rental sector will expand. Mortgage financing for individual investors is relatively easy to obtain. Someone with a good credit history and a substantial job can borrow at market rate up to the amount for which the rent will cover the monthly payment (about half of the cost) with little difficulty. If someone purchases a MOCH-sponsored unit as an investment, a "location" loan of 40,000 NIS at 4.5 percent is also available.

The government is considering or implementing a variety of policy changes designed to encourage the private rental sector, including tax and financing changes. The most important are (1) a reward to developers who hold and rent out unsold units which are otherwise subject to a purchase guarantee, (2) the creation of closed-end mutual funds designed to invest in rental housing, and (3) the permission for provident funds to invest in rental housing. The government has also firmly resisted calls for renewed rent controls (only units built up to 1954 are subject to rent controls currently). However, not all in the government are opposed to expansion in the government-owned rental stock through

acquisitions under the guaranteed purchase program. Thus, developments in this area need to be closely watched for evidence that the private sector will instead show the required level of interest.

4.5 CONSTRUCTION FINANCE

Until 1985, developers received bank credit based on the general credit-worthiness of their business and not for a specific project. This led to misuse of the funds on speculative land acquisition and eventual bankruptcy of many firms. Since then, commercial banks have adopted the project-based finance approach used in the U.S., where it is the riskiness of the project that is assessed and monitored and funds are restricted to completion of only the specified project.

Construction finance is particularly risky because of (1) uncertainty over marketing the house, (2) uncertainty over the timing and expense of completing the house, and (3) the usual risks of fraud and incompetence. For all of these reasons, lenders like to see the developers have a significant stake in the success of the project. In the U.S., such a stake has been based traditionally on the value of land plus building approvals secured by the developer. Recently, there has been an increased emphasis on cash equity involvement.

Israel is proceeding cautiously in this area because of the prior problems and their lack of experience with project-based financing. Their general goal is to have the developer provide 15 to 30 percent of the costs of the project by a cash injection or collateral (such as land or property). This equity must go in first, followed by buyer deposits if possible. The remaining financing can be derived from buyers' deposits if possible, with the bank providing a completion guarantee only for a charge of between 1 and 2 percent. Alternatively, if buyer deposits are not sufficient, longer-term cash infusions during the period of construction will bear a 3 to 5 percent real rate of interest. Short-term bridging finance costs 1.5 to 1.7 percent per month <u>nominal</u> interest (about 21 percent per year). Banks further minimize their risks by prohibiting the builder from taking out any profit until all construction loans have been repaid.

Given the low amount of equity remaining in the industry after the losses of the mid-1980's, these equity requirements are a blockage to expanding construction of housing. The GOI is hopeful that its purchase guarantees applicable to most new projects will provide the banks the assurances needed to reduce equity requirements and accommodate more construction financing. So far the banks have not made much of an adjustment because they feel that the fixing of the price to be paid by the MOCH for completed units raises risks of construction costs rising too fast. The issue is under intensive review between the banks and the Ministry of Finance.

5. HOUSING MARKET SUBSIDIES AND CONSTRAINTS

A key to understanding how any housing market functions is the presence of governmental interventions, either in the form of subsidies or through regulatory constraints. Israel has numerous subsidies and constraints, but it has also been rapidly reducing them. The massive immigration is accelerating the trend away from government intervention in some ways, despite the more usual tendency to increase intervention during a crisis.

5.1 GENERAL HOUSING INTERVENTIONS

Governmental authorities traditionally have influenced or controlled nearly every aspect of housing in Israel. One of the most important aspects of this control is the governmental ownership of almost all land. Thus the supply of land for housing and the use of the land were administratively dictated. This seems to have prompted an expectation of constant scarcity of buildable land, because there was no responsiveness of land supply to market changes. In addition, conversion of land use from agricultural to urban was very difficult, making land even more inelastic in supply. The cost of developed land was further affected by the government monopoly on planning the site and installing the infrastructure.

All of these considerations tend to push up the eventual market value of what buildable land is made available. However, eventually the land was conveyed to the builder at an appraised value, not at a free market auction value. Thus it was possible that there was some "subsidy" in terms of a below-market appraisal. Considering the constraints pushing up market values though, the appraised value probably still exceeded the "free market" value in a less regulated environment, and thus housing costs were being pushed up on net, not subsidized.

Whether or not the land was overpriced relative to a freer market, building materials were almost certainly overpriced. Imports of some materials were administratively restricted and others were heavily taxed. Building procedures were also distorted by the usual building code problems.

On net, it is very unlikely that housing was priced above some free-market standard. However, recent efforts to accelerate the production of housing have removed some of these burdensome extra costs on housing. The GOI has attempted to flood the market with developable land and has cut the appraised prices of land to reflect what it sees as a much increased supply. In addition, the GOI has elected not to recover the cost of site development. Restrictions on the importation of most building supplies have been relaxed and remain in force only in the key area of cement. Thus there is some chance that the cost of government-sponsored housing is even less that the free-market cost and is thus on net subsidized. It is unlikely, though, that this net subsidy exceeds 10 percent of the market price.

Whatever the net subsidy situation is for housing prices, there is clearly a subsidy provided to most home purchases through their mortgage financing. As discussed in the section on housing finance, most borrowers are entitled to some

amount of mortgage financing at a concessionary rate, either 0 percent or 4.5 percent currently. For those paying 0 percent, the present value of their subsidy is significant, exceeding 50 percent of the amount of the loan. For those paying 4.5 percent real interest, the subsidy has a present value of about 10 percent of the loan amount. Since the mortgages of most non-immigrants do not exceed 50 percent of the value of the house, the net subsidy element through housing finance is usually less than 5 percent of total house value, less than the subsidy provided in the U.S. by the deductibility of mortgage interest.

5.2 SPECIAL SUBSIDIES FOR THE IMMIGRANTS

Immigrants have always received some special assistance upon arrival in Israel. The high level of immigration currently has forced several changes in the basic immigrant package. In the past, most immigrants were housed and schooled at special absorption centers, as well as receiving a variety of tax exemptions. Last year, this system was largely replaced by a cash living grant and a housing voucher. The housing voucher has now been consolidated into the cash grant and the total grant is proposed to be cut by 15 percent in 1991. After this cut, the real purchasing power of the cash payment, which should average about $10,000 per household in 1991, will be almost 30 percent lower in 1991 than in 1989.

After the first year, immigrants lose their general cash support and instead become eligible for unemployment compensation if not employed and rent subsidies if not a homeowner. The rent subsidies start at 375 NIS per month in the first year and decline to 250 NIS before terminating at the end of four years (the fifth year since arrival). At the same time, eligibility for the special home mortgage subsidy ends, so there remain no special subsidies available to the immigrant after the fifth year.

5.3 SETTLEMENT IN THE TERRITORIES

There appear to be no special incentives for Israelis to settle in the occupied territories. There are, however, conditions outside of the largest urban areas (Tel Aviv, Jerusalem, Haifa) -- in the less developed parts of Israel proper as well as the occupied territories -- that may attract Israelis to move and invest in those places. First, the cost of housing is lower. Second, mortgage terms are better. Third, jobs may be more readily available due to the subsidies available for investments in industry. Fourth, personal and corporate taxes are reduced.

All these serve to attract people to development towns in Israel proper and settlements in the occupied territories; in many cases, they can live in less developed parts of the country, while commuting to work in the large cities. Nevertheless, none of these conditions that attract people to places outside the large cities is any different for a Soviet immigrant than for a veteran Israeli, nor any different in the occupied territories than in the less developed parts

of Israel proper. For example, although steps have been taken to assure that Hebrew language schools and other facilities are available in the occupied territories, they are also available anywhere in Israel proper. In fact, one might expect that relatively few recent immigrants would settle outside the Green Line, because they do not need to leave Israel proper to benefit from a deeply subsidized mortgage loan.

6. FINANCIAL AND ECONOMIC ANALYSIS

Over the next few years, Israel will undergo an economic experiment never before conducted in an advanced economy. A 25 percent expansion in population and an ever greater increase in labor force will create major imbalances between supply and demand in many markets, most especially for housing and finance. The capacity of prices, wages, institutional arrangements and expectations to change markedly will be key to Israel emerging from the experience socially and economically stronger.

Thus the major challenge for Israeli economic policy will be to expand the capital base to support additional jobs and to encourage appropriate economic adaptation among both veteran Israelis and the new arrivals. Such adaptation has already been exhibited in the portion of the housing market which is most free of government intervention, the private rental market. As the immigrant influx grew, private rents were permitted to rise sharply. This engendered major changes in both supply and demand, with many vacant apartments not normally for rent coming on the market, many marginal renters (students, singles) relinquishing apartments, and many immigrants conserving space by doubling or tripling up. Difficult policy measures probably will be needed to bring such flexibility to other key markets.

6.1 SPECIAL CONSIDERATION

Clearly an enormous increase in plant, equipment, housing and infrastructure of all types will be needed. While some of this will be provided by the government, it is essential to the longer run health of the economy that private entities make most of the key decisions about where, what, and how much to invest. Unfortunately, private decision makers both within Israel and outside must factor in risks beyond those of their specific venture, involving the future of the economy and society as a whole.

Those risks can be put relatively succinctly. Israel would ordinarily rank very high as a potential investment site, with a diversified economy, good infrastructure, educated labor force, strong foreign debt position, and relatively free markets. The major drawback, excessive control by government and the labor unions, is not unusual in the world context. However, Israel is also surrounded by enemies and is located within the most volatile area of the world. There is relatively little it can do about these geopolitical risks, although there is some chance it could reduce the enmities surrounding it. In fact, the geopolitical risks are probably overwhelming except for the presence and commitment of the United States. Even with this commitment, but in the absence of explicit guarantees, the foreign sources of investment funds are relatively inelastic.

6.2 FINANCING REQUIREMENTS

The Bank of Israel is estimating a need of total net investment of at least 85 billion dollars over the period 1991-1995 to minimally endow new arrivals and the normal population growth with housing and non-residential capital. Twenty

billion dollars would go towards financing housing units, while the other 65 billion dollars is needed for infrastructure, plant and equipment. This is more than the entire GDP of 44 billion dollars for 1990.

Fortunately, the private sector has a strong propensity to save, primarily in the form of retirement savings schemes. The private savings rate has averaged about 20 percent, but sometimes some of that is diverted to government consumption. In fact, the government has usually run significant deficits. However, some of its spending should be classed as investments. On this basis, the budget, net of investment, had been in surplus for several years until 1989 and is projected to return towards surplus the next few years. In other words, even if the budget remains in deficit, the deficit spending will not exceed the investments being made by the government and thus going towards the $85 billion in cumulative investments.

If the private savings rate stays around 20 percent and the government savings rate returns to the positive side, domestic savings may be capable of financing about 75 to 80 percent of the total investment needs, without major disruption to the financial markets. However, even under such an optimistic scenario, there will be a large financing gap to be filled from outside sources. This gap is expected to peak in 1993, when the need for capital for job creation will peak. In that year, the BOI projection is for a foreign debt financing need, in addition to grants of all kinds, of 6.7 billion dollars or approximately 12 percent of GDP. The comparable amount for 1991 is only 1.8 billion dollars, climbing to 4.9 billion in 1991. Thus the prospect is for huge continuing needs to seek debt and equity financing abroad. It is within this context that the GOI will be seeking additional Housing Guaranty authority.

As noted above, Israel offers many advantages (and some disadvantages) to foreign investors, but also one major disadvantage: its geopolitical situation. To the extent that the latter risks prevent Israel from raising the needed funds from foreign investors, there will be increased pressure on its domestic capital markets. This pressure will increase domestic real interest rates to the point that domestic savings increases somewhat and certain capital demands are curtailed. Employment and wage growth will also lag, probably prompting increased out-migration and thus some reductions in capital needs.

6.3 CAPITAL ALLOCATION DETERMINATION

Given the huge investments pending and the potential for a major credit shortage, it is essential that scarce capital be allocated efficiently, with the most productive uses being pursued first and in a least cost fashion. Until relatively recently, this has not been the case in Israel. Most capital flowed directly through the government or indirectly with the benefit of explicit or implicit government guarantees. Since 1985, direct government credit activities have ended in all areas other than housing (although an extensive number of guarantees remain). The result is a growing reliance on private sector lenders to allocate capital among competing uses, based primarily on the usual standards of risk and return.

The key element in the decontrol of the capital markets has been the gradual reduction in the requirements for major investors, such as provident funds and banks, to invest in government debt and the conversion of such investments into tradeable securities. The steady increase in tradeable government debt has expanded the activity level of the security market and made government debt more attractive by making it liquid. The expansion in freely allocable funds has permitted mortgage borrowers and enterprises to compete directly with the government for long-term financing. Changes in security laws have also encouraged the formation of mutual funds for bonds and equities to directly tap the savings of individuals.

Further steps are needed to expand and strengthen the capital markets. However, there is some chance that the markets will be ready to accommodate the possible sharp increase in domestic credit demands if sufficient foreign inflows are not forthcoming.

6.4 OTHER MACROECONOMIC ADJUSTMENTS

Real economic growth has been lagging ever since the 1973 Arab-Israel War. Not only has there been increased diversion of resources into defense expenditures, but the rigidities and mis-incentives inherent in many of the economic arrangements in Israel have retarded the adjustments needed to renew the potential for growth. Thus there had been a need for economic reforms even before the expanded immigration, a need which will become an imperative if the economy is to successfully adjust to the impending shocks.

The continuing economic crisis came to a head in 1984 and 1985. In July 1985, the government adopted a comprehensive stabilization program, including cuts in subsidies, reductions in the government work force and expenditures, tax increases, and a reduction in the real exchange rate. Since then, total government expenditures declined from 72 percent in 1984 to 59 percent in 1989, and a budget surplus was run in three of the five years. Major reforms were effected in the capital markets and the foreign debt burden improved from 54 percent of GNP in 1985 to 24 percent in 1989.

Many additional reforms appear to be needed, none more so than in the labor market and in foreign trade policy. The government has been attempting to implement some of these, including relatively minor changes in the minimum wage and unemployment compensation. However, the Histadrut seems to view these reforms as basic challenges to its authority and has resisted with its considerable strength. If unemployment worsens, though, reforms may become more feasible.

The most far reaching reform would be to open the economy to the full forces of foreign competition. In such a competitive environment, domestic regulations, controls, monopolies and institutional arrangements come under intense pressure to move towards efficiency. The government has indicated acceptance of such a course, beginning with the replacement of all administrative barriers to imports with specific tariffs, which would then be phased out over a specific schedule, permitting domestic producers to plan accordingly. This approach would also greatly encourage the type of foreign investment mentioned about. But this

program seems to be in political limbo, perhaps awaiting a more opportune moment to be implemented.

6.5 FISCAL IMPACT OF THE IMMIGRATION

Even before the immigrants arrive, the Israeli budget and budget politics feel their effect. In 1990, the government moved cautiously, assuming for its April 1 budget that only 40,000 immigrants would need to be absorbed, and then coming back for an increase up to 150,000 and then 220,000 as the flow swelled and the prospects for continuation solidified. Most of the increased spending has been funded through expansion of the expected deficit from about 5.0 percent of GDP to over 7.0 percent, although some cuts and tax increases have also been adopted. The actual deficit will be even higher, because of the failure to accrue revenues from the planned sale of government corporations.

The budgets of 1991 and 1992 are going to feel the greatest impact of the Soviet immigrants, because (1) increases in outlays for short-term housing, mortgages, and purchases guarantees on new apartments and (2) a peaking of the first year support payments. The proposed budget has about 10 billion NIS more for the immigrants than did the original 1990 budget, for a total of 11 billion NIS or about 11 percent of 1991 GDP. Growth in other expenditures, especially for defense, is to be held to less than inflation, and the real value of the cash absorption package for immigrants is being cut by about 30 percent, so that the overall budget increases only about 7 percent in real terms. In addition, the VAT is to be raised another 2 percent (to 18 percent) and a surtax of 5 percent on income taxes has been proposed. Still the expected deficit will swell to nearly 10 percent of GDP and will be higher if, as is now expected, immigration rises to 400,000 people, instead of the 300,000 assumed.

The projected deficit is not as bad economically as it appears. Three-quarter of it will go for housing-related capital investment, including mortgages, caravans, purchase guaranties and rapid construction incentives. After netting out these and similar investment items, the deficit net of investment is project at 1.8 percent of GDP. This is relatively small compared with deficits between 1975 and 1985. However, financing it will still erode the ability of the recently liberalized domestic financial markets to provide the private sector ready capital at reasonable costs to finance the effort to employ the immigrants. Long-term interest rates have already begun to move up sharply in expectation of this. Thus, the government is intent on tapping foreign sources for as much as possible of its required funding.

6.6 IMMIGRANT SUBSIDIES AND COST RECOVERY

As noted above, about 11 billion NIS will be spent in 1991 to absorb immigrants. The largest single item in this is not the cash support for the immigrants, but rather 4.8 billion NIS for housing, including 2.7 billion for purchase obligations, construction incentives and other costs of rushing flats to completion through the private sector, 1.4 billion for direct construction of 16,000 flats (in 1990 and 1991), and 0.7 billion for temporary housing for up to 100,000 immigrants. Portions of these expenditures will be recovered through

later sales of units, but a portion also constitutes a major subsidy to the immigrants. Some of this subsidy can be recovered through charging immigrants market rents for the housing created, including the temporary housing. Unfortunately, government-owned rental units are rarely managed on a market-oriented basis.

The second largest component of the absorption budget is 2.5 billion NIS for deeply subsidized mortgages. Such a mortgage program is attractive because home purchases reduce the pressure on the relatively small private rental market, and the funds will be eventually paid back. However, with immigrant mortgages being subsidized down to a 0 percent real interest rate for 30 years, the long-run cost to the government is significant. With long-term government debt currently costing about 2.5 percent (but probably climbing in the next few years), the interest subsidy will run around 500 million NIS annually if 200,000 of the immigrant households take advantage of their mortgage eligibility. The annual amount seems small, but the present value of this cost over the 30 years is 10.5 billion NIS. Thus, it may be worthwhile examining this program for greater cost recovery, perhaps through a phase-in of a positive interest rate (either the 2.5 percent government borrowing rate or the 4.5 percent subsidized rate for young couples) over the first five years of each mortgage.

The third largest, and last major, component is the 2.2 billion NIS for the costs of direct absorption, primarily the cash grants for the first year. These funds are viewed as a reasonable gift to the immigrants to attract them to Israel and keep them at a reasonable standard of living. However, it would be feasible to convert the cash grants to a loan, even at a zero real interest rate. Whether this is worth the political costs is another question, since the total cost of supporting even 400,000 households in this manner is cumulatively only 8 billion NIS, a relatively small amount compared to the future taxes to be paid by these immigrants.

7. SOVIET IMMIGRATION

7.1 POPULATION TRENDS

In the early 1950's, a large inflow of miqration drastically transformed the entire structure of Jewish society in Israel: from a population of 650,000 in 1948 (when the State of Israel came into being) to 1,404,000 in 1951; from predominantly ex-European in 1948 to 400,000 ex-Asian and African Jews.

The Jewish population of Israel has more than tripled within 20 years, the increase due mainly to immigration from all parts of the world.

In recent years, the population of Israel has been influenced by Soviet migration. There are officially about 1.5 million Jews in the Soviet Union, but estimates put the actual number as high as 3 million. Soviet immigration to Israel has been very high during various period. For example, more than 64,000 people arrived in Israel during 1972-1973. However, during other periods -- mostly due to decisions of the Soviet government -- immigration has been curbed to the extent that in years such as 1982 to 1987 only a few hundred people per year arrived from the Soviet Union.

Current estimates predict that at least 1 million Soviet immigrants will arrive in Israel during the next several years. Presently the number of Soviet immigrants has been increasing on a sustained basis. In January 1990, 4,800 immigrants arrived in Israel; 11,015 arrived in June; 30,000 arrived during the month of December. A total of 200,000 are anticipated for 1990.

7.2 SOCIAL PROFILE OF THE IMMIGRANT FAMILY

7.2.1 Family Composition

- The average family size (2.8 persons) is relatively small when compared to past Soviet immigration. This is basically due to the large proportion of single individuals.

- Over 70-75 percent of the immigrants are married, while the unmarried represent about 9-12 percent of the total; the remainder are widowed and divorced.

- 24 percent of immigrants are under 18 years old; 7 percent are 19-25 years old; 13 percent are 50-59 years of age; 8 percent are 60-65 years of age; 13 percent are over 65.

7.2.2 Housing Trends

- According to a survey, during the nine months from August 1989 to April 1990, 1.8 percent of immigrants had purchased apartments, 13 percent hope to purchase an apartment within one year, while an additional 30 percent plan to purchase an apartment within two years after their arrival, 18

percent are expecting to purchase an apartment in their third year, and 18 percent are not planning to buy an apartment.

- The average area of an apartment bought by Soviet immigrants was about 10 percent less that those of other immigrants (78 square meters vs. 86 square meters).

- Earlier Soviet immigrants concentrated their purchases of apartments in Lod and Ramle. The two contiguous towns represented 29 percent of all home purchases by Soviet immigrants. Only five percent of Soviet olim have apartments in Jerusalem.

7.2.3 Employment Patterns

- A typical Soviet family of three will require 1.5 positions in the work force.

- 15 percent of those arriving in 1990 will require jobs in 1990-1991, the number in the work force will increase to 45 percent in 1991 and will stabilize at 60 percent by 1992 (of the local population, 51 percent are in the work force).

- At present there are 1.5 million adults in the work force. It is estimated that 1 million olim will require the creation of 540,000 new jobs in the next five years. This will require an annual growth rate in the economy between 8.5 percent and 10 percent (present rate 3.4 percent)

- After six months in the country, at least one member of 40 percent of Soviet families was employed.

- 85.6 percent of adult Soviet olim are skilled workers; 33 percent are university graduates. Within university graduates, 5.2 percent are physicians and dentists; 4.5 percent are nurses and other health care personnel; 30 percent are engineers and architects; and 8.6 percent are technicians.

- Soviet immigrants who can be considered economically and scholastically worse-off have settled in the smaller cities of the country. White-collar workers are mainly located in the large cites. Upon their arrival in Israel, relatively low-skilled workers who settled in peripheral areas are far better off in terms of income than the local population. Moreover, their income was on the average only slightly below Soviet immigrants who settled in the large cities in Israel.

- A survey of Soviet immigrants shows that 27 percent were unwilling to change occupations, while 31 percent were willing to work in other occupations on a temporary basis. 36 percent of the immigrants were willing to change occupations on a permanent basis.

- Some Soviet olim are trained in occupations not in demand in Israel; Soviet technology differs from Israeli technology in significant areas.

7.2.4 Incentives

- Olim leaving the Soviet Union are allowed to take out $150 per adult member of the family and personal belongings with the exception of antiques, valuable art, and jewelry.
- Transportation and freight costs for personal goods are covered by The Jewish Agency.
- All immigrants receive rent subsidies for a three year period.
- Funding known as the "basket of services" amounts to about $9,500-10,000 for a family of three for one year.
- At the airport, a married couple receives $250 in cash and a bank check of $2,100. In addition, the family receives $125 in cash and a bank check of about $308 per child according to the age of the child.
- $225 for each adult for Hebrew language classes (ulpan) is the only specified expenditure in the basket. The remaining funds may be expended according to the specific needs of the immigrants.

7.2.5 Absorption

- On arrival at the airport, olim are taken to a special arrivals hall where they are issued identity papers.
- Those who request places in absorption centers are referred to available places in one of The Jewish Agency's absorption centers where they are entitled to stay for up to six months. The cost of maintaining a family of three in an absorption center for six months is $5,000.
- Most olim choose to follow the "direct absorption" route, going directly to rental housing of their choice in the area of their choice. They will usually go to a location where they have relatives and friends.
- For those following the direct absorption route, the Jewish Agency and GOI cover basic expenses and ulpan in the first year.

7.2.6 Social Services

- 30-40 percent of all Soviet olim require social services of some kind.
- The elderly, who comprise 8.9 percent of the population of the population of Israel, accounted for 13 percent of the total number of Soviet olim in 1989 and required more than 50 percent of the total social services provided by The Jewish Agency.

- Olim are eligible for social services form the Jewish Agency for two years from the date of their arrival in Israel.

- Health coverage in the health plan chosen by the olim is provided by the Government for the first six months and continued an additional six months for olim requiring special assistance.

- Olim receiving social services are not required to pay even the nominal rent paid by olim in the first six months at an Absorption Center, and pay much reduced rents thereafter.

7.3 OTHER SOCIO-ECONOMIC CHARACTERISTICS OF PAST SOVIET MIGRATIONS

- By 1978, Soviet olim who came in 1974 and 1976 had already achieved a 20 percent higher per capita income than comparable Israeli urban salaried families.

- 96 percent of working age Soviet olim arriving in the 1970's were employed after five years.

- In the years after their arrival in Israel, income of olim is below that of the general Israeli population. However, with the passage of time, the income of immigrants surpasses that of the average Israeli population: 9-13 years after their arrival in the country, immigrant income was shown to be 11 percent higher than that of the general Israeli population.

- 1970's Soviet olim represent 23 percent of Israeli music teachers, 20 percent of Israeli doctors, and 16 percent of Israeli engineers.

- Present Soviet immigration has a much larger component of professional and technical personnel than previous Soviet immigrations.

- Only 9 percent of the Israeli population are in academic occupations while the present flow of Soviet immigrants contains 40 percent academics.

- The family size of Soviet olim is below that of the Israeli population.

- Formerly the population of single individuals ranged between 15 percent and 23 percent.

- 28 percent of Soviet olim owned an apartment within 1-3 years after their arrival in the country. By 4-5 years, almost half of the immigrants owned an apartment, with that figure reaching 55 percent for a period of 6-8 years after coming to the country. Within 9-13 years after their arrival in Israel, 64 percent owned an apartment. This figure is still less than the ownership percentage among Israelis, which in those years was 72 percent.

- The percent of immigrants in the 18-29 age group owning an apartment was twice the rate of the over-55 year old group.

8. HOUSING PRODUCTION

8.1 HOUSING INVENTORIES

By mid-1970, the number of new units constructed was greater than the number of new household formation. By the years 1971-1975, 127,000 new households were formed while the number of apartments built reached 284,000. Thus, housing inventories have had a positive balance for many years in spite of the decline in the construction industry of the last decade.

This over construction can be identified in terms of the rates of housing occupancy. In 1970, 7.6 percent of the Jewish families living in Israel resided in apartments where there were more than three persons per room. By 1988, that percent declined to 0.7 percent while 50.5 percent of the population was estimated to reside in densities of one to two persons per room.

By 1978, Amidar and Amigour had 16,009 vacant apartments, many of which were located in remote areas. This fact is related to government policies oriented to the development of new areas to discourage urban agglomeration. In this sense, the continuous flows of immigrants arriving to Israel has been seen by the GOI as a major opportunity to settle the remote and underdeveloped parts of the country. However, new immigrants often have lacked appropriate skills and financial resources to meet the challenge of new town development. The development towns which were supposed to become the cultural and economic centers for the surrounding rural areas have not been able to compete with the old settlements or the large cities a relatively short distance away.

8.2 PRESENT HOUSING TRENDS

- 60 percent of total housing units built or facilitated by the government will be built in the North and South of the country; 40 percent of total housing units will be built in the Center.

- 148,000 units will have been built in a two year period (1990-1991): 5,000 caravans, 9,000 prefabricated units, 45,000 units in 1990, 56,000 units in 1991, and 33,000 in campers.

- Normal housing demand in Israel is for about 20,000 new housing units per year. For 200,000 olim annually, the need for housing is estimated at an additional 45,000 housing units in 1990 and 60,000 per year for the next four years.

- 11,500 units have been started since April 1, 1990. Many of these units will be completed in seven months and meet the requirements for the incentive bonus.

- More than 30,000 temporary housing solutions have been located in kibbutzim, military rest and recreation homes and installations, public housing, public institutions, hotels and on the private housing market to be administered through Amidar.

- To meet the immediate and urgent demand for housing, the Government has decided to purchase 9,000 pre-fabricated homes as well as to provide land for the private sector to construct 6,000 pre-fabs; most of these will be imported, the rest imported.

- 8,500 public housing units will be renovated for rental.

- 8,000 units will be constructed through direct negotiation, outside the competitive tendering process; these contracts will not be under a purchase commitment, but rather direct orders.

- 20,000 units have been contracted within the tendering process. 5,000 caravans, 9,000 pre-fab. and 6,000 pre-fab. homes.

- 5,000 mobile homes will be installed: 2,000 in urban areas, 2,000 in rural settlements, 500 in universities, and 500 in kibbutzim. 2,000 units are produced in Israel and 3,000 imported. These units will be around 45 square meters.

- 33,000 campers for transit camps (same as mobile homes but half the size) will be built in the future; 40 percent will be produced in Israel, 60 percent will be imported.

- The present increasing demand by new olim has resulted in spiralling rents which forced some Israelis to evacuate to tent cities. Some 150 families remain in tents.

- New construction has been estimated at $650 per square meter; the cost of repairing vacant apartments is $3 per square meter; cost of transit camps units is $24,000 per unit; and cost per equivalent unit in interim facilities is $8,000 per unit.

ESTIMATED NEED FOR APARTMENTS FOR SOVIET IMMIGRANTS
(000)

	1990	1991	1992	1993	1994
No. of Immigrants	200	350	200	150	100
No. of Apartments needed (based on 4.2 persons/household)	48	83	48	36	24
Additional needed to reach 2.8 persons/household	-	-	23	42	23
Total	48	83	61	78	47
Cumulative	48	131	192	270	317

Source: Ministry of Finance and Ministry of Construction and Housing (Estimates)

ESTIMATED NUMBER OF UNITS PROVIDED FOR SOVIET IMMIGRANTS
(000)

	1990	1991	1992	1993	1994
Vacant apartments	50	20	5	5	-
Interim: hotels, military camps	1	8	3	-	5
Transit camps	-	25	5	5	-
New apartments	-	30	48	68	72
Total	51	83	61	78	77
Cumulative	51	134	195	273	350

DISTRIBUTION OF PRESENT AND PROJECTED HOUSING PLAN BY DISTRICT

CENTRAL DISTRICT

CITY	New Starts, 4/90 to 11/15/90 Israel	Occupied	Accelerated Construction	1991-1993
Natanya				2,800
Kadima				96
Rosh-Ha'Ayin	99			3.035
Petah Tikvah				994
Rishon Le'Zion	127			3,977
Lod	317			1,814
Ramleh	48			1,309
Nes Ziona				230
Rehovot	80			860
Modi'im (new town)				15,200
Gedera	29			613
Yavneh				1,355
Gan Yavneh				270
Ashood	422			17,688
Bat Yam	170			
Yehud	82			
Kefar-Sava	92			
Netania	316			
Kefar-Yona	90			
Tel-Aviv	56			
Alfeilmanashe		28		
Ariel		40		
Zofim		81		
Beit-Dagan	8			
SUBTOTAL	1,936	149		50,241

JERUSALEM DISTRICT

CITY	New Starts, 4/90 to 11/15/90		Accelerated Construction	1991-1993
	Israel	Occupied		
Jerusalem	953			9,935
Beit Shemesh	315			5,734
Kiryat Malachi	285			450
Kiryat Gat	650		1,650	5,050
Askehelon	889		2,300	9,500
Efrata		19		
Betar		136		
Ma'ale Adummin		43		
SUBTOTAL	3,092	198	3,950	30,669

HAIFA DISTRICT

CITY	New Starts 4/90 to 11/15/90	Accelerated Construction	1991-1993
Shlomi-Betzet		350	670
Ma'alot	30	2,600	2,630
Nahariya	274		290
Acre			700
Kiryat Yam	372		1,280
Kiryat Ata	22	700	1,930
Haifa	194		2,260
Tirat Hacarmel			2,450
Neher Te-Hanan	293		2,726
Pinner			1,050
Rechassim		1,370	1,370
Yokne'am	314	2,200	3,200
Zichron Ya'akov			200
Or Akiva			1,750
Pardess Hana			450
Hadera	188	600	1,600
Nesher			
Akko	68		
Kefar-Bialik	42		
SUBTOTAL	1,797	7,820	24,556

NEGEV DISTRICT

CITY	New Starts 4/90 to 11/15/90	Accelerated Construction	1991-1993
Netivov	246	615	3,080
Sderot	388	680	3,350
Ofakim	152	1,100	4,770
Beer-sheba	1,398	1,500	12,660
Dimona	40	500	4,240
Yerucham			2,810
Arad	151	630	2,560
Mitzpe Ramon		550	1,155
Eilat	485		6,450
SUBTOTAL	2,860	5,575	41,075

GALILEE DISTRICT

CITY	New Starts 4/90 to 11/15/90	Accelerated Construction	1991-1993
Kiryat Shmonah	8	1,000	
Hatzor Haglilit	11		154
Safed		1,020	3,046
Karmiel	799	418	3,257
Tiberias			450
Upper Nazareth			6,844
Migdal Ha'Emek			1,479
Afula	467		5,690
Beit She'an	24		600
Nazareth	64		
SUBTOTAL	1,373	2,438	21,520

TOTAL ALL DISTRICTS

DISTRICT	New Starts, 4/90 to 11/15/90		Accelerated	1991-1993
	Israel	Occupied	Construction	
Central	1,928	157	-	50,241
Jerusalem	3,092	198	3,950	30,669
Negev	2,860		5,575	41,075
Galilee	1,373		2,438	21,520
Haifa	1,797		7,820	24,556
TOTAL	11,050	355	19,783	168,061

The above represents planned units. MOF budgeting accounts for 110,000 of the 168,000 units planned (1990: 45,000 planned, of which 11,050 have been started; 1991: 56,000 planned; plus 9,000 prefab units).

In the Israel Land Authority's five year plan, published in October 1990, land use designations are shown for multi-family housing, single-family housing, commercial uses, industrial uses, public use, tourism, and other uses. The document shows detailed information and maps for land in six of eight regions in the country; nothing is presented for the occupied Gaza Strip nor the occupied Judea/Samaria region. There is information, however, on two regions which include annexed territory, namely the Jerusalem region, and the Northern Region, which includes the Golan Heights.

Location	Multi-family units	Single-family units	Dunams
Jerusalem (annexed)	7,681	1,258	3,136
Golan Heights (annexed)	0	73	2,432
Total annexed	7,681	1,331	5,568
Jerusalem Region	71,577	44,815	70,513
Northern Region	41,810	77,304	153,102
Total Regions	113,387	122,119	223,615
Percent Annexed of Total Regions	6.8%	1.1%	2.5%

In the Northern Region, the ILA has plans for 153,102 dunams, on which would be built 41,810 multi-family units and 77,304 single-family units. In the annexed Golan Heights part of that region, on 2,432 dunams (1.59%) would be built 73 single-family units (.09%) and no multi-family units.

In the Jerusalem Region, the ILA has plans for 70,513 dunams, on which would be built 71,577 multi-family units and 44,815 single-family units. In the annexed part of Jerusalem, on 3,136 dunams (4.4%) would be built 7,681 multi-family units (10.7%) and 1,258 single-family units (2.8%).

9. THE ECONOMIC ENVIRONMENT

While housing is a basic and immediately pressing problem for the GOI and the immigrants alike, employment is the most important issue. Growth in employment and the economy is necessary for the immigrants to afford housing after their first year's support payment runs out. It is also necessary to prevent major social dislocations among immigrants and veteran Israelis, as well as for Israel to have the capacity to repay its additional foreign debts, including the Housing Guaranty loan.

The prospects for strong economic growth are at least as uncertain as those for meeting the immediate needs for housing. Major economic policy shifts will be required, as well as a supportive international economic environment. If successful, though, the combination of expanded labor force and improved functioning could push Israel back on the path of very rapid economic growth.

9.1 RECENT DIFFICULTIES

The Israeli economy had been one of the most dynamic in the world during the 1950's and 60's. Population was expanding through several major immigrations and real growth averaged 9 percent per year between 1950 and 1972. This period of expansion ended with the 1973 Yom Kippur War, which prompted a major diversion of resources towards defense spending as well as marked the beginning of higher energy costs. In the period since 1973, the rigidities inherent in many of the economic arrangements in Israel have become more apparent and have prevented the types of adjustments needed to renew the potential for economic growth.

The continuing economic crisis came to a head in 1984 and 1985, when inflation soared and growth stalled. The budget deficit, exclusive of foreign aid, rose to 26 percent of GNP; inflation exceeded 400 percent; gross domestic investment declined from 31 percent of GDP in 1972 to 21 percent in 1984; and foreign debt rose sharply to 80 percent of GNP, with debt servicing peaking at 13 percent of GNP.

In July 1985, the government adopted a comprehensive stabilization program. The program included cuts in subsidies, price and wage controls, reductions in the government work force and expenditures, tax increases, and a currency devaluation. By 1988, this program had brought inflation back down as low as 16 percent, sharply reduced the budget deficit, and lowered unemployment. Unfortunately, all of these trends have reversed since then. Inflation has trended upward towards 20 percent again, led by increases in housing costs. Unemployment has risen sharply from 6.4 percent in 1988, hitting 10 percent in early 1990.

These setbacks are due partly to the start of the intifada in late 1987. Inside the Green Line, the intifada has disrupted the employment of Arabs from the territories, due to frequent strike actions, curfews, and increased security concerns of employers. It has also reduced the market demand for Israeli goods within the territories. The economic slowdown is also partly a

delayed response to the economic crisis of 1985. As a result of this crisis, easy access to government credit or implicit guarantees was curtailed and business investment was cut back. In addition, real interest rates remained relatively high until 1988.

Perhaps of greater concern has been the declining level of new investment. Total fixed investment other than in housing declined by 0.5 percent in 1988 and 5.5 percent in 1989. The investment climate has been further hurt by the intensification of the intifada and the onset of the Iraqi confrontation.

9.2 PROGNOSIS FOR GROWTH

Over the next few years, Israel will undergo an economic experiment never before conducted. If, as guessed, over a million Soviet immigrants arrive, the population will increase by about 25 percent and the labor force will expand by even more (since the immigrants exhibit a higher labor force participation rate). Such an influx will create major imbalances between supply and demand in markets from housing to haircuts and from engineering to piano tuning. For the economic system to adjust to such imbalances, prices, wages, and institutional arrangements will have to be very flexible. To adjust and yet maintain the current high standard of living, capital investments in plant, equipment, and infrastructure will have to expand at a matching pace.

Thus the key challenges for Israeli economic policy will be expanding investment and encouraging appropriate economic adaptation. The GOI has been proceeding at a good pace to do what it can to provide for the investment. It has accelerated its program of withdrawing from control of the capital markets, so as to let the private market allocation of capital become more sophisticated, and more accessible to private enterprises. It has also attempted to contain its fiscal deficit, and to seek external assistance in funding it, to keep from pushing up domestic interest rates. Liberalization has also occurred in the rules governing foreign investment and repatriation of profits. Unfortunately, investments in Israel involve a significant amount of risk due to its geopolitical situation that cannot be controlled by the government.

The GOI has been less successful in assuring that prices, wages, and institutional arrangements will adjust enough to accommodate the shocks to the system and to encourage investments. On the positive side, the GOI has resisted calls for emergency rent controls and has let rising private sector rents and house prices do their jobs of encouraging careful and full utilization of the scarce housing available. Unfortunately, it has not been aggressive about seeking appropriate rent changes in its own stock of rental units. It has also not opened up internal markets to foreign supplies to the extent needed to restrain price increases in goods such as cement and steel rods for housing construction.

The failure has been most pronounced in reducing rigidities in wages and institutional arrangements. A key problem in the past had been the practice of complete indexation of wages to changes in prices and the setting of wage increases through national or industry-wide negotiations. This was moderated by agreements in 1988 and 1989 to permit bargaining at the level of the individual firm and to permit automatic wage increases to cover only about half of the price increase. In spite of this, real wages have remained relatively inflexible. The GOI is currently in the midst of another round of negotiations over a variety of mild labor market reforms, including some exceptions to the minimum wage law. Unfortunately, the fragility of the current coalition significantly weakens the GOI's position in this area.

One proposal which would have a dramatic effect in all areas of economic life in Israel is to open up the domestic economy to greater foreign competition. The process would start with the replacement of the many administrative and quality restrictions on imports currently in place with a series of simple tariffs or taxes. The tariffs would then be lowered over the course of a pre-announced schedule, giving all domestic industries clear notice as to future increases in the competition they face. Under such a arrangement, enormous competitive pressures come to bear on both labor and product markets, and wages, prices and production efficiencies tend to be dictated by the foreign competition. The resulting reduction in the power of entrenched economic interests can facilitate the adjustments needed to absorb the new immigrants.

These issues will not come to a head until 1992 or 1993 because of the nature of the absorption process. Most immigrants require at least six months of language training and many also seek or require additional job-related training, to bring their skills up to Israeli standards. Thus, most immigrants are not seeking regular full-time employment until a year or more after arrival. (After a year, they also qualify for unemployment compensation if they cannot secure a job.) Thus, the large-scale competition for jobs between immigrants and veteran Israelis will begin only in late 1991 and will peak in 1993 if immigration peaks in 1992.

9.3 FINANCING NEEDS

The Bank of Israel estimates that a total of 600,000 jobs will need to be created between 1991 and 1995 to absorb all the immigrants plus the normal growth. This is four times the number of jobs required for normal growth of the work force. To provide the plant, equipment, and infrastructure to support these jobs will require about $65 billion in such investment over the period, on top of another $20 billion in housing construction.

Under relatively optimistic assumptions about domestic savings, the Bank feels that about three-quarter of these resources can be raised internally, without raising real interest rates to untenable levels. This leaves another $22 billion to be raised from foreign sources as either grants, loans, or equity investments. Of this amount, the peak need of about $6.7 billion will occur in 1993, when the largest number of immigrants enter the regular job market.

Thus there is a major financing crisis impending if foreign sources are not easily tapped. Domestic real interest rates could rise sharply to equilibrate the capital market and attract foreign capital. The real exchange rate could decline to create a balance of payments surplus or the government could slash expenditures or raise taxes. All of these adjustments may occur to some extent, but each could cause serious political and economic dislocations.

9.4 EMPLOYMENT AND INDUSTRY

Since 1974, Israel's economy has suffered chronic stagnation which resulted in high unemployment. Its economy suffers from massive budget deficits, heavy taxation, substantial government regulation and ownership of business, capital control, industrial and labor monopolies, price controls and numerous barriers for free trade.

At present, the Israeli economy has been stagnating, unemployment rates are 9-10 percent and inflation is higher than acceptable level for western countries. There is a need for measures which will create employment and stimulate economic growth without inflation.

During the last year, foreign direct investment totaled a few hundred million dollars, no more than a twentieth of foreign aid, which exceeds $4 billion. In 1989, fixed investment declined three percent, capital imports fell, industrial output fell five percent, profitability declined and private consumption per capita fell 3.5 percent.

To confront the employment needs of the one million Soviet immigrants will require the creation of 540,000 new jobs in the next five years.

One of the main objectives of the GOI is to accelerate the pace of growth in the national economy by attracting both foreign and local capital in order to augment the sources of employment. It has been estimated that Israel needs an annual growth rate in the economy between 8.5 percent and 10 percent (the present rate is 3.4 percent) in order to maintain the standards of developed countries.

The Government of Israel has introduced a new promotion plan in order to encourage capital investment. This plan is supported by the Capital Investment Encouragement Law by which Israel is divided in three distinct areas of development.

At the same time the government has set up a number of incentives by which investment risks will be shared by the government by granting guarantees for loans disbursed for business investments.

The grants are provided on fixed assets included in the project as approved by the investment center, as follows:

- Development Area A: grant of 38 percent of the fixed assets.

- Development Area B: grant of 20 percent of the fixed assets.
- Central Israel: no grants given, although state guarantees are provided for investments.

State guarantees will be provided on all investment items: building, machinery, equipment, start-up costs, working capital, marketing and advertising expenses, acquisition of technology, etc.

Government guarantees are provided against an investment in equity made by the entrepreneur (in cash or in tangible assets), at the rate of one third of the approved enterprise but not less than $100,000 in Central Israel, or $75,000 in a development area. With regard to the remaining two thirds of the investment, the government will provide a guarantee for a loan disbursed by an authorized financial institution.

The guarantee will be given a reasonable risk premium rate, not higher than 1.5 percent. The low interest rate will equal the cost of raising the capital plus the bank profit without risk.

Companies are given state guarantees plus full exemption from income tax and company tax for ten years if investments are made in area A; six years in area B; and two years if companies are located in Central Israel.

In addition, the government is agreeing to eliminate a number of procedures by which applications for approval of the establishment or expansion of enterprises will be provided within 12 working days.

The government is providing a set of incentives for small businesses by setting up a fund to motivate small business operations. Assistance will be provided in the form of assurances for a bank loan to be disbursed to the entrepreneur.

10. INFRASTRUCTURE

Land transportation, water and sewerage are areas of necessary investment during the next five to ten years. The following issues are a synopsis of the general plan of investment in these areas.

The Ministry of Finance proposes to invest the following sums in basic infrastructure:

INVESTMENTS IN BASIC INFRASTRUCTURE
(millions of NIS, 1990 prices)

Year	Trains	Roads	Sewerage	Water
1991	110	600	70	125
1992	110	600	70	200
1993	110	600	70	200
1994	110	600	70	200
1995	110	600	70	200
1996		600		125

The sums represent the estimated demand for investment required to furnish the necessary infrastructure for the absorption of one million olim during the next five years.

These fields are very different from one another in several respects. Land transportation tends to lead to regional development and encourages settlement of people and industrialization of relatively distant areas; it may therefore be considered a forerunner of housing construction. Water and sewage facilities, on the other hand, can not be planned and executed until the location of housing development is definitely decided upon. The plan for road construction is therefore fuller in scope and more accurate, and affords a better picture of funding needs.

The magnitude of the sums involved as well as the general trend to minimize government intervention in the economy has led the Ministry of Finance to propose legislation dealing with the semi-privatization of water and sewage systems in local government. The Ministry has also taken steps oriented to enable the national water company, Mekarot, to raise funds for development of the capital market and to free itself from its dependence on government financing.

10.1 WATER

The scarcity of water in Israel has recently been exacerbated by two consecutive dry seasons, which have brought water levels in the Lake of Kinneret and in the major subterranean water bodies to record lows. Economists have long argued that the shortage of water in Israel is man-

induced; subsidized pricing of water used in agriculture has encouraged abuse and the cultivation of water-intensive crops.

Absorption of an additional population numbering a million individuals is expected to raise urban consumption by 100 million cubic meters of water per year. The urban population in Israel consumes 450 million cubic meters per year, but the major consumer is Israeli agriculture, which uses about 1,200 million cubic meters a year. Agricultural consumption is regulated by administrative quotas -- a system which has many weaknesses and has been unable to contend with the pressures of all sectors for increased consumption. Most of Israel's water potential has been developed, and reclaimed water based on the reuse of effluent can not provide a satisfactory response to the demand pressures exerted under the present system of allocation.

A fundamental change in the antiquated system of allocation is inevitable. The alternative may well be sea-water desalination -- an expensive process which is economically unjustifiable at present.

The Ministry of Finance plan for development of water supply systems does not deal with the provision of additional water sources; it stipulates that water needed for the newcomers be found within the system through reallocation. This reallocation can be best achieved by a market mechanism through price increases. The Israeli government has recently adopted a resolution to gradually decrease water subsidies in the course of five years, eventually allowing for all sectors to pay the full price of water.

It is presumed that a sharp increase in development and construction of the water system will require a period of transition and planning. Hence, only 75 million Israeli shekels of the special budgetary allocations due to Soviet immigrants will be added to the budget for this purpose in 1990.

10.2 SEWERAGE

The Israel sewerage system owes its beginning to the World Bank which began funding a sewage project in 1974. Sewerage services are self-financed. The local resident is billed by the local authority which provides the user with the service of treating and discharging effluent in accordance with health regulations.

The most widely used methods of disposal in Israel is agro-sanitary. Treated sewage is reclaimed and reused as water for agricultural purposes, subjected to the requirements of the Ministry of Health. The Ministry of Finance is endorsing a scheme whereby urban centers will be required to treat sewage discharged to a minimum standard stipulated by law. Farmers will then be able to benefit from reclaimed water for the price of delivery to their fields. Cooperation between urban and agricultural populations will tend to lead to sharing the burden of sewage treatment and disposal, and help make further economic use of discharged water.

The average cost for the construction of sewage treatment and disposal facilities in Israel has been estimated at $100 per person.

10.3 ENERGY

The National Energy Authority was established in 1977. The purpose was to centralize the administration of energy-related and energy economic matters.

The Ministry of Energy and Infrastructure, established in 1977, has assumed most of the operational responsibilities originally assigned to the Authority.

Most of the energy in Israel has to be imported. The imported energy arrives in the form of crude oil, oil products, and coal which together provides about 96 percent of Israel's total primary energy sources.

The recent increase in international oil prices has caused serious problem to the Israeli economy by increasing the trade gap and hindering the availability of foreign currency reserves.

Israel's indigenous energy resources are quite limited; little oil has been found. The country's conventional hydroelectric potential (as distinct from the proposed Mediterranean-Dead Sea Canal) is small, and no nuclear power plants have been built.

One indigenous energy resource Israel has in abundance is sunlight. Used mostly for domestic water heating, solar energy provides over 300,000 TOE annually, or three percent of energy consumption.

The nation's total net energy requirement in 1987 was 9.653 thousand ton-oil equivalents, about 10 percent higher than the previous year.

Israelis consume less energy on a per capita basis than Americans and Europeans. This reflects different levels of industrialization and standards of living. Israelis also use less electricity per capita than Europeans and Americans. However, the trend towards increasing per capita consumption of electricity in developed countries has also been visible in Israel.

Energy prices in Israel reflect not only energy costs but also government tax and subsidy policy.

10.4 ROADS

One of the prerequisites for regional development is adequate transportation. The proposed plans for road construction are based on two main criteria -- finding solutions for bottlenecks in the existing system, as well as facilitating access to the new urban centers in planning. Improvement of the road system offers an opportunity for ameliorating living conditions for local residents, while at the same time affording a chance of regional development.

The proposed road system was constructed with the purpose of giving priority to regional roads, and linking distant peripheral areas in the Galilee and the Negev with the center of the country. These guidelines were set forth in order to further the progress of these regions and encourage their economic growth. Though government policy requires proposed projects to show unequivocal economic benefit before they are carried out, the policy constitutes a departure from regular norms. The premise underlying this new procedure is that making new regions accessible will raise land values, and additional benefits will accrue from the development of the periphery.

In addition to the development of new roads, attention was also given to routes which are forecasted to attract heavy loads of traffic due to a increases in highway use. Main routes in the center were not neglected, as they are expected to receive much of the traffic originating in the periphery.

The regional distribution of the additional funds appropriated to road development is as follows: (millions of NIS)

Haifa and the Northern District	535
Center	460
Jerusalem and the Southern District	190
TOTAL	1,185

The proposed plan for the next few years includes, among others, the following projects: improvements on the Afula-Megido Junction road (35 million shekels); adding a second lane on the Megido Junction-Hadera road (100 million shekels); adding a second lane on the Gadera-Ramla road (55 million shekels); adding another lane on the Lehavim-Beersheba road (22 million shekels); improving the Arad-Tel Shoket road (30 million shekels).

10.5 RAILROADS

Public transportation in Israel is based on bus travel complemented by cab service. The train is used for passenger service mainly on the Haifa-Tel Aviv line, carrying relatively few commuters.

The merger of the train service with the Ports Authority two years ago has caused a sharp increase in the budgets allocated to the train service. An attractive and efficient rail service may potentially yield considerable savings in expenditure and in commuter time and toxic pollution from vehicle exhaust.

Due to the rigidness of the choice of routes and the high investments required to develop new service lines, rail services will be limited to serve the large metropolitan spheres of Haifa and Tel-Aviv and to the link between them.

The proposed investment plan of the Port and Rail Authority (at a cost of 564 million shekels) includes the following projects:

- Improvements on the Haifa-Tel Aviv line including doubling several stretches of the track in order to allow for an increase in speed and frequency.

- Doubling the track between Haifa and Kiryat-Motzkin, improving the track and the passenger cars and adding stations in order to provide service for the Haifa suburbs.

- Improvements and doubling of the track on the Netanya-Tel Aviv line and laying tracks along the Ayalon road in order to provide a suburban service along the Netay-Herzliya-Tel Aviv axis.
- Acquisition of new passenger cars and renovation of the existing cars in order to improve the service and increase frequencies along the above mentioned lines.

11. ENVIRONMENTAL CONSIDERATIONS

Israel's rapid population increase of 25 percent will have consequences on all aspects of its environment. However, the direct consequences that occur as a result of GOI housing programs to accomodate the Soviet immigrants will be on the sites on which new housing will be constructed.

Israel has the necessary tools to assure that any new construction is planned and built in the most environmentally sound way and with appropriate attention to the country's natural resources. Environmental concerns have been introduced into land use planning at the local level. Approvals of plans and building permits now reflect environmental issues. The laws and regulations exist and the technical capacity is available.

11.1 LEGAL FRAMEWORK AND INSTITUTIONAL ARRANGEMENTS

Upon the creation of the State of Israel in 1948, different ministries assumed responsibility for various areas of environmental problems. In 1971, the Knesset appointed a permanent Knesset Committee on the Interior and Environmental Quality. This Committee in turn set up a permanent sub-committee for environmental quality, primarily to review and present environmental legislation to the Knesset.

In 1973, in recognition of the urgent need to strengthen and coordinate national environmental policy the Environmental Protection Service was established in the Prime Minister's Office as a separate government agency to deal with prevention of pollution and protection of the environment. This office was granted authority to advise the ministries and planning bodies on the subject of environmental quality, either by request or at its own initiative, both as to prevention of and response to environmental degradation.

In 1988 the Office of Environment Protection Service became the Ministry of Environment. As a result, many responsibilities were transferred from the Ministries of the Interior, Health, Agriculture, Industry and Commerce and from the Prime Minister's Office empowering the Ministry of Environment to operate within the framework of 13 diverse laws.

11.2 MAJOR ENVIRONMENTAL CONCERNS

Since the early 70s, Israel has experienced a fast rate of development accompanied by substantial increases in population, water and energy consumption, expansion of the built environment, and agricultural expansion. According to the Ministry of Environment, such economic and social growth has exerted large pressures on Israel's fragile ecosystems.

Further expansion of the physical environment -- if not planned properly -- can place at risk non-renewable resources and cause serious environmental

degradation. According to the Ministry of Environment, there is limited concern about the preservation of natural resources, and there is limited planning in terms of preservation of sources of potable water, sewage treatment, solid waste disposal, and air pollution control.

Israel's major environmental concerns can be summarized as follows:

11.2.1 Water Resources

- There are three sources of water in Israel: The Sea of Galilee; a coastal aquifer; and a mountain aquifer. Overuse and overpumping have caused a cumulative deficit of up to two billion cubic meters, an amount equal to a years's consumption. Water reserves are presently close to critical. The expected population increase of one million persons will probably add another 10 percent to the country's demand for water.

- Pollutants currently located in the protective unsaturated zone are penetrating into the depth of the groundwater, causing groundwater to become unsuitable for drinking in the future.

- Pollution of the majority of Israel's streams by wastewater and effluent is a common phenomenon. Over the past two decades, high quality water was systematically removed from Israel's streams to be replaced by wastewater.

- The western Galilee no longer carries high quality water; today its bacterially polluted water must undergo intensive treatment to eliminate the threat of disease. Along the coastal strip, ongoing salination of groundwater by human activities and natural processes has led to the closure of wells. Continued overpumping at present levels may lead to the salination of 20 percent of the water from this aquifer by the year 2000. Moreover, continued contamination of the coastal aquifer by nitrates and organic materials threatens to damage this essential sources of fresh water irrevocably.

- Damage to water quality does not occur at the source only, but at the level of transport and supply system as well. Inappropriate design and construction result in the crossing of sewage and water lines, thereby increasing the potential risk of penetration of wastewater into transport and supply systems of potable water. In addition, pesticides and fertilizers from irrigation networks may penetrate into main water lines.

- Agriculture is very intensive and uses about 60 percent of total water supply. Rain is scarce (more so in the last two years) and only occurs in limited parts of the country during winter.

- Approximately 70 percent of Israel's wastewater is reclaimed for agricultural use, but increasingly, irrigation by inadequately treated

effluent has been accompanied by stench and risk of groundwater contamination. The increased use of low-quality effluent for irrigation of industrial crops (cotton) and sometimes other crops (fruit trees) has increased the risk of groundwater contamination.

11.2.2 Sewerage Systems

- The country has two sophisticated sewage treatment plants, located in Tel Aviv and Haifa. There are 200 other small plants and oxidation lagoons around the country. The Ministry of Environment indicates that many sewage plants are presently overloaded. Several years ago, most treatment plants produced water at near-drinking levels which was reused in agriculture. Now, because treatment plants are working beyond capacity due to urban concentrations and population growth, the Ministry says that the quality of the end product has deteriorated.

- The Ministry of Environment indicates that the present sewage system will not be able to accomodate the addition of one million people to the population. It has estimated that investments of $500 million are necessary to serve the existing demand.

- One of the major causes of groundwater deterioration is seepage of untreated or inadequately treated sewage. In addition to causing river pollution, stench nuisances, and health problems, the infiltration of raw or inadequately treated sewage into groundwater presents a serious threat to Israel's future supply of potable water.

- The major source of microbial pollution on Israel's coastlines is sewage discharged into the sea by some local authorities, notably those of Acre and Nahriya. In other cities, wastewater is discharged into the sea when problems arise in the sewage network or into streams flowing into the sea.

11.2.3 Solid Waste Systems

- A 1989 review of waste collecting systems in 45 local authorities revealed many inefficiencies and wasteful practices in several areas of the country. Israel's solid waste is disposed mostly through uncovered landfills. In some cases, landfill sites are reaching full capacity and new sites are difficult to find. Problems are especially severe along the coastal plain where alternate sites are scarce, and improper disposal causes environmental nuisances and risks including pollution of groundwater (leachate phenomenon). The problem of locating new sites for sanitary landfills is exacerbated by risks of groundwater pollution, land-use density and reluctance on the part of local authorities to approve solid waste disposal sites within their jurisdiction.

- Solid waste, including nylon, plastic, and bottles contributes significantly to the aesthetic degradation of the shores in Israel.

11.2.4 Other Environmental Issues

- The Sea of Galilee is a very fragile ecosystem due to the activities of the watershed of the area in Syria and Lebanon. Presently the sea is used as a fishing area and as a tourist attraction.

- The coastal aquifer is deteriorating due to the intrusion of untreated pesticides, fertilizers and leachate effects.

- The most rapid development in the country has taken place within 20 kilometers of the coast. In 1989, 32,000 tons of sludge were dumped to the sea by Haifa Chemicals in accordance with permit conditions outlining the specific manner of disposal. The Israel Electric Company began dumping coal ash into the sea in April 1989 in accordance with stringent environmental conditions included in a permit for the dumping of 50,000 tons of ash to the sea over a two year period.

- High concentrations of sulfur dioxide are found in Haifa and Ashdod. Haifa's power plant and oil refineries are responsible for some 85 percent of total sulfur dioxide emission in the area.

- Little has been done in Israel to reduce pollution from vehicular sources, despite the constant increase in the number of vehicles traversing the country's roads annually. Transportation sources are responsible for carbon monoxide pollution and for a substantial percentage of the concentration of lead, hydrocarbons, nitrogen oxides and particulates in the environment.

11.3 COMMENTS

Much of the planning in Israel at this moment is directed to respond to the immediate problems of the arriving Soviet immigrants. Efforts are especially concentrated in providing housing for new olim. The Ministry of Finance and the Ministry of Construction and Housing are making decisions with long term consequences on settlement patterns. The GOI must seek formulas where present goals and programs are accomplished without the degradation of environmental and natural resources. The following recommendations can form the framework of further studies.

- Environmental cost and impact analyses should be undertaken in the process of program planning and execution.

- The construction of necessary sewage treatment plants and the prevention of the discharge of raw sewage or partially treated effluent into streams must be taken into consideration in short term plans.

- In light of the expected rise in water consumption in the near future, the supply of high quality water for drinking rather than agricultural purposes must be a high priority.

- The prevention of water pollution is intrinsically connected to the proper treatment of sewage, to the controlled disposal of domestic and industrial waste, and to environmentally sound practices in the agricultural sector, especially with regard to the use of fertilizers and pesticides. These activities must be analyzed.

- One of the most viable channels to disseminate environmental information are the local governments since they are community based institutions. A major activity of the Ministry of Environment is the implementation of environmental programs at the local level. Local environmental units were established within Israel's municipalities in 1977 to extend environmental management expertise to populations at the local level. Because of the importance of municipal activities to environmental protection, programs must be undertaken to strengthen and equip local governments with the financial support, professional staff, and technical and scientific equipment necessary to address the existing environmental problems.

12. TENDERING AND CONTRACTING

Although the GOI has had years of experience managing the process of competitive bidding (the ILA and other institutions regularly use formal tendering procedures), the MOCH had virtually no such experience. Almost as soon as it began tendering in July 1990, it discovered that the management requirements were much heavier than it expected. By September 1990, the Ministry was authorized to enter into direct negotiation with contractors, still according to the price and other requirements of the bidding documents, but bypassing the normal competitive bidding process.

In the analysis of the lengthy duration between housing plans and construction completion, the tendering process has not been identified as an obstacle or cause of delay. The tendering process provides the necessary safeguards against unfair competition and reasonable costs. Yet, in the government's efforts to expedite housing construction, the direct negotiation approach leaves too great an opportunity for favoritism.

The MOCH has 450 registered developers, of which they estimate 80 are real developers, the rest are contractors. MOCH is in direct negotiation with seven companies. The following four tenders have been issued.

TENDER	TOTAL NUMBER OF UNITS	TOTAL BIDDERS	US BIDDERS	TOTAL AWARDS	US AWARDS	AVERAGE NUMBER OF UNITS	AVERAGE COST PER UNIT
#321:duplex prefabs; open competition	6,000			32	23	200-250	$32,000
#315: Ex-Im; prefabs; 60 m2; selected firms	3,000	45		11	8	200-300	$23,000
#320: mobile homes	5,000			11	8	420	$20,000 $22,000
#325: traditional units	10,000	9	2				

13. PLANNING AND BUILDING PROCESS

13.1 CURRENT SYSTEM

The Planning and Building Law (5725-1965) is a comprehensive statute with enabling regulations that monitors and regulates all building and land use designation in Israel.

Within the process there are five levels of planning: a) National Outline Plans which are comprehensive plans for the whole territory, or sectoral plans, such as roads, railways, seaports; b) District Outline Plans include all the topics in a framework of the administrative district; c) Local Plans are sectoral plans, similar to traditional land use planning schemes; d) Detailed Plans are short term although if substantial changes are not in place, they can cover a period over five years; e) Building Permits are granted by local authority.

Government Level

The members of the Cabinet constitute this level of the planning stage. The main responsibility of the members is to approve the National Outline Plans or master plans that include the planning structure for the whole area of the country. The schemes are medium-term plans for the next 15 to 20 years. Regional schemes are incorporated into these national schemes, and short-term plans must be in accordance with the long-range planning principles expressed in the national outline scheme. National Plans cannot be contested; they only can be reviewed as a mechanism of consultation.

The National Planning and Building Board

The National Planning and Building Board (the National Board), is chaired by the Director-General of the Ministry of the Interior, and composed of representatives of government ministries, local government, and public and professional organizations. The Board is responsible for all planning in the country. It advises the government as to everything relating to general policy in implementing the law, including matters of legislation and enforcement. The Board is also responsible for approval of National Outline Plans before they pass to Cabinet level. In addition, it is the highest authority to approve District Outline Plans.

The Planning Department of the Ministry of Interior

This Department is responsible for the arrangement and preparation of the national outline schemes. After completion at the National Board level, the National Board must submit the outline schemes to the government for approval. Once approved and announced, they have the status of legally binding plans.

District Planning and Building Commissions

These commissions operate at the regional level. The Commissions are composed of regional representatives of government ministries and of members appointed on the recommendation of the local authorities within the district. Their chairpersons are the District Commissioners of the regional offices of the Ministry of Interior. They are responsible for the approval of District Outline Plans related to the administrative region. Proposed development of land is generally based on forecasts of population growth, employment prospects, and demand for public services.

Local Planning Committee

District Commissions serve as links between national planning and local implementation. All national outline schemes must be referred to the regional level for comment, and any proposal at the local level which does not conform to an approved plan must be passed from the local to the District Commission for approval.

13.2 RECENT CHANGES

In order to meet the present demand in housing as a result of the current flow of Soviet immigrants, several important steps have been taken to eliminate the major constraints in the building and approval process in Israel.

In the past, the approval for detailed and local plans could take from six months to over a year. There was no time limit for approving plans developed at the local level. A Building Committee was created within the planning process with the purpose to place a time frame on the approval process. This new level operates instead of the District Planning Committee and the Local Planning Committee. Presently, permits are issued based on obligations to build according to standards and zoning requirements. Permits should be issued within 20 days otherwise construction can start under self-regulation procedures.

The availability of land also has been an obstacle to starting projects in terms of land use planning. By definition, all lands which have no other use (such as for housing, industry, or commerce) are agricultural. Since most available vacant land is owned by the government, decisions (to "take-off" the land from agricultural use) about the amount to be sold for construction, the location, and the final terms, usually took a long time. Presently, special efforts are directed to rezoning in order to make land available for construction. As a result, it is anticipated that ILA-designated land will be available for the construction of a minimum of 50,000 housing units next year. By law, land could only be used for what was specifically permitted; everything else was prohibited. This was a cause of great delay. A new law makes it possible for a developer to proceed with construction if the local authority does not grant a building permit within 20 days of the developer's request. The local authority provides the developer with the standards and regulations regarding building heights, set-backs, sizes, infrastructure, fire service, etc.

A five year master plan for the country - the National Outline Plan - is currently being prepared for a committee comprised of the Ministries of Interior, Housing, and Finance, and the ILA. The plan will establish settlement patterns, employment centers, infrastructure requirements, etc. Upon completion, the plan will become the legal guidance for development; all development will be subject to consistency with it.