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Affordable Housing Policy:
Effectiveness and Social Impact

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AFFORDABLE HOUSING POLICY

EFFECTIVENESS AND SOCIAL IMPACT

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Introduction

In July of 2011, with Israeli housing prices soaring, the country experienced major social protest that would come to be known as the “housing protest” and the “tent protest”. A young woman evicted from her rental apartment in Tel Aviv pitched a small tent in the city center and urged others to join her and set up a city of tents in protest at the high cost of housing. Within a month, some 3,500 protest tents had been pitched in 41 encampments up and down the country.

Record increases in apartment prices between January 2008 and June 2015 amounted to approximately 70% in real terms, while household income had only seen a moderate rise in the parallel period. In consequence, households were experiencing a major burden on their expenses, with the lower and middle classes being most heavily impacted.

The protest prompted the government to initiate a series of integrated steps to promote affordable housing. One of these was a government resolution in 2015 to introduce the **Homeowner's Fixed Price Scheme** which would enable households who did not own a home to purchase an apartment in various projects throughout the country at less than market price. The **Homeowner's Fixed Price Scheme** fundamentally changes the way government-owned lands are marketed for residential purposes. The Scheme would set in place land tenders where the bidders (land developers /constructors) would compete for **the lowest possible price per square meter** they could offer for a residential apartment. Under the Scheme, family households (or single individuals over the age of 35) could purchase an apartment provided that they do **not already own a home**. In construction projects where the number of eligible people enrolled exceeds the number of apartments on sale, a lottery would fix the order of precedence.

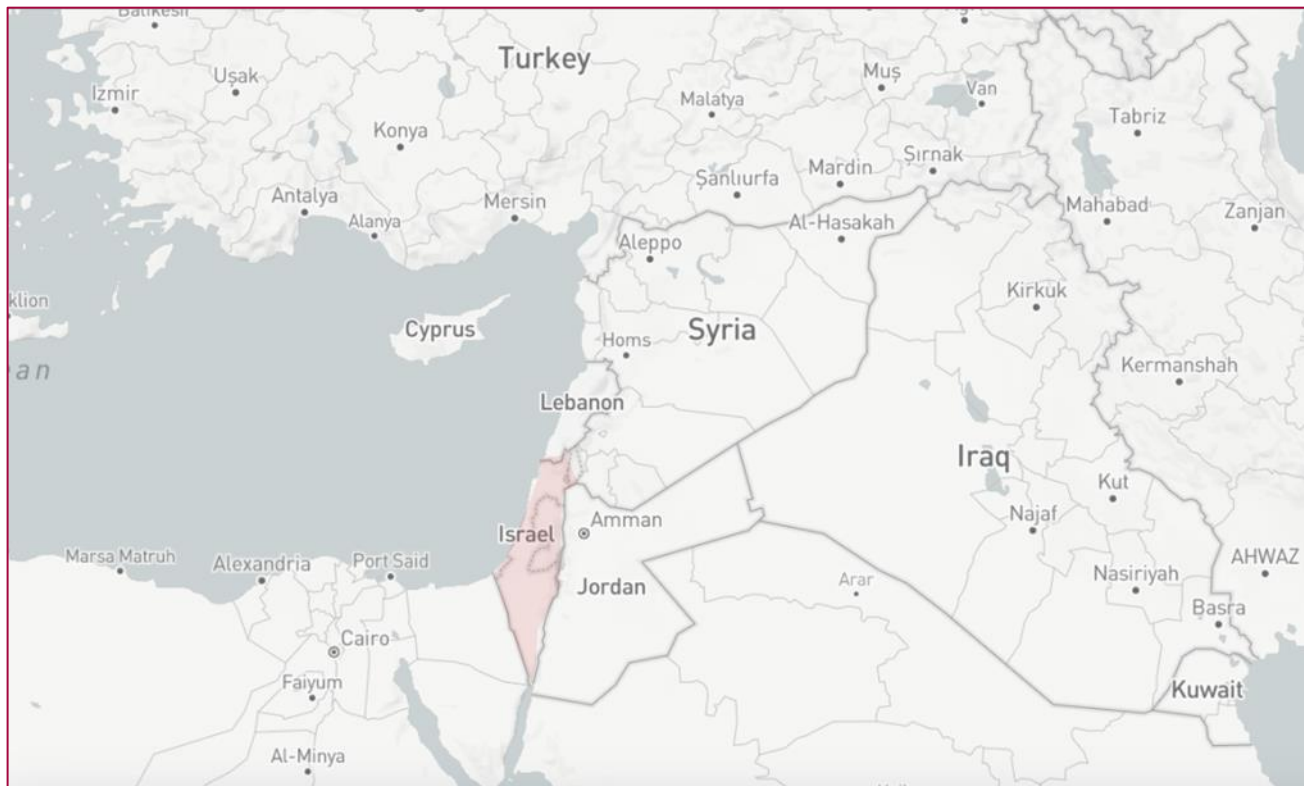
The Homeowner's Fixed Price Scheme is the State of Israel's flagship scheme for resolution of the housing crisis, and its objective is to provide affordable housing solutions on a grand scale. The Scheme is under constant review and examination by government entities, the Bank of Israel, leading bodies in the real estate market, economists and other experts, as well by the eligible public. Much has been said in Israel about the macro-economic effects of the Scheme and its effect on the lowering of housing prices relative to its financial cost. The purpose of this paper, however, is to study certain socio-demographic aspects of the Scheme and evaluate its effects on certain distinct populations in the social and demographic periphery in Israel.



1. Background

1.1 The State of Israel - Country Data

- Global locality: The Middle East
- Area: Approximately 22,000 km² (smaller than the State of Massachusetts -27,000 km²)
- GDP: 317.1 million US dollars (54th in the world)
- GDP per capita: 37.6 thousand US dollars (50th in the world)
- Population: c. 9 million inhabitants (98th in the world)
- Population density: 406 inhabitants per km² (30th in the world) - (Massachusetts has 313 inhabitants per km², ranked 3rd highest in the US)
- Population growth: Approximately 1.9% annually (highest among OECD countries)
- Main ethnic groups:
 - o Jews - 74.3%
 - o Arabs¹ - 20.9% (83.8% Muslim, 8.4% Christian)
 - o Druze - 1.7%



¹ Inclusive of 400,000 residents of East Jerusalem



1.2 The Housing Market in Israel

1.2.1 Chronology of key events

The Real Estate and Construction Industry in Israel is one of the base sectors in the Israeli economy and the housing market constitutes a key concern in economic and social discourse in Israel since the dawn of its founding (1948).

In the early years of the State, hundreds of thousands of immigrants were absorbed, and the population doubled within a very few years. In consequence, there was a severe housing shortage and it became necessary to create plans for housing to be managed and funded by the State, which included the setting up of transit camps and housing complexes, enactment of the Tenant Protection Law, the founding of "Development Towns" and the cultivation of public construction companies.

Instability and a shortage of housing solutions were also registered in the periods following the Six Day War (1967) and through to the Yom Kippur War (1973), as well as in the 1980s, a period of high inflation. In the 1990s, following a spike in demand stemming from immigration from the former Soviet Union, there was another housing crisis that required intense government intervention so as to increase the housing supply. The current housing crisis, experienced in the Israeli economy as of 2008, is in effect the fifth such crisis since the State was founded 72 years ago, and it too is characterized by housing prices that have risen at a far higher rate than both the minimum and average wage. A detailed description of the current housing crisis and how the government is dealing with it is to be found later in this document.

1.2.2 The Role of Government in Israel's Real Estate and Construction Industry

Government structures and leading agencies

The Housing Cabinet - A committee of Ministers headed by one of the Government of Israel's (GOI) Ministers that sets government policy in the field of housing, approves and promotes reforms and structural changes, and promotes residential construction projects. In general, decisions taken by the Housing Cabinet have validity on a par with the Government's Cabinet Resolutions.

Israel Land Council - is a Council appointed by the GOI and its remit is to set the policy whereby Israel's land is to be managed, and to supervise the activity of the **Israel Land Authority** (see hereunder).



National Housing Headquarters - a coordinating body in the Ministry of Finance founded in 2015 in light of the housing crisis in order to synchronize government actions and coordinate between the various government bodies and entities.

Planning Authority - is the responsible entity in the State of Israel for the formulation of national planning policy, initiating and promoting national, regional and local outline plans, and operating the national planning institutions; it handles detailed plans; prepares and promotes regulations under the Planning and Building Law.

Main Operational Entities

Israel Land Authority - The government arm for management of State lands (for the Authority's broader remit, see below).

The Ministry of Construction and Housing - This Ministry is entrusted with the initiation and implementation of government policy in public housing and residential construction. The Ministry focuses on finding housing solutions for the entire population, through activity in urban renewal, new construction in town and country, rehabilitation of neighborhoods, mortgages and housing assistance for low income households.

The Government Authority for Urban Renewal - a unit under the remit of the Ministry of Housing to promote and encourage urban renewal activity.

Government-owned Companies - such as "Apartment to Let" - engages in promotion of increasing the supply of rental apartments; "Cities (Arim)" a company that serves as the contracting arm of the Ministry of Construction and Housing in developing urban infrastructures for establishing and expanding communities.

1.2.3 The Israel Land Authority and its Main Function

"Israel Lands" is defined within Section 1 of the Basic Law: Israeli Lands. As of 1960, Israeli lands were managed by the Israel Land Administration, which changed its name a few years ago to the Israel Land Authority (ILA). The ILA is an arm of the State, and Israeli Lands are the State's land inventory. In 2012, this inventory extended over an area of approximately 20 million dunam (app. 5 million acres), which account for approximately 93% of the area of the State of Israel (21,957,000 dunam). The Israel Lands Council governs and provides direction for the ILA and determines policy for national land management.



The ILA's main function is to allocate land for residential, affordable housing, public housing, industry and commerce, open areas and other purposes, in such locations and of a scope that will best serve Israel's economy, society and the environment, as well as its future needs.

In recent years, the ILA has acted to promote plans for construction of housing and the publication of tenders across the country so that supply of apartments will meet demand. The ILA publishes land tenders in accordance with rules that were set under the auspices of the Homeowner's Fixed Price Scheme alongside market-price tenders.

In the years 2016-2018, the ILA marketed lands for approximately 70,000 residential units annually (most by public tenders) and transactions were approved for at least 40,000 residential units on yearly average.

With the Housing and Construction Industry becoming the focal point of GOI economic policy led by the Ministry of Finance in recent years, the ILA has been rebranded as the key entity in implementing government policies and in executing its decisions. In consequence, the scope of ILA's activity has grown significantly over the past few years, even as it adopted multi-year planning and implementation practices, and increased its involvement in the initiation, oversight and execution of long-term projects.

1.2.4 The Strategic Plan for Housing

In February 2017, the Government of Israel adopted by resolution the Strategic Plan for Housing 2017-2040 setting measurable output goals for the statutory planning system in order to provide a sufficient and adequate response to the ever-increasing housing needs of the population in Israel.

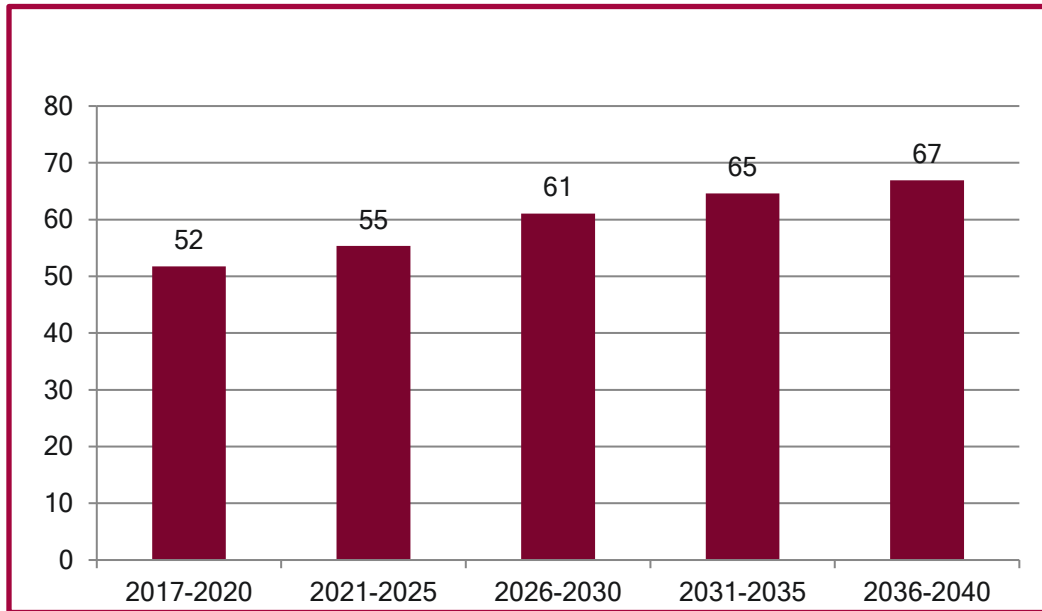
The various chapters of the strategic housing plan include:

- Activity targets for the planning system (*inter alia*, a planning goal of 2.6 million apartments).
- Targets for future regional deployment of apartments in Israel, considering the composition of housing demand, and the fiscal efficiency of the economy.
- Emphasis on the importance of urban renewal in the center of the country.
- Setting dedicated targets for Arab towns and villages in order to meet the challenges of the specific housing preferences of this population.
- It should be noted that the plan does not make specific mention of the ultra-Orthodox Jewish population (goals and solutions for dedicated housing solutions for the ultra-Orthodox sector were determined in Government Decision No. 1823 of 2016).



In total, through the period 2017-2040, the construction of approximately 1.5 million new residential units is required (an increase of approximately 60% in the country's housing inventory over 25 years), which equates to the annual construction of approximately 60,000 residential units on average.

Figure 1: Housing Needs in Israel, in thousands of housing units/year



Source: Central Bureau of Statistics, processing and calculations by the National Economic Council



1.2.5 Affordable Housing in Israel

Affordable housing is a set of policy tools intended to provide suitable residential solutions while looking after financial independence in light of the increase in housing prices. In recent years, affordable housing has become critical for many population groups that are unable to meet the soaring housing prices in global city centers - populations of medium to low income.

One of the key strategies for the provision of affordable housing is the production of new affordable units. Today, many western countries are adopting legislation calling for the inclusion of affordable housing in new builds², both obligatory³ and voluntarily through economic incentives such as tax benefits⁴. Ownership of affordable housing varies and includes private ownership, public ownership, ownership by associations, joint ownership and affordable housing for rental⁵.

In the Israeli housing market it is customary to differentiate between **public housing** - which provides housing solutions outside of the free market, mainly for underprivileged populations, and **affordable housing** - which operates mainly in keeping with free market rules and is intended for the middle class (lower to upper middle class).

This research focuses on the Homeowner's Fixed Price Scheme as an initiative for affordable housing and does not address public housing.

² The Center for Urban and Regional Studies (Rachelle Alterman, Emily Silverman, Haim Fialkoff), Affordable Housing: Tools for Statutory Planning and Municipal Policy, 2012 [<https://en.urbanclinic.huji.ac.il/regulatory-tools-affordable-housing>] [The link is to a Hebrew document]

³ For example, a local zoning inclusion provision in law in Montgomery County, USA that requires the inclusion in every residential project constructed a certain percentage of reduced-price apartments for defined populations.

⁴ For example, Low Income Housing Credit, the most common program in the USA today provides tax benefits to real estate developers who build affordable housing.

⁵ The Center for Urban and Regional Studies (Rachelle Alterman, Emily Silverman, Haim Fialkoff), Affordable Housing: Tools for Statutory Planning and Municipal Policy, 2012



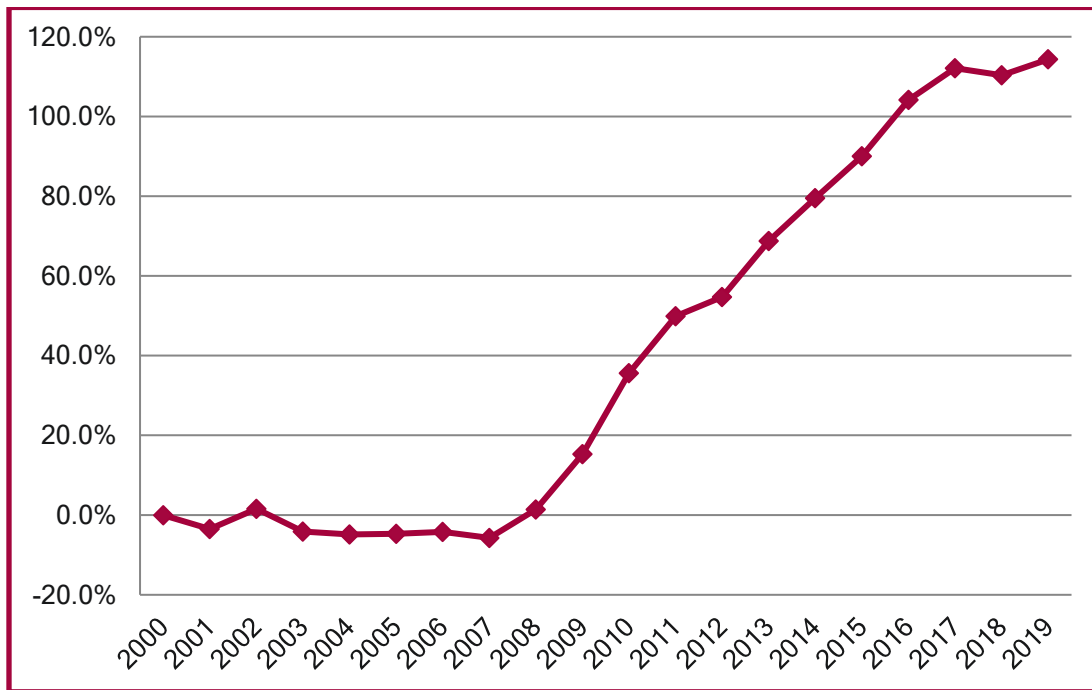
1.3 Israel's Current Housing Crisis and Government Response

1.3.1 Description of the crisis

The price of apartments

From 2008 to the end of 2017, there was a sharp rise in the Apartments Price Index, which reached more than 120%. This rate represents an average rate of over 8% per annum, which is significantly higher than the average perennial rate of 2%.

Figure 2: Increase in Apartment Prices in Israel 2000 - 2019

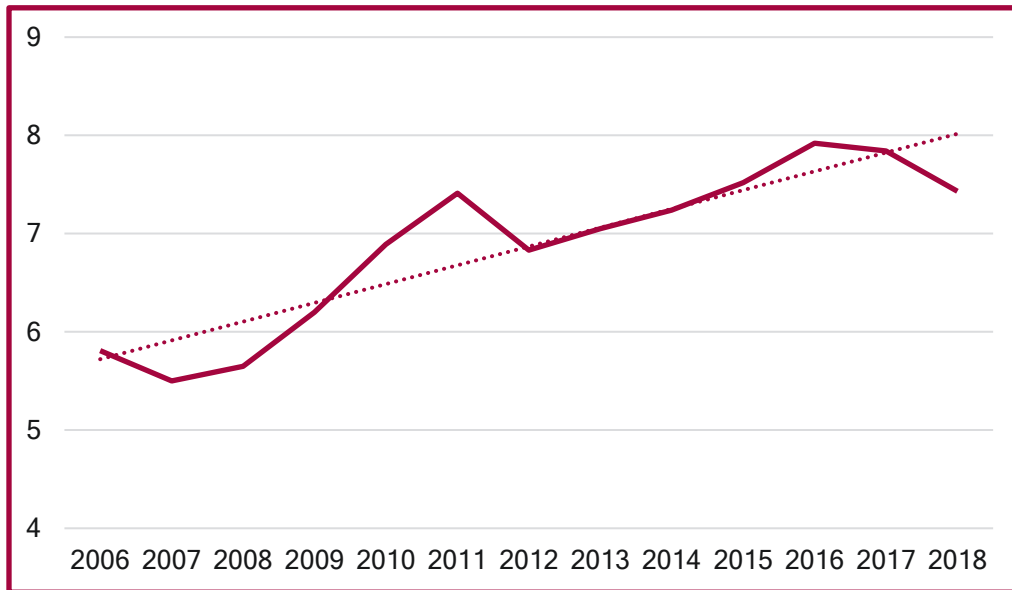


Source: CBS

Affordability of a residential apartment, and the number of salaries required to purchase one
Against the sharp increase of approximately 120% in housing prices, in the period between 2007-2017, average earnings in Israel increased by only 30%, resulting in an increase of 54% in the number of salaries required to purchase an apartment, materially impairing the affordability of an apartment.



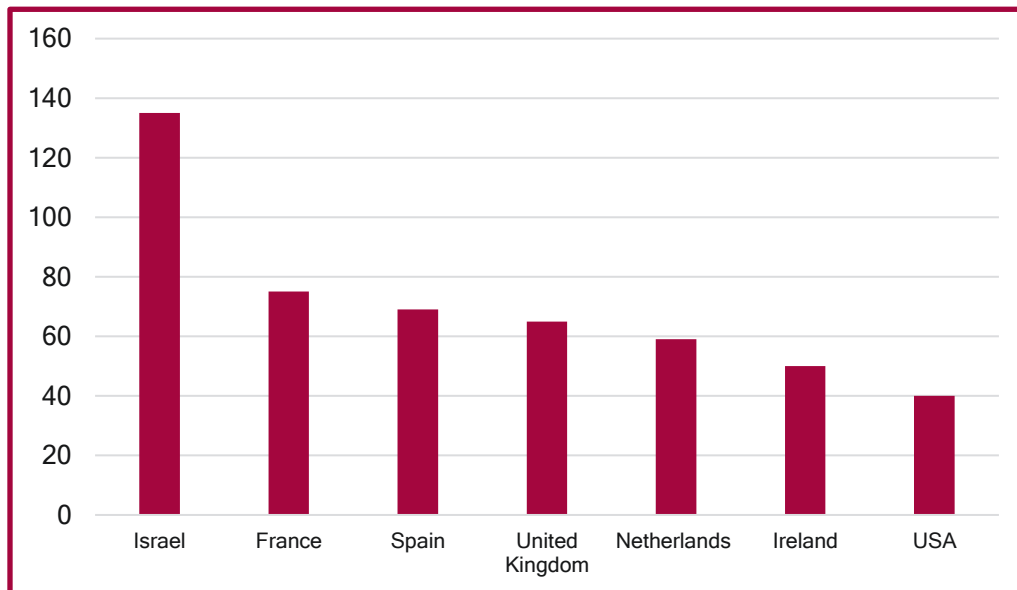
Figure 3: Average Household Income Years required to purchase an average apartment.



Source: Ministry of Housing

The decline in the ability of Israeli citizens to afford an apartment can also be expressed through international comparison, where Israel's position at the top of the average number of salaries needed to purchase an average apartment is evident, as can be seen in following chart:

Figure 4: Number of salaries required to purchase an apartment, selected countries



Source: OECD



1.3.2 Government response

With a view to dealing with the housing crisis, the most recent Israeli governments made several structural changes in the handling of the real estate and housing industries by the government and its satellite agencies. For hands-on dealing with the crisis, a series of steps were introduced characterized by heightened government involvement across the breadth and depth of the Israeli real estate market.

On the apartment supply side, effort was concentrated on streamlining the work of the planning institutions by shortening bureaucratic processes and integrating direct and indirect amendments in the Planning and Building Law, while introducing government steps in the other stages of the production chain of a residential unit, including through programs dedicated to in-depth handling of the housing crisis.

On the demand side, treatment included measures to push landlords out of the market through an increase in purchase tax on owners of more than a single apartment and an attempt to impose a special tax on ownership of a third apartment.

Furthermore, the government has taken a hands-on approach through a number of operational initiatives addressing the unique challenges of the industry during this period in order to resolve the housing crisis and the soaring price of housing.

The Homeowner's Fixed Price Scheme tops the list of steps taken by the Government of Israel to deal with the housing crisis.



2. The Government Plan for Affordable Housing in Israel - the Homeowner's Fixed Price Scheme

2.1 Overview

The Homeowner's Fixed Price Scheme is an affordable housing scheme that enables households that do not own a home to purchase an apartment in various projects across the country at below market price.

In recent years, the Homeowner's Fixed Price Scheme has been the main government scheme for the creation of affordable housing and the containment of rising housing prices. It serves as the spearhead in a series of unprecedented steps initiated by the Israeli Government, led by its Ministry of Finance (MoF), the Israel Land Authority (ILA) and the Ministry of Construction and Housing, which gave top priority to the promotion of housing solutions for the wider public.

2.1.1 The Universal Format of the Scheme

On its agenda in 2015, Israel's 24th Government determined that the Homeowner's Fixed Price Scheme in its new format would be applicable **on all marketable lands suitable** for the construction of residential apartments. This step was adopted once it became clear that providing a wide supply of housing at a reduced price was a vital condition for dealing with the housing crisis in its entirety, and for making it possible for a far wider swathe of the population to purchase an apartment. The Scheme was in fact intended to get to grips with the general decline that had occurred in Israel in terms of housing affordability, and to bring about an improvement in the capability of households to purchase an apartment and to reduce the widening gap between the price of apartments and household income. In order to expand the circle of participants in the Scheme, no income criteria were set (as had been the case in earlier initiatives, which were also more limited in scale). The only criteria set - and a general one at that - was to set **a wide target: All married couples in Israel** as well as singles over the age of 35, who do not own homes.



2.1.2 Social-Progressive elements in the Homeowner's Fixed Price Scheme

Progressive Price Discount

Without prejudice to the Scheme's universality, the Government recognized the need to adopt a progressive discount policy, by setting a limit on the discount amount given per land unit, as well as a decreasing discount rate with the increase in land value.

Housing Grants in the Geographic Periphery

Additionally, the Scheme includes allocations of funds to **subsidize development costs** for developers and to provide **grants** to buyers of apartments located in areas of low land value, allowing for the amount of the grant to increase vis-à-vis lower land value.

This mechanism is intended to expand the circle of participants in the Scheme to areas where land value is lower - mainly in the geographic periphery - and even to encourage purchase by people from outside such localities, in a manner that would be on a par with Government housing policies aimed at strengthening the periphery and broadening and varying population distribution.

As the Scheme progressed, further steps were adopted to deepen support of the periphery, such as increasing the share of residential units allocated for market price sales (alongside the reduced-price apartments under the Scheme), while also applying the development subsidy to such housing units.

Dedicated solutions and deepening support for special populations

The Arab population - barriers to participation among this population arise mainly from factors that are exogenous to the Scheme, such as a shortage of planning and suitable State lands, as well as from cultural barriers, which required the introduction of certain tailormade adjustments and the adoption of specific steps in order to enhance participation within this group .



Table 1: Residential Units Awarded through Homeowner Fixed Price Scheme, by Ethnic Groups

| Population | Percentage of National Population | Units Awarded | Percentage of Units Awarded | Average Discount per Unit (NIS) |
|------------|-----------------------------------|---------------|-----------------------------|---------------------------------|
| Jewish | 74.2% | 89,031 | 97.98% | 284,606 |
| Minorities | 25.8% | 1,838 | 2.02% | 230,081 |
| | 100% | 90,869 | 100% | 187,076 |

The ultra-Orthodox Jewish population - this population is characterized by a low average income per capita and extremely high birth rates, estimated at approximately 4% per annum. The specific housing needs of ultra-Orthodox society derive from their unique way of life and their particular culture, which often dictate the establishment of separate neighborhoods and other modifications.

Therefore, Government policy in the Homeowner's Fixed Price Scheme was directed at a broad population of young couples who do not own a house, without setting income criteria, and with the objective of assisting lower as well as mid to upper middle class to purchase apartments. There are however affirmative conditions in favor of the lower strata and people living in the geographical periphery in the form of discount rates and higher grants, as well as steps intended to address the shortage of housing in the Arab sector, while making certain adaptations that would enable their participation in the Scheme.

2.2 Scheme format and benefits

2.2.1 The Marketing Method and its Goals

Lands are marketed under tenders whereby developers compete on the **final apartment price** to be paid by the final buyer - **the homeowner**. The winning bidder is the developer that commits to the lowest final apartment price under the conditions set in the tender and in accordance with Ministry of Housing specifications for that project.

Ultimately, this method is meant to result in a total discount that exceeds the actual value of the direct government subsidy (comprised of land price discount and grants), by generating a



reducing effect on other cost factors such as marketing and advertising costs, and the required profit rate as well as the perceived commercial risks, compared to free market projects.

2.2.2 Scheme Terms and Offered Benefits

The discount rates in the price of land per apartment and the grants under the Scheme are calculated as follows:

- Where land value per apartment exceeds ILS 150,000, the developer will be given a discount of ILS 120,000 per apartment.
- Where land value per apartment does not exceed ILS 150,000, the developer will be given a discount of 80% of the land's value.
- Where land value per apartment is between ILS 50,000-100,000, the developer will be given a land value discount of 80%. Furthermore, a grant of ILS 40,000 will be given to apartment buyers, and ILS 40,000 as a development subsidy to the developer.
- Where land value per apartment is lower than ILS 50,000, the developer will be given a land value discount of 80%. Furthermore, a grant of ILS 60,000 will be given to apartment buyers, and developers will receive a development subsidy of ILS 40,000.

Table 2: Benefits to developers and apartment buyers based on land value (in thousands of ILS)

| Land value per apartment | Developer discount | Buyer grant | Development subsidy | Total benefits |
|--------------------------|--------------------|-------------|---------------------|----------------|
| Up to 50 | Up to 40 | 60 | 40 | 100-140 |
| 50-100 | 40 to 80 | 40 | 40 | 120-160 |
| 100-150 | 80-120 | - | - | 80-120 |
| Above 150 | 120 | - | - | 120 |

Source: ILA

2.2.3 Additional Assistance Tools

- **Financing support** - the Homeowner's Fixed Price Scheme allows a higher mortgage ceiling than the maximum set by the Bank of Israel on free market apartments. In addition, the State provides mortgage guarantees as well as interest subsidies so that those who are eligible



can enjoy a lower interest rate. The Scheme also provides assistance to winners who are inexperienced in the processes of purchasing and financing an apartment.

- **Post-win support** - all projects enjoy a dedicated post-win management and control service by the MoH providing support and assistance to lottery winners in their contact with the contractor and monitoring contractors to ensure they meet their contractual obligations and comply with construction specifications. Further aid to these young couples buying their first apartment includes financial education workshops and seminars.
- **Local residents' preference** - A mechanism whereby local residents enjoy preferred odds in a lottery for apartments offered in their hometowns.

2.3 Applying to the Scheme

2.3.1 Threshold application requirements

- **Non-homeowners** - in general, the Scheme is intended for those who do not have an apartment (as of 2017, a limited track was opened for people seeking to improve their housing). A non-homeowner is defined as a person who has not owned an apartment in the last three years.
- **Family status** - married (including common law marriage) couples, individuals (bachelors, divorcees, widows/widowers) over the age of 35, single parent families.
- **Individuals with disabilities** and who are over 21 years of age.

As demand significantly exceeds supply, selection of buyers under the Homeowner's Price Fixed Scheme is carried out by lottery.

2.3.2 Overview of Scheme Applicants

According to Ministry of Construction and Housing data, as of November 2019, 135,820 eligible households - equivalent to more than 5% of the total number of households in Israel - had applied for the Scheme. Of these, approximately 125,000 were non-homeowning households, **accounting for approximately 15% of the total number of households in need of housing in Israel.** This rate demonstrates an impressive response by Israeli households to the Scheme. It should be noted that applying is a non-binding procedure that requires compliance with the general parameters mentioned, most notably with regard to non-ownership of an apartment



and a one-off payment of US\$ 50. Applying for the Scheme gives a right to participate in lotteries and does not guarantee the right to purchase an apartment through the Scheme. The deadline when an effective decision is required on actual purchase of an apartment is therefore deferred to the date of winning a lottery, and therefore at the application stage, there is some variance among registrants regarding their intention to actually purchase an apartment through the Scheme.

2.4 The Homeowner's Fixed Price Scheme in Economic-Social Discourse in Israel

The Homeowner's Fixed Price Scheme attracts huge media interest and "stars" in public conversation in Israel. Hardly a day goes by without an article being published in the media on one aspect or another of the Scheme. The financial press, research institutions and persona from academia, and from state and public authorities all carry out research about the Scheme, evaluating and analyzing its results and impacts, with economic and business officials in the real estate industry publicly and routinely praising or criticizing the Scheme.

Indeed, the effects of the Scheme on the housing market and real estate in particular and on the Israeli economy in general, are wide-ranging and composed of a number of factors: from direct impact on the general supply and location of apartments, through the price of housing in Israel, changes in the behavioral patterns of developers and contractors and the accepted profitability rates, and through to behavioral changes and decision-making processes among the buyers.

This study, as mentioned, concentrates on **the effectiveness and social impact of the Scheme**, which serve as a central pillar among the Scheme's objectives and in its public scrutiny. We shall review and analyze certain social-economic aspects of the apartment buyer's population and evaluate the Scheme's effects in various key parameters.



3. The Homeowner's Fixed Price Scheme – Effectiveness and Social Impact

3.1 Apartment buyers in the Scheme - general data

Since the application process mentioned above requires no firm commitment but only compliance with certain general parameters, most notably non-ownership of an apartment and payment of an NIS 180 (US\$ 50) registration fee, our focus is on the 70,000 or so households having won lotteries and actually chosen to continue the process and see their win materialize into a reduced-price apartment. This group thus constitutes the main object of impact of the Scheme and as such is the research group chosen for this paper.

During the months of research, data was collected about this group from the institutions in Israel most relevant to this purpose, and foremost among them the National Insurance Institute, the Ministry of Construction and Housing, and the Israel Land Authority. By integrating their databases and cross-referencing between them we were able, in the first stage, to obtain an in-depth picture of the participants' economic situation (household income and per capita income), where they lived and their family status and, in the second stage, to link households to the project in which they had won an apartment and estimate what level of benefit they had attained.

The next Table presents data on the total number of winners, the percentage of winners in their hometown locale, the market value of the purchased apartment and the average discount level, in a cross-section of geographic regions in Israel:



Table 3: Apartment Buyers in the Scheme - General data, by Region

| | Tel Aviv | Center | Jerusalem | Judea & Samaria | Haifa | South | North | Nationwide |
|--------------------------------|----------|--------|-----------|-----------------|-------|--------|-------|------------|
| Total pop. (thousands) | 1,406 | 2,158 | 1,109 | 413 | 1,014 | 1,272 | 1,426 | 8,798 |
| Total # winners | 5,654 | 27,730 | 7,823 | 1,295 | 9,453 | 15,001 | 6,227 | 70,183 |
| Local winners | 1,921 | 7,051 | 3,430 | 612 | 2,803 | 6,841 | 3,233 | 25,891 |
| % of local winners | 34% | 29% | 44% | 47% | 30% | 46% | 52% | 37% |
| Price per sqm (excl. VAT) | 11,749 | 8,958 | 9,555 | 7,650 | 7,177 | 6,618 | 6,016 | 7,519 |
| Av. apartment size (sqm) | 106 | 117 | 106 | 123 | 113 | 109 | 115 | 113 |
| Av. Unit price (thousands ILS) | 1,452 | 1,223 | 1,189 | 1,100 | 950 | 843 | 810 | 990 |
| Av. Discount (thousands) | 442 | 336 | 279 | 277 | 286 | 181 | 201 | 257 |
| Discount as % of the price | 30% | 27% | 23% | 25% | 30% | 22% | 25% | 26% |
| Av. grant (thousands) | - | 1.4 | 1.0 | - | 12.9 | 38.0 | 39.3 | 20.8 |
| The grant as % of price | 0% | 0% | 0% | 0% | 1% | 5% | 5% | 2% |
| Total benefit/ price ratio | 30% | 28% | 24% | 25% | 32% | 26% | 30% | 28% |

Main demographic characteristics of the households:

- The vast majority (87%) are married, representing an excellent match with the defined target population.
- The average number of children (1.88) and the number of members of the household of 3.7, is higher than the population average (3.3). The high number of children in Jerusalem, for example, is testimony to participation of this region's large ultra-Orthodox and religious populations, which are characterized by above average birthrates.
- 3.7% are recipients of disability allowances - a rate similar to that in the general population.

3.2 Socio-economic analysis of the winning households

The main objective of this study is to assess the effectiveness of the Scheme and its social impact. For this purpose, in the first stage the winning households' collected income data shall be reviewed and compared with general population income statistics, while in the second stage we shall evaluate and analyze the absolute and relative benefits received by the winners relative to their income.



3.2.1 Household income and its composition

The Table below shows the average characteristics of the winning households in various aspects of family status and income level, broken down according to geographical regions in Israel.

Table 4: Apartment Buyers - Socioeconomic Characteristics, by Region

| | Nationwide | North | South | Haifa | Judea & Samaria | Jerusalem | Center | Tel Aviv |
|--|------------|---------|---------|---------|-----------------|-----------|---------|----------|
| Married | 87% | 88% | 89% | 86% | 96% | 93% | 88% | 84% |
| Num. of Children | 1.88 | 1.75 | 1.80 | 1.65 | 2.32 | 2.29 | 1.85 | 1.68 |
| Num. of Persons in HH | 3.62 | 3.51 | 3.59 | 3.36 | 4.24 | 4.15 | 3.62 | 3.36 |
| Pct. Elderly Allowance Recipient | 0.7% | 0.8% | 0.6% | 1.5% | 0.3% | 0.6% | 0.7% | 0.7% |
| Pct. Disability Recipients | 4.7% | 5.8% | 5.3% | 6.0% | 3.6% | 4.9% | 4.2% | 4.3% |
| Pct. Unemployed | 2.1% | 5.0% | 3.8% | 2.2% | 1.8% | 2.0% | 1.4% | 1.0% |
| Avg. Wage (NIS) | | | | | | | | |
| | 160,596 | 151,201 | 133,349 | 165,790 | 114,043 | 114,571 | 184,475 | 204,688 |
| Avg. Self Employed Earnings | | | | | | | | |
| | 10,650 | 4,474 | 4,897 | 6,947 | 5,279 | 7,029 | 11,567 | 14,848 |
| Avg. Social Benefits | | | | | | | | |
| | 10,884 | 10,713 | 10,272 | 10,789 | 10,361 | 10,351 | 11,571 | 11,646 |
| Avg. Total HH Income (main sources) | | | | | | | | |
| | 182,130 | 166,389 | 148,518 | 183,526 | 129,683 | 131,952 | 207,612 | 231,182 |
| Avg. income per standard person in HH | | | | | | | | |
| | 62,688 | 57,780 | 50,840 | 65,122 | 40,051 | 42,126 | 70,104 | 83,184 |
| Avg. Income Decile | | | | | | | | |
| | 5.5 | 5.3 | 4.9 | 5.7 | 4.3 | 4.2 | 6.1 | 6.2 |

Source: National Insurance Institute Processing by ILA

The median income of the Scheme's participants, as reflected in the above Table is slightly higher than the median income in the population and is in the 55% percentile. At the regional level, similar results are obtained - i.e., high conformity to the general population.

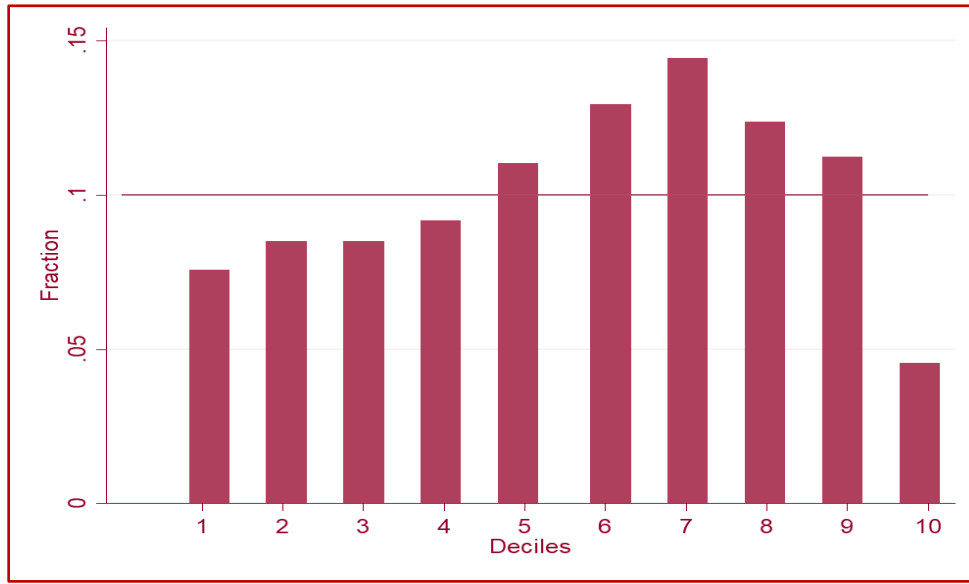
3.2.2 Scheme winners' income vis-à-vis the general population



Distribution of households in the Scheme according to their level of income

The following chart presents the income level distribution of households in the Scheme according to their respective income decile in the general- population:

Figure 5: Distribution of apartment winners according to their decile in the population



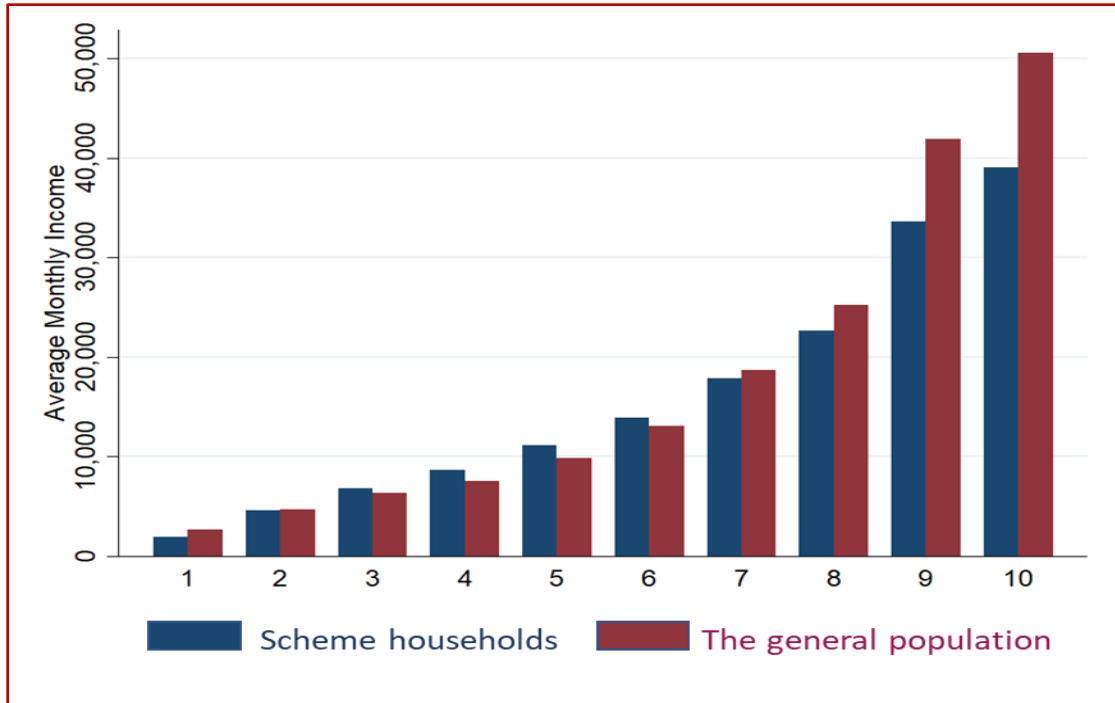
One may obtain the impression that all deciles have substantial representation in the Scheme, without exclusion of even the most extreme deciles.

Over-representation in the top half may indicate that the Scheme has certain regressive biases. The relatively lower representation of households with low income may result from an inability to raise basic capital and repay a mortgage. It is interesting to note that the top decile is only represented at 4% compared with 10% in the population. This is not unexpected since in this decile the rate of people not owning an apartment is low.

Households in the Scheme vs. the general population - distribution into income deciles

The following chart presents a comparison between monthly average income of the Scheme's households and the general population, in each of the income deciles:

Figure 6: Monthly Income: Scheme buyers Vs. General population, by Deciles



The data indicate a high correlation between average income among Scheme households and the general population in the various deciles. It is obvious that in the lower deciles (3-6), the income of Scheme participants is higher than in the general population, a trend that is reversed in the higher deciles. This analysis implies that the level of income of Scheme participants tends towards average.

In general, one can conclude that household income within the Scheme does not materially differ from the population, as expressed in both the high representation of all income deciles, and in the relative similarity to the general population's income levels across the various deciles.

Some variability was observed in the slightly higher participation among the middle-high classes compared to the middle-low. Also noted, is a certain tendency in the income of Scheme participants to gravitate towards the median income of the general population.



3.3 Scheme benefits in relation to household income

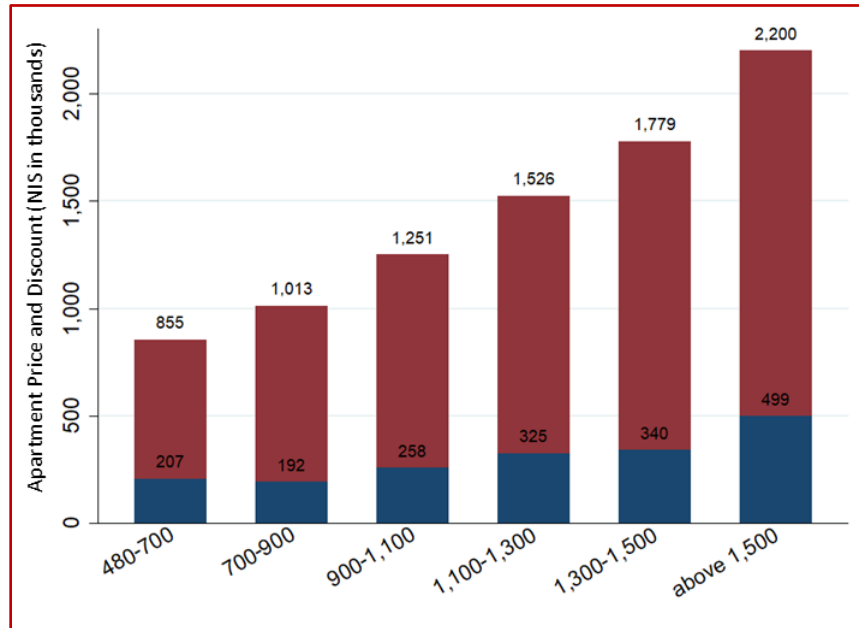
The main objective of the Homeowner's Fixed Price Scheme is to halt the plunge in apartment affordability in light of soaring real estate prices in Israel, which first and foremost impairs the ability of the lower middle classes to purchase a home. Therefore, studying and analyzing the actual allocation of benefits awarded under the Scheme and their distribution within the various socio-economic classes has supreme importance for assessing the Scheme's effectiveness and social impact. The latter aspect of the Scheme is also the focus of its public examination.

3.3.1 Apartment prices and discount amounts

Firstly, we shall describe the effect of the apartment price on the amount of the financial benefit: The economic mechanism underpinning the Scheme is provision of a discount in the price of the land in return for the contractor's obligation to reduce apartment prices. The marketing format is by way of public tenders in which the subsidized price of the land is already fixed, and contenders compete on the highest discount they are willing to commit to, to be rolled over to the final buyer. As mentioned previously, the discount amount was restricted to ILS 200,000 per unit of land per apartment, in order to avoid an increased discount for lands of higher value. **However, the results of the tenders show that despite the measures described, the actual discounts rolled over to final apartment prices offered under the Scheme increase in correlation with the apartment value:**



Figure 7: Homeowners' Fixed Price Scheme: Apartment Prices and Discounts



The chart above presents different price ranges of apartments offered within the Scheme based on real estate appraisals performed in 2015, and the average discount received by the Scheme's buyers relative to the apartment price. It should be noted that **the discount rates** off the apartment price are relatively uniform and of low variation, while the increase in the discounts' absolute values in relation to the price of the apartment is consistent and distinct, and its effects will be discussed later.

3.3.2 The correlation between household income and the price of the purchased apartment

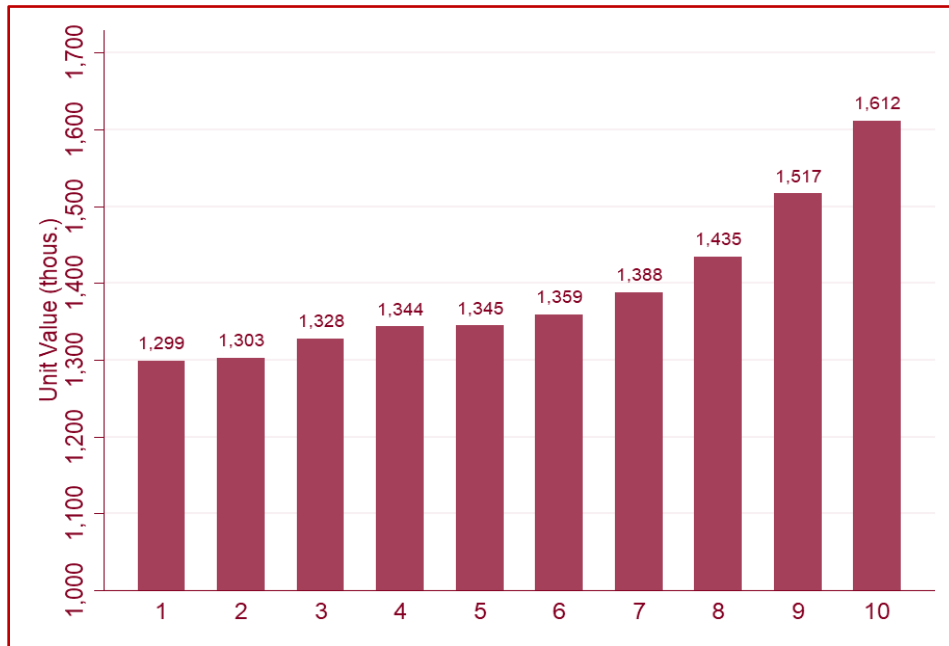
We will now take a look at the correlation between the level of income and the price of the apartment.

In order to uphold the principle of universality and expand the circle of participation in the Scheme, no criteria with regard to income were set in the current format of the Scheme. And indeed, as shown above, the Scheme attracted households from all levels of income.

In order to analyze whether and to what extent the variance in economic means and financial ability among winning households is reflected in their choice of apartments, the household income data collected was used in studying the relationship between income level and the price of the chosen apartments. Our findings indicate that the higher the income of buyers, the more likely they were to bid for the more highly-priced apartments, as shown below:



Figure 8: The Scheme's Average Apartment Prices, by Income Decile



Integrated observation of the findings presented thus far indicates that buyers with a higher income use the opportunity to enjoy the inherent increased discounts offered by choosing the more expensive apartments in the Scheme as those are within their reach. This trend constitutes the main criticism of the Scheme's equality.

3.3.3 Description of the link between income and benefit levels

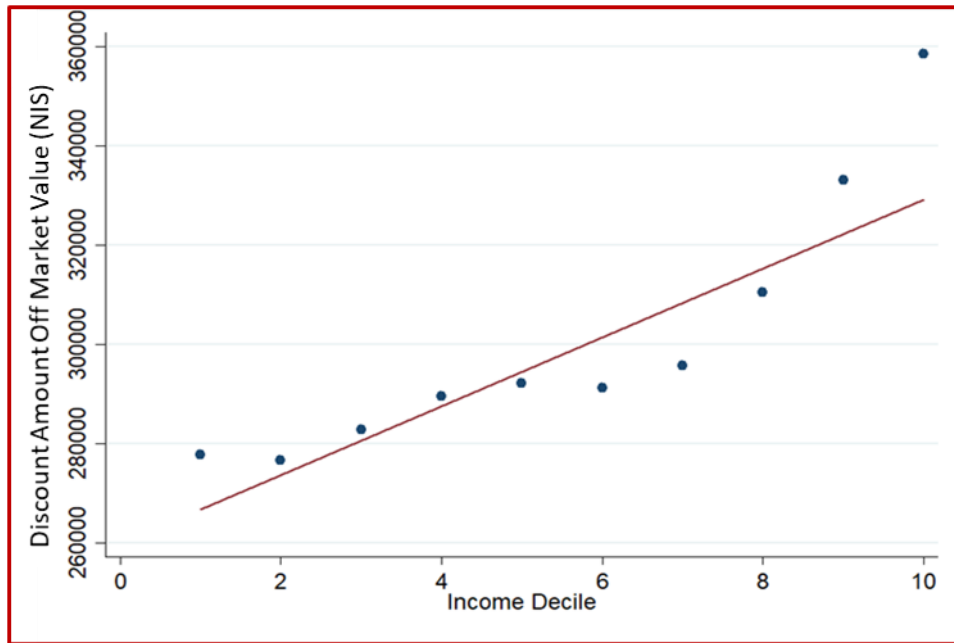
We now describe how the relationship described between apartment prices and benefit levels is reflected in the distribution of benefits across the various income levels.

Analysis of the allocation of benefits in absolute values

The monetary value of the benefit as a function of household income is presented in Figure 9 below, and describes the trend whereby the value of the benefit increases with the rise in household income:



Figure 9: Actual Discounts, by Deciles



The regressive result of benefit allocation can be attributed to a combination of two factors: The Scheme’s universality on the one hand, and its applied model of competitive allocation on the other, as will be explained below:

The model for marketing land and apartments in the Scheme does not directly intervene in the discount amount of the purchased apartment, but rather “makes do” with setting a discount ceiling on the land, while leaving the final price to market forces. The tender results have shown that projects in areas where demand is high can support greater discounts in the final apartment price because of the entrepreneurial potential for profit in these areas.

On the other hand, the inclusion of households at different income levels, coupled with the marketing of apartments at a wide array of price levels, create space for households to choose an apartment suited to their level of income and their economic ability.

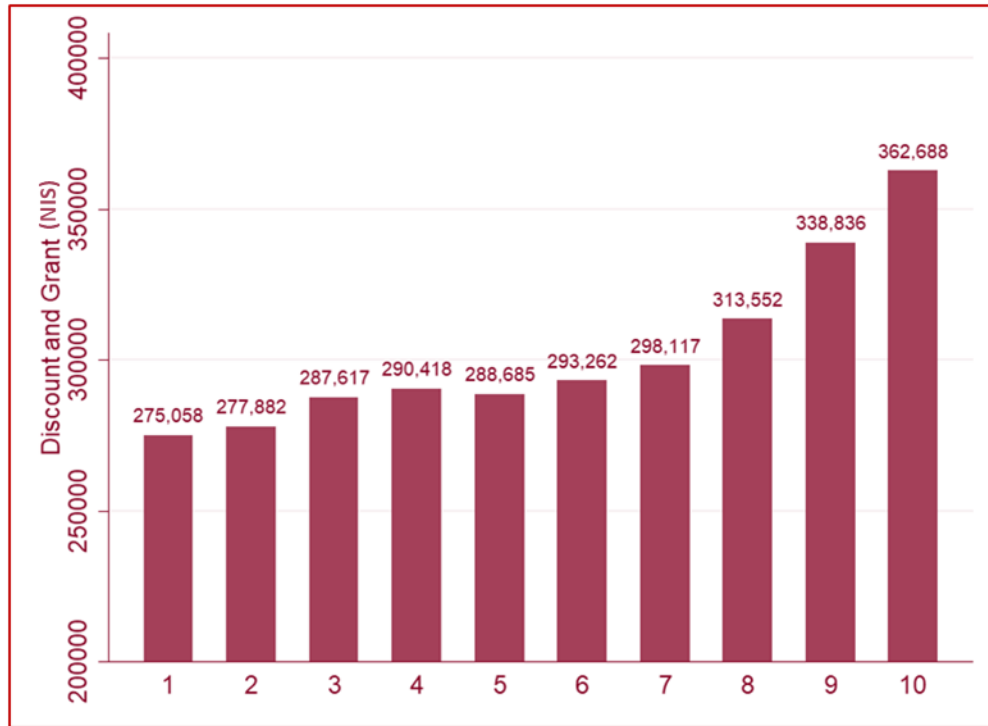
In this way, the demand from buyers of high income is naturally directed to the more expensive apartments, where the inherent economic benefit in their purchase rises in accordance with their price, as explained above.

Analysis of benefits allocation in relative values

First, for convenience, the average discounts will again be presented in absolute values as a function of household income:



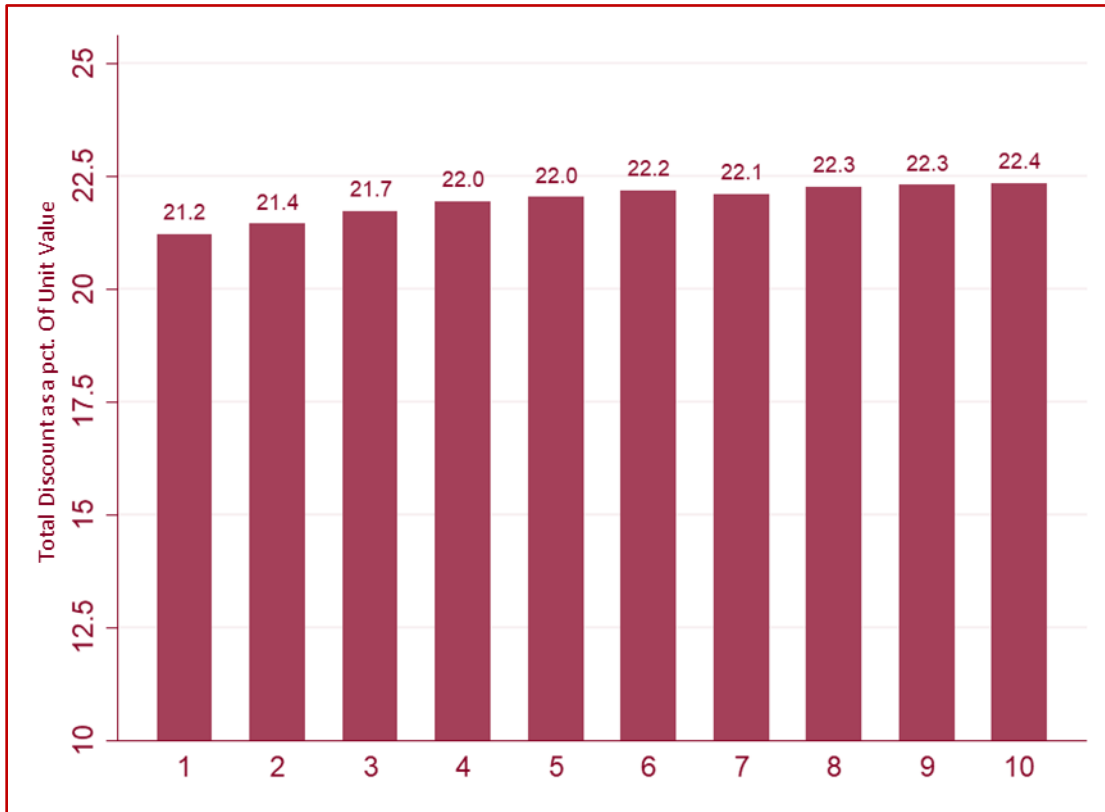
Figure 10: Average Benefit (Discount+Grant), by Deciles



However, when examining the discount **rate** (as opposed to the discount **amount**) off the price of the apartment as presented in the next chart, we see that the discount rates are fairly uniform in relative terms and are of lower variance:



Figure11: Average Discount Percent (%) off Apartment Value, by Deciles



A summary of the findings reviewed thus far, shows that apartment prices in the Scheme are characterized by high variance, in a way that does not differ from the housing market in Israel. There is a direct relationship between the price of the apartment and the discount level in its absolute values, while a more balanced picture emerges in relative terms (i.e., discount rates off the apartment price).

The contribution of Scheme benefits to housing affordability

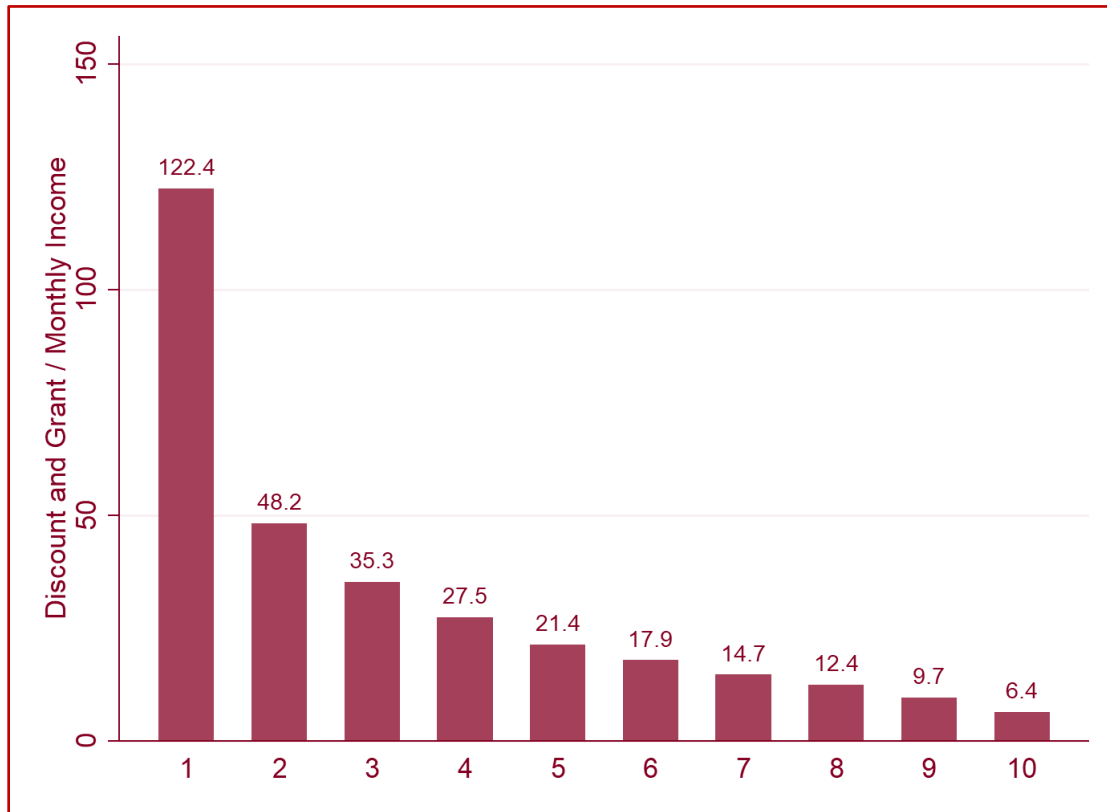
Let us now analyze the impact of the benefit in relation to household income in the different deciles. Measuring apartment affordability in relation to average salaries is an accepted benchmark internationally, since it indicates the ability of the household to finance total housing costs from its income sources.

As mentioned, a key trait of the Israeli housing crisis is the decline in housing affordability, stemming from the widening gap between the increase in apartment prices compared to household salaries and income. This gap was expressed in a consistent and continuous rise in the number of monthly salaries and income required to purchase an apartment.



Figure 12 shows an estimate⁶ of the benefit apartment buyers received under the Scheme in terms of months of income for each decile:

Figure12: Financial Benefit received under the Scheme as Number of Income months, by Decile⁶



It can be seen that the Scheme helps to increase apartment affordability in the lower deciles at a higher rate compared with the upper deciles. This finding, in some respects, responds to the criticism of inequalities in the allocation of benefits since it indicates a more significant economic impact on households in the low deciles in general and on the total housing cost component in their expenses, in particular. Concurrently, it should be emphasized that this is a relative economic impact, since in absolute monetary values, the allocated benefit is regressive, as previously explained.

A spotlight on the progressive impact of the grant in periphery regions

In the previous chapters, we reviewed the anti-regressive steps adopted by the Scheme in order to moderate the regressive relationship between income and benefit levels. A key

⁶ The estimate concerns the unsampled household income components, per-decile mean values were used (source: CBS)

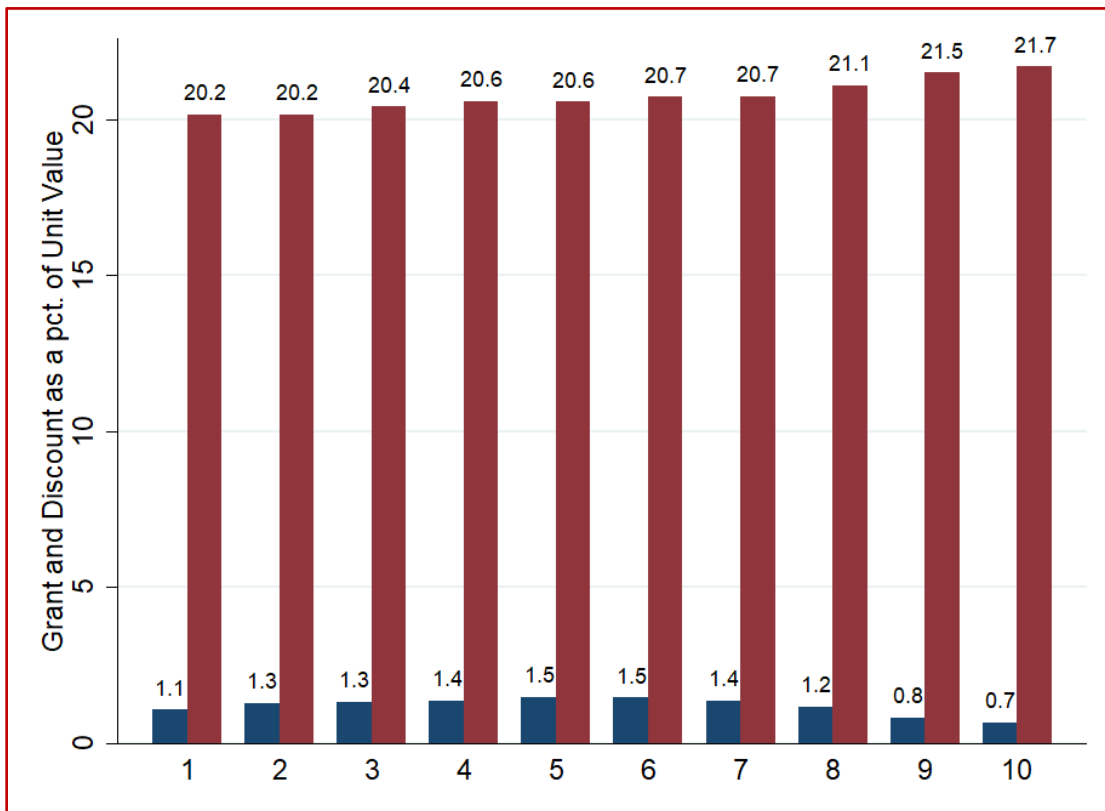


element here is the grant ranging from 40 to 60 thousand shekels per apartment, awarded to buyers of apartments in the periphery areas.

It should be clarified that this grant is based purely on location and is not contingent on income criteria.

At the same time, since household income and apartment prices in the peripheral areas of the country are low compared to the average, we have analyzed the grant's impact on reducing the gaps in benefits allocation and its contribution to moderating their progressive biases, among the deciles, as presented in the chart below:

Figure 13: Discounts and Grants as Percent (%) off Apartment Value, by Decile



The effect of the periphery grant is seen to be higher among the eight lower deciles (1.1%-1.5% of average apartment prices), as opposed to the two top deciles (0.7%-0.8%). In other words, a 0.3-0.7% higher discount rate is obtained in favor of households located in the lower deciles (1 to 8).

In deciles 1 to 8, the share of the grant is estimated at 5% -7% of the total benefit received under the Scheme, compared with only 3%-3.5% in the two top deciles.



The grant's contribution to reducing the gap in discount rates between the two uppermost deciles and the rest of the population, is therefore estimated at between 1.5% and 4%.

3.4 Socio-geographic analysis

Another aspect of the social impact of the Homeowner's Fixed Price Scheme we seek to examine in this study is that of the changes brought about by the Scheme in terms of internal migration and relocation, and their effect on population distribution between the periphery and the center of the country. We also look at how this transition impacts on demand and on where Scheme participants choose to reside or purchase an apartment for other purposes, such as for the purpose of a yielding an investment.

3.4.1 A cross section of the geographic supply of Homeowner's Fixed Price projects

Marketing challenges facing the Scheme

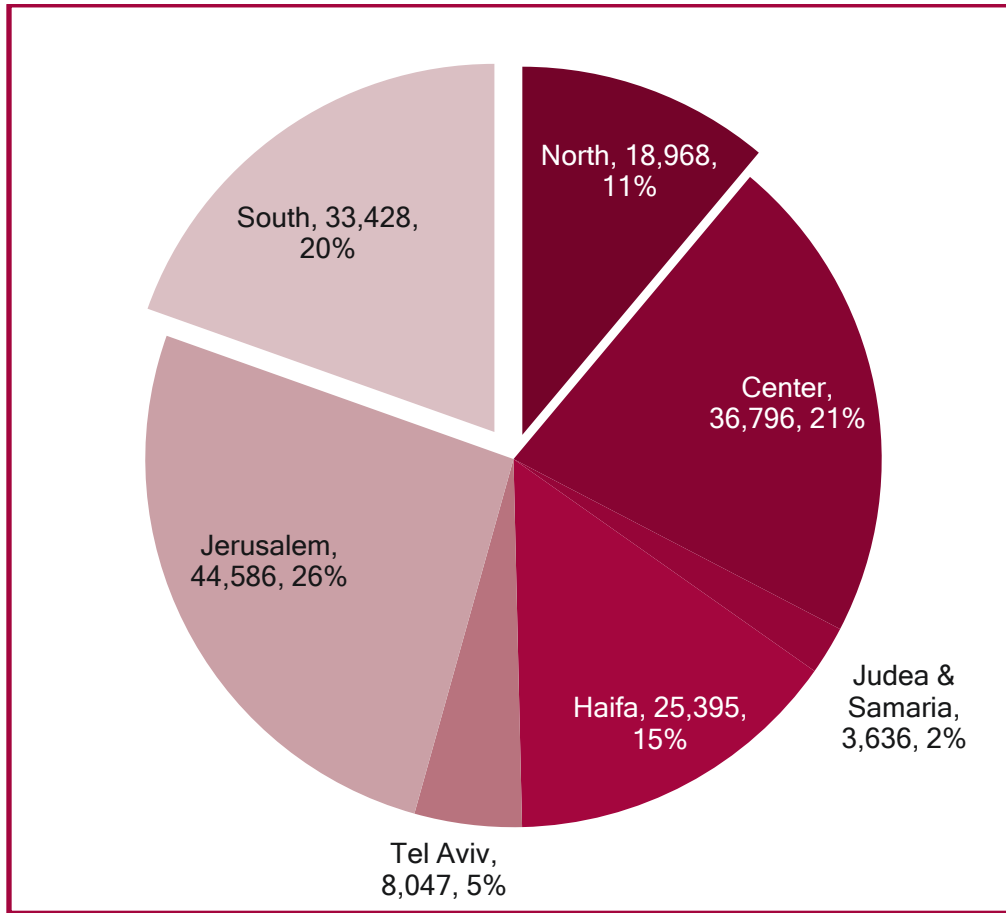
First, it should be mentioned that successful marketing of all parcels of residential land under the Homeowner's Fixed Price Scheme is not guaranteed, and that bids are not received in all tenders. While the Scheme's format does offer lower risks, it also represents lower profitability and less flexibility than projects on the free market. The success in marketing the land compounds is uneven. It varies from project to project and is affected by many factors including expected demand, the number of projects in adjacent areas, and the maturity of development and infrastructure for each particular project.

Housing supply - a geographic cross-section of residential units offered

The chart below shows the regional distribution of the total number of housing units offered to date through the Scheme's land tenders.



Figure 14: Housing Units by Region- OFFERED



Source: ILA

From the chart, it can be seen that 31% of housing units under the Scheme were offered in the peripheral regions (north and south), which exceeds their relative weight in the population (24.5%). However, when taking a look at the two regions separately, it transpires that this overrepresentation is only true for the southern region, which gained app. 20% of the total number of apartments offered through the Scheme, while its population accounts for only 8.3% of Israel's total population.

In contrast, the northern district actually suffered from 11% under representation in the total quantity of apartments offered, compared with the population size, which amounts to 16% of Israel's total.

In other words, the Israel Land Authority took action to intensify **marketing** in the southern district relative to high demand areas in the center of the country.

We will now examine the success of these efforts.



Geographical distribution - residential units **actually awarded**

Naturally enough, because of the large gaps in demand, marketing in the periphery presents more complex challenges than in the center of the country.

The Table below shows the number of housing units **offered** through land tenders under the Scheme compared with those **actually awarded** - i.e., successfully marketed. Analysis of the actual allocations shows that compared with the more central districts, there has been a significantly lower rate of success in the periphery regions, mainly in the southern district.

Table 5: Land Compounds Offered and Awarded, by Region

| % Awarded | Res. Units Awarded | Res. Units Offered | Compounds Awarded | Compounds Offered | Region |
|---------------------------|--------------------|--------------------|-------------------|-------------------|--------|
| Peripheral Regions | | | | | |
| 31% | 10,300 | 33,428 | 110 | 357 | South |
| 42% | 7,916 | 18,968 | 158 | 297 | North |

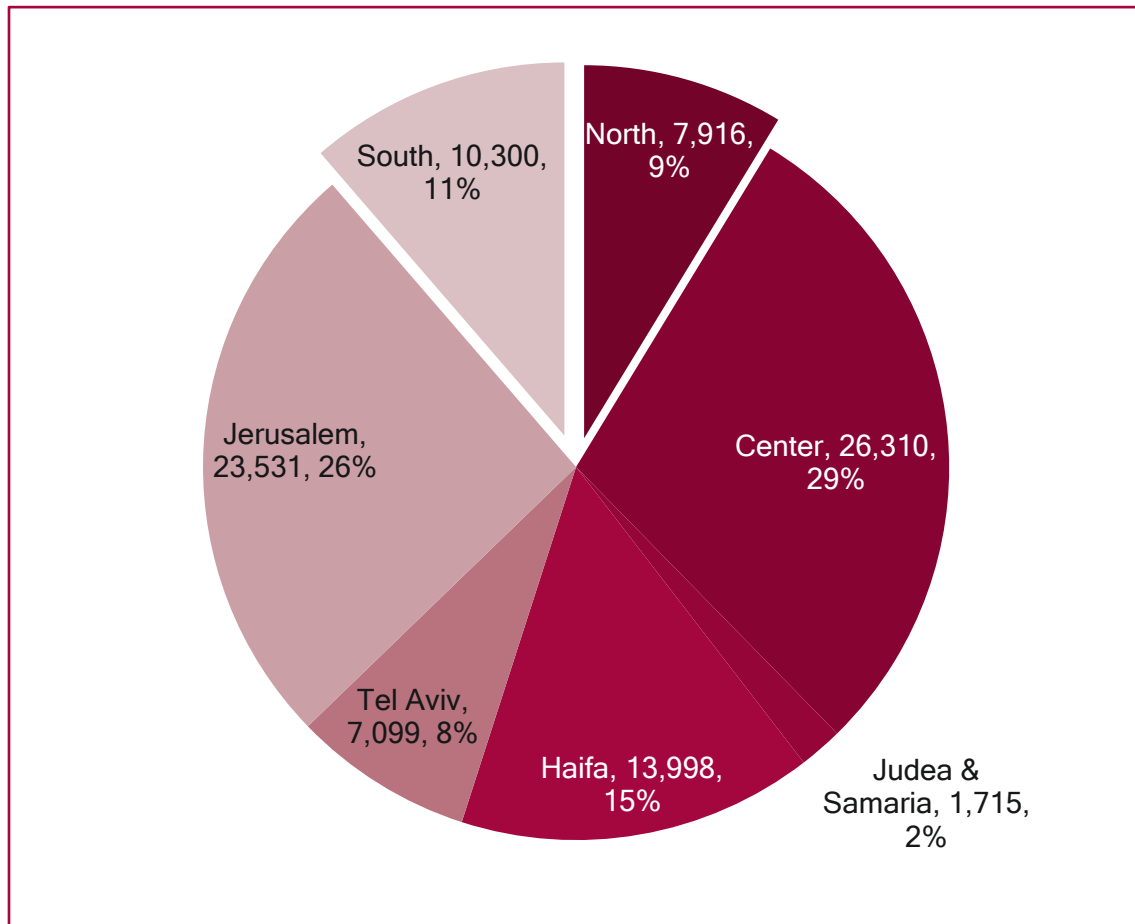
Central Regions

| | | | | | |
|---------------------|-------------------------|-------------------------------|--------------------------|----------------------------|------------------|
| 47% | 1,715 | 3,636 | 22 | 52 | Judea & Samaria |
| 53% | 23,531 | 44,586 | 182 | 367 | Jerusalem |
| 55% | 13,998 | 25,395 | 109 | 177 | Haifa |
| 72% | 26,310 | 36,796 | 212 | 291 | Center |
| 88% | 7,099 | 8,047 | 28 | 39 | Tel Aviv |
| 53% Success Rate | 90,869 Units Awarded | 170,856 Res. Units Offered | 821 Compounds Awarded | 1,580 Compounds Offered | Nationwide Total |

The low success rates in the peripheral districts compared with the central districts are of course reflected in the picture that emerges from the geographical distribution of **actual awarded** units so that their rate in the peripheral districts ultimately amounted to only 20% of the Scheme's total number of apartments.



Figure 15: Housing Units by Region - Awarded



Source: ILA

The southern district (which at 31% represents the lowest rate of success), ultimately only constituted 11% of the total number of apartments purchased under the Scheme, compared with 20% of the apartments offered through land marketing tenders.

3.4.2 Relocating and internal migration

Another possible social impact of the Homeowner's Fixed Price Scheme in its countrywide format is as a motivator for relocating and/or as a generator of change when selecting where to purchase an apartment.

First, it needs to be pointed out that Israel is a small country with a high population density. Transition between districts - and all the more so between neighboring districts - does not necessarily indicate a significant change in terms of internal migration or relocation of the center of life.



Furthermore, the Homeowner's Fixed Price Scheme does not require the owner to live in their purchased apartment, but only forbids its sale for a period of five years following the win, so that a not insignificant number of the apartments are purchased not for residential purposes and are intended for rental. The location of the purchase therefore serves only as a partial indicator of the patterns of residential relocation.

In order to identify the major trends, the matrix hereunder was drawn up for this study to show transitions between region:

Figure 16: Homeowner`s Fixed Price Scheme: Inter & Intra Regional Purchases Matrix

| | | Winning area | | | | | | |
|-------------|-----------|--------------|-------|-------|--------|----------|-------|-------|
| | | Jerusalem | North | Haifa | Center | Tel-Aviv | South | Judea |
| Living area | Jerusalem | 49% | 3% | 13% | 22% | 2% | 10% | 2% |
| | North | 3% | 62% | 17% | 14% | 1% | 4% | 0% |
| | Haifa | 1% | 11% | 70% | 12% | 1% | 4% | 0% |
| | Center | 4% | 4% | 12% | 66% | 5% | 9% | 0% |
| | Tel-Aviv | 7% | 4% | 16% | 47% | 19% | 7% | 0% |
| | South | 4% | 2% | 8% | 18% | 0% | 67% | 0% |
| | Judea | 22% | 4% | 23% | 27% | 1% | 14% | 9% |

Intra-district purchases (purchases in the original residential district)

As expected, most purchases under the Scheme are apartments in the district where the household resided before the Scheme's inception, **and in most districts about 2/3 of the winners purchased an apartment in their home district.** The low rates of intra-district purchasing among Tel Aviv residents (most purchases were made in its adjacent "center" district) and in Judea and Samaria may be explained by the low number of projects in these districts.

The exception is the **Jerusalem district** where, at 51%, the rate of purchases outside of the district is relatively high - is probably due to the divergence within the district in all matters regarding the characteristics of the cities that make up this district.



Local residents

In the context of intra-district purchases, mention is again made of the Scheme's policy of giving **preference to locals** by determining a quota that is set aside for locals for whom the chances of winning that lottery become significantly higher than for those who are not locals. The Israel Land Council even set increased quotas in small townships and localities that have national priority status (mainly in the periphery), and minority communities.

Table 3 on page 22, shows that approximately 37% of the winners are "local winners" - i.e., they resided in the locality of a Scheme project prior to the apartments coming under offer. The peripheral districts (south - 47%, north - 54%) lead the rate in terms of wins by locals where the northern district stands out in particular because it is characterized by smaller and more homogenous towns and villages and because of the contribution of Arab towns and villages in the region where quotas for locals were increased as an affirmative action policy. In Jerusalem (44%), the high rate of the many tenders in the vicinity may be attributed to the relatively large number of tenders in Beit Shemesh, which were earmarked at a high rate for local residents from the ultra-Orthodox population.

Inter-district purchases

Once we had become aware that in most districts about 2/3 of the purchases are internal to the district (and about 50% in the Jerusalem district), it therefore arises that about 1/3 of the purchases are intra-district - namely in districts other than the one in which the participant originally resided, some of which are adjacent districts while others are not.

At this stage of the Scheme, it is not yet possible to distinguish between apartments purchased as an investment and apartments purchased to actually live in, and conclusions on this aspect will be the matter of further study.

3.5 The social impact of the Scheme - Summary

The Homeowner's Fixed Price scheme is the Government of Israel's flagship scheme in the real estate market and has a number of goals, including reduction of the price of housing in the country, a response to the demand among young couples who do not own a home, and an improvement in the affordability of housing among all socioeconomic strata from the lowest deciles up to the mid- to upper middle class. The Scheme is wide-ranging and countrywide, and today constitutes the lion's share of the new apartment market in Israel. The Scheme adopted a universal format in the sense that it does not set threshold income criteria.



3.5.1 A concise summary of the findings

Wide representation of all socioeconomic strata in Israel

In general, and **in keeping with the universality of the Scheme**, the study findings indicate good representation of all socioeconomic strata. Furthermore, a high correlation was found between the average income of those in the Scheme and the general population in the various deciles.

The price of apartments and the offered financial benefits

The study found that in a similar way to the housing market in Israel, apartment prices in the Scheme are characterized by high variability and, as part of the Scheme, apartments are offered at a wide range of prices in keeping with the countrywide distribution of the Scheme in 'expensive' and 'cheap' localities alike.

As mentioned, the Scheme sets a progressive mechanism within its land subsidizing policy, in the form of diminishing discount rates and the setting of a discount amount limit as the market value of land increases. However, the study's findings indicate that the final discount enjoyed by buyers for apartments actually purchased, rose in parallel with the rise in the apartment's market price.

Although it was found that the **discount rates in relative terms** were more or less on a par at different price levels, the discrepancies between the level of economic benefit in absolute terms between 'expensive' and 'cheap' apartments were at the heart of public criticism against what was perceived to be allocation of benefits favoring households with means.

As part of the study, a positive relationship was described between the level of household income and the price of the apartment chosen in the Scheme which, as mentioned, was ultimately translated to a higher discount. It was found that significant discrepancies are to be found in apartments awarded to households whose income is ranked in the top three deciles (and more specifically in the top two deciles) relative to the other deciles.

Contribution of the Scheme to improved housing affordability

The decline in the affordability of housing in Israel as of 2008 and through to 2016, which arose from the gap between the steep rise in housing prices as opposed to the more moderate increase in real wages and household income, is the strongest possible expression of the housing crisis affecting Israel. As of 2017, with the halt in price increases, and the rollout of the Homeowner's Fixed Price Scheme, apartment affordability began to show improvement.



As part of the study, we sought to estimate the impact of the inherent economic benefit as a contributing factor to improving apartment affordability among the various socioeconomic strata that make up the buyer population. Examination of the benefit gained by households relative to their monthly income found that the Scheme helps improve apartment affordability in the lower deciles at an increased rate compared with the upper deciles.

The grant to buyers in the periphery as an effective social tool

The grant for people buying in the periphery, as discussed in Section 3.3 above, was found to have a positive effect in helping to reduce the gap in discount rates between the top two deciles and the remainder of the winning population by approximately 1.5%-4%.

Difficulties in marketing projects in the periphery

Analysis of tender results according to a geographical cross section shows decreasing success rates in the peripheral regions despite an increase in the grants offered to apartment buyers and the additional reliefs given to contractors in these regions. This finding is further strengthened by a Bank of Israel report in 2019 that highlighted a halt in price increases and even an excess supply of housing in the periphery.

3.5.2 Guidelines for maintaining and strengthening the Scheme's social impact

An analysis of the social outcomes of the Scheme as became evident during the course of this study, and their comparison to the defined objectives of the Scheme, show that in order to preserve the social impact achieved so far, and to deepen its positive effects wherever possible, the following guidelines should be followed:

Retaining the universal principles of the Scheme

Given that the Scheme was designed to have a full scale impact on Israel's housing market as a whole, and encompass a wide range of affordable housing solution for diverse populations, the positive picture arising from the findings of good representation of all socioeconomic strata supports the principle that a universal Scheme is preferable to the introduction of income threshold criteria for participation. Even so, and in light of the findings relating to the top (10th) decile and the relatively high benefit it received, it is worth considering improvement of the universal format at the edges - i.e., to limit the discount level to these populations.



Updating the land value assessments that form the basis for the tenders under the Scheme

The research findings relating to the positive connection between the price of an apartment and the final level of discount enjoyed by the buyer, indicate instances where the market price of the apartments increased between the date of their value assessment and the time apartments were awarded. This gives expression to an excessive discount off the market price at the time of the award, particularly in areas characterized by high apartment prices. Updating the assessments at a date closer to the tender will ensure more accurate pricing and reduce this occurrence.

Exclusion of areas with exceptionally high land values

The study clearly shows that the disparity in the financial value of the Scheme's offered benefits grows along with the rise in apartment prices. Furthermore, it was noted that the greatest differences in the benefits' financial value are found in those received by the top two deciles compared with the other deciles. It is therefore suggested to consider the exclusion of locations where land value is particularly high and not to market through the Scheme in such scenarios.

Targeted marketing in the periphery

The strategic Scheme for housing adopted by the Government of Israel set targets for future planned geographical deployment of new apartments throughout the country, taking into consideration the variability in demand and macro-economic efficiencies.

The falling success rates of the Homeowner's Fixed Price Scheme in the periphery and the economic indications that even suggest excess supply in these regions, show that this is a wider issue going beyond questions of supply and housing prices, and that in order to achieve the housing targets in the periphery, government will need to take action to integrate infrastructure and transportation development, public service improvement and wider employment opportunities in the periphery in general, and added-value employment in particular.

We furthermore propose that adjustments be made in the Homeowner's Fixed Price Scheme to focus on housing solutions for minorities who make up a relatively high proportion of the population in Israel's peripheral regions, while their participation in the Scheme is significantly lower than their share in the population.