Chapter 9 The Housing Market

- In 2018, the price of housing declined for the first time following a decade of uninterrupted price increases. This was partly due to government efforts that led to an increase in supply in previous years, and contributed to lowering demand. The Tel Aviv and southern districts were responsible for the overall drop in prices, with prices continuing to rise in other districts.
- The number of transactions in the housing market in 2018 was similar to that in 2017 but lower than in 2015–16. The downward trend in the number of transactions, which began in late 2016, continued through the first three quarters of 2018, though it began to rise in the fourth quarter. The annual totals indicate that the volume of transactions declined among investors and housing upgraders, while it increased among first-time home buyers, partly due to the Buyer's Price program.
- Housing starts declined in 2018 for the second year in a row. It is believed that about 52,000 new housing units per year are needed in order to meet demand.
- Since the Buyer's Price program began, about 59,000 households have won the right to purchase a subsidized home. However, the number of actual purchases is still low, primarily due to the time required to obtain building permits. The number of households newly eligible to participate in the program is approximately in line with the number of new households established by young couples.
- The marketing of land as part of umbrella agreements with the local authorities has so far not met the targets that the government has set for itself.
- In response to the reduced demand for homes in the periphery as part of the Buyer's Price program, developers reduced housing starts and the demand for land in those areas. As a result, it is possible that some of the umbrella agreements in the periphery will not be implemented.
- The government has set ambitious targets for urban renewal. Meeting the targets in areas of high demand will require a change in the existing urban fabric and large investments in infrastructure, particularly mass transit. The achievement of the targets will require regulatory adjustments and the allocation of a significant amount of resources. It is important that these adjustments be made without harming the incentives of developers and residents to act in such a way that the targets will be met.

1. MAIN DEVELOPMENTS

In 2018, housing prices declined moderately, the first decline in a decade. The number of transactions in the housing market in 2018 was similar to that in 2017.

In 2018, housing prices declined moderately, the first decline after a decade of uninterrupted increases that led to a doubling in prices. The number of transactions in the housing market in 2018 was similar to that in 2017. During the first three quarters of 2018 the downward trend in the number of transactions, which began in the last quarter of 2016, continued. This trend was led by investors and housing upgraders, while first-time home buyers maintained a high level of purchases, partly due to the Buyer's Price program. During the final quarter of the year, the number of transactions rose significantly in all the groups.

The increase in prices was to a large extent halted by the increase in construction, following the acceleration in housing starts in previous years. The number of homes under construction rose from an average of 95,000 in 2013–14 to 117,000 in 2016–18 and the number of building completions has risen since 2008 without interruption (Table 9.1). During the last two years, the supply of new homes, as measured by the number of housing starts, has declined. Thus, in 2017 the number of housing starts dropped by about 8 percent relative to 2016, and during the first three quarters of 2018 there was a decrease of 17 percent relative to the same period in 2017. The number of building permits also dropped during these quarters (by about 13 percent).

The rigidity of supply in the housing industry is asymmetric, such that the decline in construction is much faster in response to a slowdown in demand than the increase is in response to an acceleration in demand. The drop in the volume of housing starts—if it continues—and the slow response of supply to an increase in demand are liable to create a situation of excess demand, particularly in view of the demographic forecasts that the need for housing will grow significantly in the next decade and beyond. However, it is important to mention that the geographic distribution of housing starts indicates that they are still stable in the center of the country and have so far declined only in the periphery, apparently in response to the decline in demand for homes in the periphery. An analysis of the Buyer's Price data indicates that there is a need to plan housing units primarily in the areas of high demand in the center of the country. The Israel Land Authority's report for the first half of 2018 indicates that even though the Center, Tel Aviv and Jerusalem districts account for about 70 percent of the existing inventory of homes, they account for only 23 percent of the homes included in the submitted plans and only 36 percent of the homes included in the approved plans, due to the low availability of land for construction in the center.

2. THE INCREASE IN THE SUPPLY OF HOUSING IN PREVIOUS YEARS

Table 9.1 shows the long-term trend in the supply of housing. The table shows that in 2008 and 2009, the supply of housing was below the average for the previous decade, and as a result of high demand during that period, prices shot up following a decade of decline in real prices (prices relative to the CPI). In 2009, the government

Table 9.1 Selected housing market data, 2008–2018

Selected Housing market data, 2006	-2010											
	1997–2007 average (if not noted											
	otherwise)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Supply variables												
Building starts ^a (thousands of units) of which: Building starts as part of urban renewal	36.8	32.9	35.0	40.4	46.6	43.5	47.9	47.7 6.0	53.6 7.6	55.9 8.2	52.9 9.3	47.4 10.3
of which: Net additional housing units in urban renewal (estimate)								4.8	6.0	6.3	7.4	8.7
Building completions ^a (thousands of units)	41.0	30.5	32.6	33.3	34.1	37.4	42.5	44.7	43.9	46.1	48.4	50.0
Stock of homes under active construction (end of year, thousands of units)	69.9	61.9	64.3	70.9	83.2	89.0	94.2	96.9	106.4	115.9	119.9	117.6
Building permits ^a (thousands of units)	27.8	33.2	33.5	43.4	50.3	45.5	50.2	48.0	55.6	54.1	55.2	50.0
Investment in residential construction (rate of change, 2011 prices)	-1.8	9.8	8.0	12.5	9.8	6.7	5.4	6.7	1.0	9.1	1.9	-8.2
Demand factors												
Population aged 25–44 (rate of change) ^b	2.1	2.0	3.6	1.7	1.3	2.1	1.6	1.5	1.4	1.3	1.2	
Average real wage per employee post (rate of change, 2011 prices)	1.2	-0.3	-2.5	0.7	0.4	0.6	1.1	1.3	2.8	2.9	2.9	2.8
Average net real household income (rate of change, 2011 prices)	3.2 ^g	2.7	0.8	2.4	-0.2	3.5	4.1	3.1	2.5	2.7	4.6	1.8
Unemployment rate among those aged 25–64 (level, percent)	9.4	6.4	8.3	7.2	6.1	5.9	5.4	5.0	4.5	4.1	3.7	3.5
Weighted real interest rate on new mortgages ^c (level, percent)	4.3 ^g	3.1	0.9	1.4	2.5	2.2	1.6	1.3	1.0	1.5	1.9	1.7
Real per capita GDP (rate of change, 2015 prices)	1.7	1.3	-0.4	3.6	3.2	0.4	2.4	1.9	0.6	2.0	1.5	1.3
Financial wealth of the household sector ^d (end of year, rate of change)	11.9 ^h	-14.6	20.9	16.0	0.2	11.6	6.4	6.2	1.2	3.1	11.5	
Rate of those planning to buy a home in the next 12 months ^e (percent)					6.6	7.7	7.4	7.3	7.0	7.6	7.3	8.4
Outcome variables												
Housing transactions ^f (thousand)	90.9	94.1	102.2	104.0	86.5	102.7	114.4	99.6	121.1	112.0	101.5	102.6
New homes sold (thousands)	17.6 ^g	16.4	18.8	22.5	19.5	22.5	24.3	23.6	32.3	29.6	24.4	21.9
Homes not for sale, construction began on them (thousands)	14.0 ^g	15.4	17.1	17.6	20.3	20.2	19.5	18.3	18.9	19.8	18.3	16.7
Home prices (real rate of change, 2011 prices)	-2.3	6.5	15.4	11.1	1.8	6.9	5.4	4.5	9.0	5.9	1.0	-1.5
Households that do not own a home (percentage of population)	28.2 ^h	29.6	29.3	28.8	27.6	28.0	27.9	27.9	27.5	27.4	28.2	
Households that own more than one home (percentage of population)	2.9 ^h	3.4	4.2	4.5	6.4	7.9	8.4	9.1	9.9	9.7	10.0	
Length of time to sell home (days)							168	204	190	194	173	220
Percentage of homes purchased for investment (as a share of total purchases)		26.2	28.1	28.0	24.0	22.5	22.8	25.3	25.1	18.9	16.8	16.0

^a The data relate to the last four quarters.

^b The break in the population aged 25-44 series is due to changes in the Census made in 2008.

^c The real weighted interest rate on mortgages is calculated assuming a 2 percent annual inflation rate.

^d Financial wealth of the household sector includes cash and deposits, shares and other securities, insurance reserves, participatory certificates, and financial derivatives. The figure is taken from the National Balance Sheet prepared by the Central Bureau of Statistics.

^e The rate of those planning to purchase a home taken from the Consumer Confidence Index, Central Bureau of Statistics.

^f The number of residential home transactions is based on purchase tax and betterment tax data.

g Average from 2004 to 2007.

^h Average from 2003 to 2007.

SOURCE: Central Bureau of Statistics, Ministry of Construction and Housing, Israel Tax Authority, and Bank of Israel.

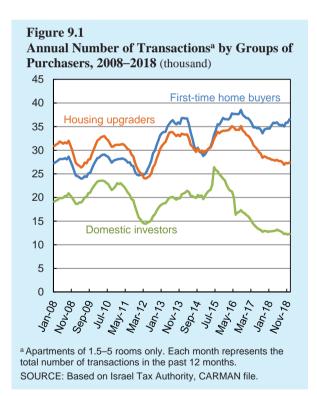
The increase in building starts in previous years was a major factor in halting the increase in home prices in recent years.

initiated a process to release land and increase supply, which was accompanied by a consistent increase in housing starts (from 32,000 at its lowest point in 2009 to 55,800 in 2016). The change in direction and the consistent increase in housing starts facilitated a consistent and gradual increase in housing completions, from 30,000 in 2008 to 48,000 in 2018, and this process has increased the stock of housing under construction (from 62,000 in 2008 to 115,000 in 2018). Considering the fact that, starting in 2012, demand for housing increased and young couples returned to the market, this increase in supply was a major factor in halting the increase in housing prices.

It should be emphasized that the Strategic Plan for Housing for 2017–2040 estimates that the need for housing will be about 52,000 units per year from 2017–20 and about 60,000 units per year during the period 2017–2040, since housing needs will rise gradually over the period. The data on housing starts for 2017–18 indicate that construction is lower than these needs, and a deficit in housing units is therefore liable to develop in the economy.

3. TRANSACTIONS

The number of transactions in 2018 was similar to that in 2017. The number of transactions in the housing market fell during the first three quarters of 2018, and rose in the final quarter. For the year as a whole, purchases by investors and housing upgraders continued to decline, while the number of purchases by first-time home buyers remained stable until the last quarter, when it rose (Figure 9.1). First-time home buyers increased their share of total purchases from an average of about 39 percent during 2013-15 to about 48 percent in 2018. Many of the potential buyers are waiting to win one of the lotteries in the Buyer's Price



purchases by investors and housing upgraders continued to decline, while the number of purchases by first-time home buyers remained stable until the last quarter, when it rose.

For the year as a whole,

program or for the granting of a building permit for a project in which they have already won. The number of new housing units sold in 2018 is about 10 percent lower than in 2017.

First-time home buyers purchased about 35,600 homes in 2018, of which about 9,800 were part of the Buyer's Price program. The increase in home prices since 2008, and particularly since 2012, has been accompanied by a marked increase in the number of young couples purchasing a home. It was also accompanied by an increase in the proportion of first-time home buyers (as a share of total buyers) who purchased homes in the periphery. Thus, homes outside the center of the country (Tel Aviv, Center and Jerusalem Districts) accounted for 39 percent of total purchases by first-time home buyers in 2008–9, and about one-half in 2017–18. The focus on the periphery is due to the higher availability of land than in the center, where it is difficult to market land. This can be seen from the figures of the Buyer's Price program. Thus, in 2016, 53 percent of the homes included in the lotteries were located in the periphery. Although in 2017, this proportion dropped to about 40 percent, it rose to about 63 percent in 2018. Following the beginning of the program in 2015, the proportion of new homes as a share of purchases by first-time home buyers has increased from an average of about 24 percent in 2013–14 to an average of about 37 percent in 2015–18 and in 2018 the figure rose to 41 percent. This illustrates the fact that first-time home buyers have reduced their demand for second-hand homes.

Since 2012, there has been a clear upward trend, as already mentioned, in the number of transactions carried out by first-time home buyers. Within this trend, there was only one episode of a decline, which occurred as a result of the expectations created by the proposed zero-VAT law in late 2014. Thus, even though housing prices have doubled in the last decade, first-time home buyers increased their volume of purchases significantly, although the rate of increase of the population has remained unchanged.¹

Housing upgraders carried out 26,700 transactions in 2018, which was a continuation of the steep downward trend that began in 2017. It appears that these households reduced their purchases first and foremost due to the reduced possibilities of selling a second-hand home, following the drop in demand for homes among investors and for second-hand homes among first-time buyers (the latter, as mentioned, increased the proportion of new homes in their total purchases). The proportion of upgraders-in-waiting (those who have already purchased a new home but have not yet sold the old one) reached a peak of about 30 percent during the last two years. It is reasonable to assume that this is due to increased difficulty in selling a home in the second-hand housing market, rather than the expectation of an increase in prices, since the time needed to sell a home has risen sharply (Table 9.1).² The Ministry of

The proportion of upgraders-in-waiting increased in the past two years due to a decline in demand for second-hand homes.

In the last decade, first-time home buyers increased their volume of purchases significantly, although the rate of increase of the population remained unchanged and home prices increased.

¹ The changes that have occurred in the purchases by young couples and the influence of various factors on the probability of purchasing a first home were discussed in Bank of Israel (2019), "The changes in the proportion of first-time home buyers among young families according to level of income during the period 2007–17," Selected Research and Policy Analysis.

² The time in days until the sale of a home is calculated according to the date on which the home was first advertised and the date of the actual sale.

Finance has carried out a study³ based on the data for upgraders-in-waiting, which showed that homes sold in December 2018 were "on the shelf" for about 15.2 months on average while this figure was only 10 months for homes sold in January 2018.

Another possible explanation of why there are fewer purchases by housing upgraders is related to the urban renewal programs, namely Tama (National Outline Plan) 38 and "vacate-and-build", in which homeowners receive roomier homes with the addition of a security room and a balcony. In recent years, the volume of construction in these programs has expanded. Thus, in the last three years, the number of homes included in one of these programs was about 1,800–2,000 per year and the estimated number of homes renovated in the Tama 38/1 program (reinforcement of buildings) stands at 4,000–6,000 per year. For some households, this process constitutes an improvement in their housing situation and eliminates the need to sell their old home and buy a new one. It is difficult to estimate the extent to which housing upgraders have been freed from the need to purchase a new home as a result of their participation in one of these programs. First, it appears that many of these households were not among potential upgrade home buyers, since most of them are apparently older and belong to weaker

socioeconomic status groups, and lived in old and poorly-maintained housing. Second, some of the home owners in these programs are similar to investors, in that they have purchased homes in locations that are designated for urban renewal in order to benefit from the increased value of the renovated homes.

Local **investors** accounted for an average of about one-quarter of the purchase transactions during the period 2008–15. Their share of transactions has been falling for various reasons, and in this context it should be recalled that the purchase tax on investment homes was raised in mid-2015.⁴ Thus, during



³ "Review of the Residential Real Estate Market," December 2018, Ministry of Finance Chief Economist. [in Hebrew]

⁴ In addition, the government attempted to impose a multiple-dwelling tax on owners of three or more homes. Apparently, this move has also affected investor decisions, although in the end the Supreme Court froze the initiative.

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the 2016–18 period, their average share reached only about 16 percent (Table 9.1) and the absolute number of transactions by investors fell significantly, with the number of purchases in 2018 totaling only about 11,800. While the linear calculation of the betterment tax increases the profitability of selling some investment homes and realizing the capital gains, particularly in an environment in which it is possible that the upward trend in prices has been halted⁵, the profitability of investing in rental homes has increased as there have been signs during the last year that the yield from rentals is increasing, following a number of years in which it declined (Figure 9.2).

Israeli households have therefore cut back investments in rental properties in Israel, but, at the same time, they have expanded their investment activity in real estate abroad. Thus, net investment in 2018 increased by about 67 percent relative to 2017. Israeli households began to increase this type of investment in 2015, when the purchase tax on investment homes in Israel was raised, and its volume has been increasing continuously since then.

Israeli households have cut back their investment activity in rental properties in Israel, but, at the same time, they have expanded their investment activity in real estate abroad.

4. PRICES

In 2018, home prices fell for the first time after a decade of interrupted price increases. Thus, the Index of Home Prices for December 2018 was about 0.7 percent lower than in the corresponding period in 2017. Home prices fell in the Tel Aviv district (by 3.6 percent) and the southern district (0.1 percent), while in the other areas prices rose (1.2 percent in the Jerusalem district, 1.1 percent in the Haifa district and 0.1 percent in the central and northern districts). The price index of new homes sold in December 2018 was about 1.8 percent lower than the index for December 2017. During this period, the proportion of subsidized homes rose from 24.5 percent to 41.3 percent.

The drop in prices reflected both the expansion of supply in the previous years and the government policy to reduce investor buying. This policy was the result of the conclusion that investor demand had contributed to the accelerated increase in prices. In 2008–10, for example, home prices rose by about 36 percent in real terms and investors constituted about 27.4 percent of purchasers on average. In contrast, during the past year they constituted only about 16 percent. Other countries also took steps to reduce the effect of investors, including foreign ones, on housing prices. Several raised the purchase tax on investors (Australia, Canada, Hong Kong and Singapore); others changed the tax applying to foreign investors (Britain and New York); and others explicitly prohibited the purchase of assets for investment in certain areas (as in Switzerland, China and New Zealand). It is reasonable to assume that in the

⁵ Until the end of 2013, investors in homes could obtain a full exemption from the betterment tax once every four years if they sold an apartment for up to NIS 4.5 million and if they had held it for at least 18 months. At the beginning of 2014, an amendment went into effect that cancelled the exemption but provided "linear protection", according to which tax would be paid at a rate of 25 percent only on betterment that had accumulated from 2014, on the assumption that the entire betterment was spread evenly over the home's holding period. Therefore, as we get farther from 2014, the portion of the betterment on which tax is to be paid will be greater.

coming years a rich empirical literature will develop on the effect of these steps on home prices. In the meanwhile, this literature is still emerging and sometimes yields conflicting results. To illustrate, a study that looked at the response of the Chinese housing market to severe limits on the purchase of additional homes—whether for investment or even for residence—found that in the immediate term the number of transactions in regions where the limits applied fell by 40 percent relative to other regions. The effect weakened over time but even after two years there remained a gap of 24 percent. Nonetheless, the study did not find any empirical evidence of a drop in prices (after controlling for differences between the two types of regions with respect to changes in the supply of land for construction and the price of land). However, studies that use other identification techniques have also found an effect on housing prices. Thus, in cities where the purchase of homes for investment is prohibited, prices have fallen by 18–20 percent relative to other cities.⁷

In recent years, the government has adopted a number of new measures to moderate home prices and to allow young couples to purchase a home at lower-thanmarket prices. Thus, it has implemented the Buyer's Price program, which provides a significant discount on the purchase of a home, and it has signed umbrella agreements with a large number of local authorities in order to facilitate an increase in the number of new housing units.

The data indicate that while the number of housing starts increased significantly in 2015–16, there has been a pullback during the last two years (Table 9.1). This trend is influenced by the fact that the slowdown in sales has left contractors with a stock of unsold homes, which apparently has discouraged the undertaking of new projects. It also appears that there has been a slowdown in the issuing of building permits (Table 9.1). Furthermore, in recent years construction as part of urban renewal projects has been expanding (Table 9.1), and it constitutes a significant portion of total housing starts. Since urban renewal projects longer to mature than projects on new land, due to the need to reach agreement with the residents who hold the property rights, there is less supply of homes in the short term, while demand originating from the participants in these projects is reduced (Box 9.1 provides further discussion of urban renewal).

2018 (Table 9.1). In order to understand the expected trend in prices, the change in

The number of housing starts increased significantly in 2015-16. In the last two years, it has declined.

At this stage, it is difficult to determine whether home prices will continue their downward trend. The sale of new homes fell by 10 percent in 2018, even though the Central Bureau of Statistics Consumer Confidence Index shows that the proportion of those planning to purchase a home in the next 12 months in fact rose during

⁶ T. Somervile, L. Wang, and Y. Yang (2018). "Using Purchase Restrictions to Cool Housing Markets: A Within-Market Analysis", Faculty Research and Publications.

https://open.library.ubc.ca/collections/facultyresearchandpublications/52383/ items/1.0372526

⁷ J. Cao, B. Huang, and R.N. Lai (2015). "On the Effectiveness of Housing Purchase Restriction Policy in China: A Difference in Difference Approach", SSRN Working Paper, http://dx.doi.org/10.2139/ ssrn.2584275; Y. Yan and H. Ouyang (2018). "Effects of House-Sale Restrictions in China: A Differencein-Difference Approach", Applied Economic Letters, 25(15): 1051–1057.

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construction costs should also be taken into account. Thus, the Index of Building Inputs for Residential Construction rose by 2 percent in 2018, and it is possible that legislation to improve work safety will increase costs to some extent. The legislation is necessary in view of the number of accidents in the industry (41 individuals were killed in 2018 alone).

5. GOVERNMENT HOUSING PROGRAMS⁸

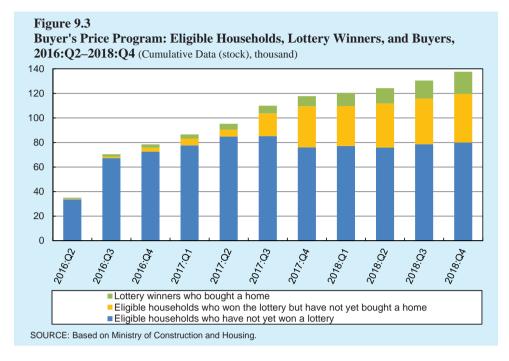
From the beginning of the Buyer's Price program at the end of 2015 until the end of 2018, 18,000 households exercised their right to purchase a subsidized home out of the 59,700 who won the right in a lottery. In total, about 140,000 households have obtained certificates of eligibility to participate in the lotteries (about 132,000 of them do not own a home while the rest are housing upgraders). The data published by the Housing Bureau show that about 1,800 homes were meant to be occupied during this period and it is expected that during 2019 about 5,000 more will be occupied.

With the initiation of the Buyer's Price program, the government decided to market State land almost exclusively through that channel, which is designated only for the eligible population. In 2018, this channel accounted for 95 percent of the land marketed that was designated for high-density construction. The government's financial statements show that from the beginning of the program until the end of March 2018, the total cost of the program was about NIS 5.5 billion, and about NIS 3.9 billion of that was the result of the discounts on the value of the land. Furthermore, the government provided guarantees to the banks for the mortgages provided to buyers in projects where the developers were not required to provide guarantees to the buyers under the Sales Law (Housing).

In 2018, about 26,000 households were issued certificates of eligibility to participate in the program, a figure that is consistent with the rate of new households that fulfill the criteria (in other words, the "flow" of households). The numbers were higher in previous years (66,000 certificates were issued in 2016 and 44,000were issued in 2017), since couples without a home who had marriage seniority (the "inventory" of households who meet the criteria) also registered for the program. Figure 9.3 presents the number of eligible households, the winners, and the purchases in the Buyer's Price program, starting from the second quarter of 2016. The Figure shows that many of those eligible for the program did not win a lottery, and that many of those who won a lottery have still not purchased the dwelling for which they are eligible.

⁸ The data for the Buyer's Price program are correct as of February 10th 2019. The general data also include the Target Price program.

⁹ In locations where the average value of the land per housing unit (without development) is less than NIS 150,000, a discount of 80 percent of the value of the land was provided, while in locations where the value of the land per housing unit was higher than that a discount of NIS 120,000 per housing unit was provided. The value of the land is determined by the Chief Government Appraiser.



The Housing Bureau regularly publishes figures on the progress program, primarily regarding the numbers of eligible households and the lotteries. The information on the progress of the lotteries for which results have been published is divided into three stages: (1) a project in the lottery process (projects that have not yet received building permits; recall that in the Buyer's Price program it is possible to advance to the sale stage only after the receipt of a permit¹⁰); (2) the selection of the home; and (3) control of contracts (purchase). Figure 9.4 presents all of the homes won by eligible households according to the

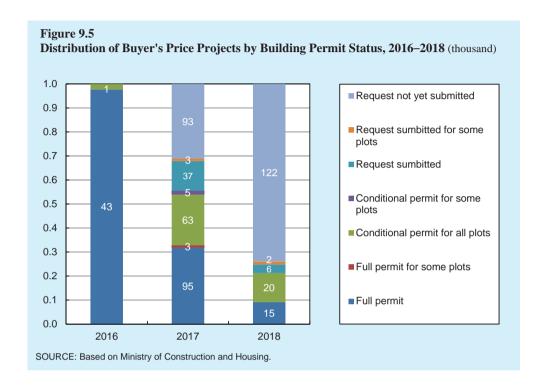
Figure 9.4 **Distribution of Buyer's Price Lottery Winners** by Project Stage, 2016–2018 (thousand) 1.0 1,880 2,417 0.9 4,869 0.8 2,191 0.7 0.6 0.5 7,786 0.4 23,13 0.3 2.055 0.2 0.1 0.0 2016 2017 2018 ■ Contract control stage Home selection stage ■Lottery stage SOURCE: Based on Ministry of Construction and Housing.

Most of the "Buyer's
Price" winners in
2017–18 have not yet
reached the stage
of choosing a home,
because many projects
have not yet received
building permits.

status of the project and the year of the lottery. Most of the winners in 2017–18 have not yet reached the stage of choosing a home.

¹⁰ In regular projects, sales are sometimes carried out before a building permit is obtained.

Figure 9.5 distinguishes between the projects according to the status of the permit. It shows that many of the projects in the lottery stage have not yet received a building permit, and therefore have not yet reached the stage of home selection.



There is therefore a long period between winning the lottery and receiving a permit and subsequently choosing the home, which reflects, among other things, the close proximity in time between the tendering of land to the contractors and the lottery among eligible households. ¹¹ Table 9.2 presents the simple average of the number of days and the average weighted by the number of housing units in each lottery. The figures in the table indicate that in 2018 this index dropped sharply, relative to its level of two years ago. It appears that the time between the tender and the lottery has shortened due to the government's interest in maximizing the number of winners. However, as a result, the period between the announcement of the winners and purchase of the home—i.e. the waiting period before the purchase—has lengthened. ¹² In general, the detailed planning of a project begins only after winning the land and the developer submits a request to increase the number of housing units in the project,

In 2018, the time between the tender for developers and the lottery became significantly shorter.

¹¹ For each lottery, we located a corresponding tender to developers in order to calculate the number of days between the selection of the winning developer and the closing of registration for the lottery, except for a number of tenders in which the name of the winning contractor differed from the name in the lottery, and for several cases in which a corresponding land tender was not found.

¹² When a household advances from eligibility to winning the lottery, its commitment to purchase a home as part of the program and not in the free market is apparently reinforced.

among other things.¹³ The approval of such a request delays the issue of a building permit. Additional delays are the result of Buyer's Price winners sometimes submitting their opposition to the local planning council out of concern that this will lower the quality of the apartments.¹⁴ Recently, the Attorney General decided that the winners in the program do not have the right to submit their opposition since they have not yet purchased the apartments and therefore do not have property rights.

Table 9.2 Duration from land tender for developers and the lottery for eligible participants, 2016–2018

	Days, simple	Days, average weighted by number				
	average	of dwellings in the project				
2016	251	226				
2017	251	229				
2018	96	113				

SOURCE: Central Bureau of Statistics, Ministry of Construction and Housing, Israel Tax Authority, and Bank of Israel.

It appears that the Buyer's Price program has succeeded in providing a full solution to the demand of young couples in the periphery. Moreover, the program is less attractive in the periphery than in the center since the discount on a home in the periphery is relatively small at the moment. An analysis carried out by the Ministry of Finance¹⁵ found that the gap in prices between new homes purchased by young couples in the free market and homes purchased through the Buyer's Price program is 30 percent in the center but only 7 percent in the periphery.¹⁶

In the absence of data on those who gave up on their rights, we can obtain an index of the demand for homes within the program by comparing the number of winners to the number of homes in the lotteries. There are cases in which dwellings are left over in the first lottery and a second one is held (and sometimes even beyond that). Therefore, the calculation includes only the initial lotteries in order to avoid duplication. Table 9.3 presents the findings, which show that about 18 percent of the dwellings offered in the lotteries remain untaken. These are usually in localities in the periphery. This is apparently the main reason that as the program matures it is being opened to new populations. Thus, starting in October 2017 housing upgraders

¹³ Such a request is submitted for most of the high-density building projects, based on the "Sheves regulation", which makes it possible to increase the number of housing units in a project by up to 30 percent without increasing the building rights (as a percentage of the lot area). In 2015, an amendment to the Sheves regulation was approved, making it possible to increase the building rights by 20 percent.

¹⁴ As happened in Herzliya, Rishon LeZion, Or Yehuda, Ra'anana and Mevasseret Tzion.

¹⁵ "Survey of the Residential Real Estate Market," December 2018, Chief Economist of the Ministry of Finance.

¹⁶ Most of the dwellings in the central district are located in localities with low demand such as Yavne, Gedera, Be'er Yaakov and others.

¹⁷ The full list includes the Krayot, Nahariya, Harish, Dimona, Tirat Carmel, Migdal HaEmek, Haifa, Be'er Sheva, Yavne, Gedera, Or Yehuda, and Ramle.

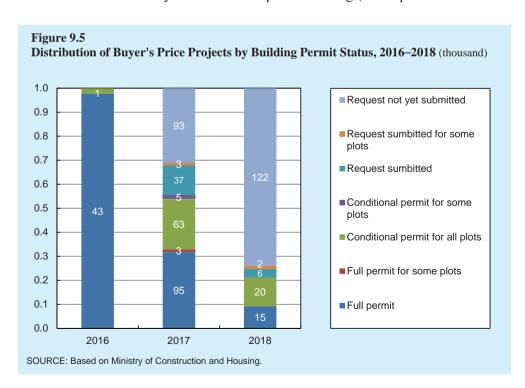
Table 9.3 Number of dwellings in the initial Buyer's Price lotteries and number of winners, 2016–2018

	The Center ^a			The Periphery ^b		
	2016	2017	2018	2016	2017	2018
Homes actually put through the lottery	2,226	21,677	5,966	3,381	13,757	9,296
Winners	2,042	19,806	5,879	2,460	7,996	7,187
Percentage of homes left without a winner	8.3	8.6	1.5	27.2	41.9	22.7

^a Tel Aviv, Center, and Jerusalem districts.

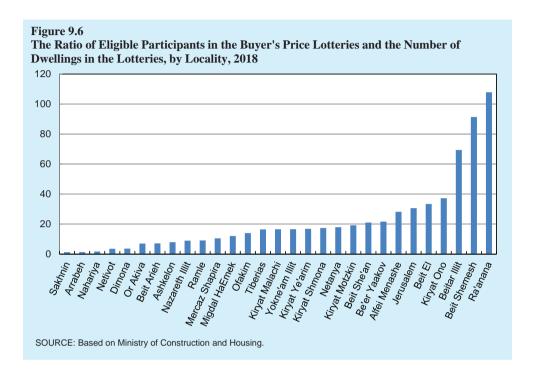
SOURCE: Based on Ministry of Construction and Housing.

were permitted to participate. This year they were joined by divorcees under the age of 35 with no children living with them, and just recently singles aged 26–35 became eligible to purchase the leftover apartments. In addition, the definition of a non-homeowner was recently changed. Thus, until now a household was considered to be a non-homeowner if it had not owned a home for six years. That period was recently shortened to three years. More than one thousand leftover apartments—almost all of them in the periphery—were offered at a subsidized price and without a lottery to anyone with a certificate of eligibility. In addition to these changes, another two exemptions were recently granted: (1) It was decided that if the contractors were left with an unsold inventory of apartments after additional lotteries, they could sell them to the State and they would become public housing (the implementation of the



^b North, South, and Haifa districts.

decision is expected to begin for Buyer's Price projects in Carmiel and Kiryat Bialik); (2) It was decided that under certain conditions¹⁸ a developer can rent out the unsold apartments in the free market until they are sold to eligible buyers.



The low demand for housing in the periphery is also reflected in the ratio of eligible households registered for a lottery to the number of dwellings in the lottery. In lotteries held in 2018, the ratio ranged from 1.2 (in which winning is almost a certainty) in periphery localities such as Sakhnin and Arrabeh to 108 in Ra'anana (Figure 9.6). Nonetheless, there were localities outside the center, such as Beit Shemesh and Beitar Illit, that were characterized by high demand.

Table 9.4 presents the total completed land tenders, the tenders that were completed without a winner (in almost all cases because no bids were submitted) and the total completed land tenders without a winner as a share of total completed land tenders.²⁰ The table shows that this proportion has risen over time. The tenders that did not

¹⁸ Approval for renting will be given only after at least 40 percent of the apartments in a project have been sold and on the condition that there remain at least 6 unsold apartments. It is permissible to rent up to 50 percent of the apartments remaining in a project.

¹⁹ We calculated the ratio only for the initial lotteries in which eligible participants from all the series could register (some of the lotteries were closed to eligible participants from series C in order to increase the chances of winning for those with more seniority). We used the average of the ratios in the locality.

We also counted the repeat tenders for the same lots. If, for example, a tender failed the first time but was closed successfully the second time, then we counted it twice.

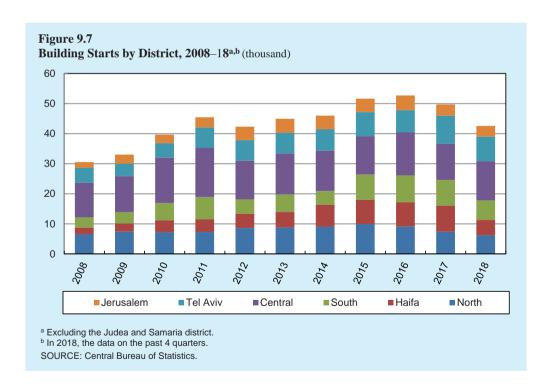
receive bids in 2018 were for lots in the periphery and in localities in which there has been a high number of housing starts in recent years.

Table 9.4
Buyer's Price land tenders that ended with no winners, 2015–2018

Year	Total tenders that ended	Failed tenders	Failure rate (percent)
2015	93	7	7.5
2016	346	126	36.4
2017	375	141	37.6
2018	387	191	49.4

SOURCE: Based on Ministry of Construction and Housing and Israel Land Authority.

The data for housing starts illustrate the speed with which supply responds to a drop in the demand for housing in the periphery (Figure 9.7). The number of housing starts in the periphery (in the North, the South and Haifa districts) declined, while they remained stable in areas of high demand (the Center, Tel Aviv and Jerusalem districts).



BANK OF ISRAEL, ANNUAL REPORT, 2018

The increase in building in recent years, and to some extent also the Buyer's Price program, have made it easier for young couples to purchase a home in the center and have made purchasing in the periphery less worthwhile.

As of the end of 2018, the total land successfully marketed as part of the umbrella agreements is about 42 percent of the target.

The demand for housing in the periphery has risen in the last decade because the high level of prices in the areas of high demand has reduced the affordability of housing there. This level of prices is the result of insufficient marketing of land for residential building, particularly in these areas. During the period 2007–2012, the land actually marketed was sufficient for about one-half of the housing units that were required according to the growth in the number of households in those years, and the scarcity of marketed land was primarily felt in the central and Tel Aviv districts, where the amount of land marketed was only 39 percent and 25 percent, respectively, of what was needed.²¹ The increase in building in recent years, and to some extent also the Buyer's Price program, have made it easier for young couples to purchase a home in the center and have made purchasing in the periphery less worthwhile. In general, buyers have had a clear preference for the center due to its superior employment possibilities, and because there is no efficient mass transit system, although in recent years the government has invested significant efforts in developing public transit in the periphery. In view of the understanding that there is a need to develop mass transit systems both in the center and in the periphery, the government has decided that the Planning Authority would emphasize the planning of infrastructure and transportation, and that the VATMAL (National Planning and Building Committee for Priority Housing Areas) would focus on planning supporting infrastructure, including public transportation stations, integrated transportation hubs and new train stations.

The government has initiated an additional and important measure to deal with the increase in housing prices, in the form of umbrella agreements (for further details see Chapter 9 of the Bank of Israel Annual Report for 2017). Since 2013, 28 contracts were signed between the local authorities and the Israel Land Authority or the Ministry of Housing, and they are meant to support the construction of more than 350 thousand housing units. These agreements set targets for the marketing of land. As Table 9.5 shows, as of the end of 2018, the total land successfully marketed stands at about 42 percent of the target. Since most of the agreements were signed with localities in the periphery, their implementation will be affected by government efforts to boost the attractiveness of living there.

²¹ A special report by the State Comptroller on the housing crisis, 2015.

Table 9.5
Umbrella agreement marketing targets and actual marketing

				_	
			Marketing target	Actual high-	Actual
		Housing units in	to the end of	density	marketing rate
Locality	Signature date	the agreementa	2018 ^b	marketing	(percent)
Modi'in	1.2014	11,804	10,000	6,843	68.4
Kiryat Bialik	1.2014	7,253	7,253	2,132	29.4
Rosh HaAyin	2.2014	13,636	9,651	4,514	46.8
Rishon LeZion	11.2014	16,393	8,000	5,138	64.2
Ramle	7.2015	7,483	7,483	1,986	26.5
Ashkelon	12.2015	31,791	8,000	10,198	127.5
Be'er Sheva	10.2015	18,140	10,000	4,890	48.9
Herzliya	1.2016	7,443	6,000	1,468	24.5
Netanya	4.2016	12,288	6,000	2,178	36.3
Yavneh	8.2016	12,699	6,000	2,367	39.5
Tirat Carmel	9.2016	7,986	5,000	1,957	39.1
Afula	9.2016	10,496	6,000	190	3.2
Ma'alot	2.2017	5,545	2,741	325	11.9
Ofakim	2.2017	14,436	8,000	1,266	15.8
Eilat	3.2017	18,372	6,000	403	6.7
Beit Shemesh	4.2017	13,007	7,498	5,750	76.7
Or Yehuda	4.2017	5,020	4,000	1,292	32.3
Acco	5.2017	11,968	4,000	1,200	30.0
Lod	5.2017	17,018	3,010	0	0.0
Be'er Yaakov	5.2017	11,653	4,000	2,235	55.9
Ashdod	8.2017	30,046	5,570	0	0.0
Migdal HaEmek	8.2017	4,985	2,493	896	35.9
Dimona	9.2017	15,657	2,924	594	20.3
Nahariya	9.2017	7,422	5,125	2,290	44.7
Netivot	12.2017	13,103	6,000	2,746	45.8
Sderot	1.2018	5,498	3,977	0	0.0
Haifa	3.2018	15,623	2,000	53	2.7
Total		353,207	163,167	68,173	41.8

^a Excluding special housing (protected housing, dormitories, etc.), additional housing units pursuant to the Sheves regulation, and urban renewal. Housing units on State-owned land only.

SOURCE: Based on Ministry of Construction and Housing and Israel Land Authority.

^b Marketing targets subject to approval of the plans in the preparation and approvals process.

Box 9.1 Urban Renewal Projects

1. INTRODUCTION

Urban renewal projects are meant to reinvigorate older neighborhoods, including the improvement and reinforcement of residential buildings, and to upgrade public space and infrastructure and increase the supply of housing. The projects include both government and private initiatives. Most of them focus on older neighborhoods and include the addition of new apartments by means of strengthening and adding on to existing structures and by means of demolishing old buildings and constructing new ones in their place.

In many countries, urban renewal has become a major element of urban policy² in view of its potential advantages, including the renewal of urban space; the improvement of the quality and resilience of existing infrastructure; the prevention of neglect in areas of low socioeconomic standing; an increase in the number of available housing units in areas of high demand; and the benefits arising from economic and spatial agglomeration. The latter includes: improvement in access to employment centers; increased productivity; strengthening of human capital thanks to the spillover of knowledge and learning; lower transportation costs and a reduction in air pollution as a result of reduced commuting; preventing urban sprawl and preserving open spaces. In Israel, urban renewal serves additional goals, such as reinforcing residential infrastructure against natural disasters and security threats.

Alongside its advantages, urban renewal also involves significant challenges and high costs. Large-scale urban renewal leads to higher urban density and increased congestion (on the roads, in the use of infrastructure and in public spaces³) and higher costs of maintaining buildings⁴, which negatively impact existing residents. Therefore, such projects must be accompanied by large-scale investment in public infrastructure, including the construction of schools, hospitals, leisure facilities, green areas, and in particular mass transit. Such comprehensive changes in the urban fabric and in its infrastructure require long-term construction work, which disrupts day-to-day activity in the area. Therefore, even if the renewed area benefits in the end from upgraded infrastructures, the transition period involves not insignificant costs, including disruption for residents and businesses, a slowdown in traffic and a temporary drop in the number of housing units.⁵

In February 2017, the government decided on ambitious targets for urban renewal as part of the Strategic Housing Plan. According to the plan, urban renewal's share of the planning targets will gradually rise to 46 percent of approved housing units in 2036.⁶ The targets vary across districts according to the

Urban renewal has various physical and social elements. This box will primarily examine its physical aspects.

² W. Zheng, G. Shen, & H. Wang (2014). "A Review of Recent Studies on Sustainable Urban Renewal", *Habitat International*, 41: 272–279.

The costs of traffic congestion will decline with the improvement in efficiency of public transport.

In high-rise buildings, maintenance costs per housing unit are significantly higher than for low-rise buildings.

⁵ Since two-to-three years pass from when the residents vacate prior to demolition to when the buildings are repopulated.

⁶ The plan is meant to provide a solution to the expected housing needs between 2017 and 2040. With respect to urban renewal, the plan set targets for implementation (additional housing starts) and planning targets (increasing planning inventory).

availability of open spaces designated for residential construction and based on the housing needs derived from the expected geographical distribution of households across districts. To illustrate, it was decided that in 2036 urban renewal would provide 72 percent of additional approved housing units in the Tel Aviv district but only 25 percent in the southern district.

This box will focus on the barriers to meeting the urban renewal targets set by the government.

2. URBAN RENEWAL: THE CURRENT SITUATION AND TRENDS IN RECENT YEARS

a. The urban renewal tracks

Property owners, developers, local authorities, and the government are partners in urban renewal projects. Recognizing the benefits of urban renewal, the government has developed several tracks during the past two decades to encourage and implement it.⁷

With the aim of creating an infrastructure for the rapid implementation of projects on all of the tracks, the Government Authority for Urban Renewal, in close cooperation with the local authorities, is promoting master plans for urban renewal. These plans create certainty for both developers and residents regarding the relevant urban renewal tracks on each street and in each neighborhood, and allow the municipality to plan the development of public infrastructure accordingly.⁸

The vacate-and-build projects on the local authorities track and the taxation track: In order to be declared a designated urban renewal⁹ on these tracks, a project must include at least 24 existing housing units. The local authorities track began operating in 2000. In this case, the municipality initiates the project and advances its public elements, while the Government Authority for Urban Renewal finances the detailed planning. The taxation track began operating in 2004. It stimulates the urban renewal processes initiated by the private market, i.e. developers and property owners. The advantage of the local authorities and taxation tracks lies in the inclusion of the sites within the urban planning of the public space, since it makes it possible to provide solutions for transportation needs, public institutions, and green spaces.

Tama (National Outline Plan) 38^{10} was approved in 2005 primarily with the goal of reinforcing buildings against earthquakes (Tama 38/1 – Reinforcement and Addition to Buildings). Over the years, an incentive was added to implement the plan by way of demolition and reconstruction (Tama 38/2) and another goal was added on to the original one, namely urban renewal. As a result, the ratio of the number of added housing units in Tama 38/2 to their number in Tama 38/1 increased and currently stands at about 50 percent. Tama 38/2 is preferable over Tama 38/1 from the perspective of the planning of the relevant structure, since it includes demolition and rebuilding rather than just strengthening an existing structure

Although there are other programs that add housing units to the existing urban configuration, including infill and demolition and rebuilding that are outside the main tracks, the primary execution of urban renewal occurs within the tracks discussed here.

Some of the local authorities are advancing plans which, like the zoning plans, are meant to create certainty among residents and developers with respect to changes, incentives and rights. These include, for example, the Tel Aviv-Yafo Quarters Plan.

⁹ If the project is considered to be an urban renewal site, it is eligible for tax benefits.

National Outline Plan 38 for the strengthening of existing buildings against earthquakes. This track also grants tax breaks.

¹¹ In 2017, the Supreme Court, as part of the discussion of a petition, addressed the question of what are the goals of Tama 38. It ruled that it has a two-fold purpose.

and adding a few floors. It also allows for greater population density.¹² In contrast, Tama 38/1 makes it possible to develop projects quickly and fairly simply since not every location is appropriate for demolition and reconstruction; the cost of reinforcing a building is lower than the cost of demolition and reconstruction; and the risk implicit in the project is lower from the perspective of the residents.

b. The data

The data on vacate-and-build sites on the local authorities and taxation tracks¹³ and for all of the projects on the Tama 38 track are presented in Table 1. The ratio of total housing units to the number of existing units represents the density multiplier for the vacate-and-build sites.¹⁴ High multipliers are necessary in order to achieve profitability in areas where land values are low, and this is sometimes not practical from a planning perspective. This is one of the main reasons that there are only a few projects being developed in the periphery, and most of them are in Nahariya in the northern district and in Ashdod in the southern district.

Table 1
Data on Vacate-and-Build and Tama 38

				Density multiplier	Number
				(the numerator	of permits
	Number of	Number	Number of	obtained from	(buildings)
	Vacate-and-	of existing	proposed	dividing proposed	issued under
District	Build sites	housing units ^a	housing units ^a	by existing)	Tama 38
Tel Aviv	87	10,501	36,641	3.5	1,154
Center	58	6,105	27,050	4.4	464
Haifa	16	1,803	7,741	4.3	381
Jerusalem	15	1,510	6,084	4.0	90
South	9	800	4,450	5.5	89
North	3	92	440	4.8	59

^a Existing residential units-before demolition of the building; number of proposed housing units-in the new building to be built.

SOURCE: Urban Renewal Authority data.

¹² For a discussion of how Tama 38 (Reinforcement of Structures) affects potential crowding, see the Bank of Israel *Annual Report* for 2015, Chapter 9.

¹³ All of the sites that are in the advanced planning stages (prior to approval), projects that have been approved, and projects being implemented. The data were received from the Government Authority for Urban Renewal and include information on about 190 sites.

¹⁴ The Government Authority for Urban Renewal's published data on Tama 38 do not make it possible to calculate regional density multipliers but only an aggregate multiplier, which is equal to about 2.5. Similarly, in the case of Tama 38, there is a reporting problem originating in the local authorities, as a result of which there are numerous revisions of the number of reported housing units. Therefore, we present the building permits that were provided for the buildings.

3. THE TARGETS AND MEETING THEM

a. Meeting the building targets in the present

The term "supplemental housing starts" relates to the number of housing units added on to the units that existed prior to the demolition and reconstruction. We calculated them on the basis of Central Bureau of Statistics data and the regional density multipliers (Figure 1).¹⁵ Figure 1 shows that the number of housing starts resulting from urban renewal has risen in all the regions.¹⁶ During the last seven quarters, total supplemental housing starts due to urban renewal reached about 88 percent of the target.¹⁷ Apart from the central district, in which the supplemental housing units constitute only about 65 percent of the target, in all the other regions, implementation reached at least 75 percent of the target and in the Tel Aviv region it was even 15 percent above the target.

In contrast, the number of supplemental housing approvals in 2017¹⁸ is only about 30 percent of the target that was set (Figure 2) and this has implications for the ability to meet implementation targets in the future. The distribution according to regions shows significant differences with respect to planning targets. Thus, in the Jerusalem district, the addition to the planning inventory is about 75 percent of the target; in the southern district it is about 65 percent; in the Tel Aviv district it is about 37 percent; in the central district, it is about 25 percent; and in the Haifa and northern districts there were no urban renewal projects approved in 2016–17. It is possible that the lack of approval in Haifa and the North and the small number in the South is a result of a certain amount of substitution in these regions between urban renewal projects and the Buyer's Price program, among other things.

b. Urban renewal targets in the future

In the short term, meeting the housing start targets is primarily dependent on the existing planning inventory, i.e. the total projects that have been approved on the urban renewal tracks starting from 2004 but have not yet been implemented. The data¹⁹ show that following the approval of a project it takes an average of 5 years until the beginning of implementation.²⁰ Therefore, the source of housing starts in the coming five years is to be found in the planning inventory available to the economy today and the expected implementation of Tama 38 in the future. The number of supplemental housing approvals stands at about 36,000 housing units, which constitutes about 60 percent of the target for housing starts in the

¹⁵ On the basis of the regional density multipliers in the case of vacate-and-build and on the basis of the aggregate crowding multiplier in the case of Tama 38/2.

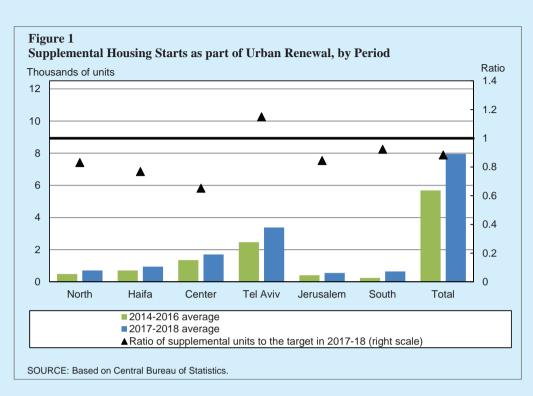
¹⁶ During the first three quarters of 2018, additional housing starts in urban renewal constituted about 19 percent of total housing starts in the country.

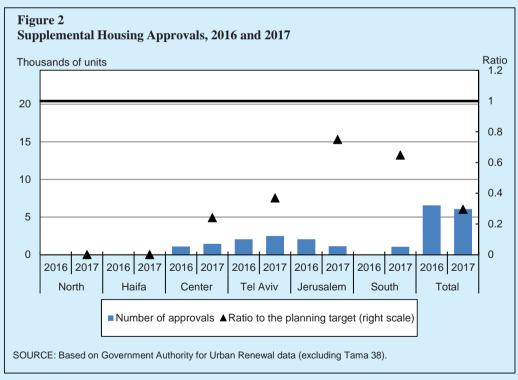
¹⁷ The targets were set starting from 2017. The data presented are in annual terms. There are differences between the data on housing starts that the CBS reports and the data on building permits that the Government Authority for Urban Renewal reported for 2017. However, the differences are not large in terms of "supplemental housing units".

¹⁸ On the local authorities and taxation tracks – additional housing units.

¹⁹ Source: Government Authority for Urban Renewal.

²⁰ For a large proportion of the plans, additional planning is needed after approval due to the consolidation and division of the plots.





next 5 years.²¹ In recent years Tama 38 has supplied about 50 percent of the urban renewal housing starts. Therefore, the existing planning inventory makes it possible to meet the aggregate housing start targets for the next five years only if all of the plans that are approved are indeed implemented and if there is no decline in Tama 38 implementation.²²

In order to encourage urban renewal, the Government Authority for Urban Renewal²³ was created in 2017 and it has been working to remove or reduce the barriers in this domain. Thus: (1) in 2017, a law was passed that is meant to protect homeowners from nonprofessionals in this domain and to encourage worthwhile projects; (2) as of July 2017, urban renewal projects of at least 500 housing units can be approved by means of a fast-track process in the VATMAL (National Planning and Building Committee for Priority Housing Areas); (3) the Israel Land Authority has for the first time created tracks for the allocation of supplementary lots with a discount of up to 80 percent, while providing the possibility of transferring the land rights (on the city level); and (4) in 2017, the first tender was published in the "build-vacate-build" format, in which the Government Authority for Urban Renewal sells housing to the residents in exchange for their rights to the homes that will be demolished, thus increasing the residents' security and helping to advance the projects. Despite these measures, as of the end of 2017 there was no increase in the number of plans approved, although the number of projects in the planning stage apparently grew significantly.²⁴

Since the planning targets are not currently being met, and since the annual targets will almost double starting in 2026, it is important to adopt additional tools for the encouragement of urban renewal processes on a large scale. Apparently, new planning tools will be needed in order to support the density objectives, such as the establishment of a metropolitan authority for determining density policy in the Dan region (greater Tel Aviv area).²⁵ In regions that are designated for high density, urban renewal can be encouraged by means of taxation that provides incentives for the exploitation of building rights, such as payment of tax on the appraised value of the land given the expanded building rights instead of payment of a tax on the utilization of the rights. It is also important that the government measures to "capture" the value resulting from the land betterment due to the expanded building rights and the upgrading of public transportation be designed in a way that does not harm the incentives for implementing urban renewal processes.

²¹ The target for 2019–2023 is about 60,000: The annual targets for implementation are 9,000 housing starts in the years 2019–20 and 14,000 in the years 2021–23.

²² We do not have sufficient information in order to determine whether this is a realistic assumption. While it is possible that the majority of the more easily implemented and more profitable projects have already been implemented and the rate of implementation with respect to Tama 38 will therefore decline, the accumulation of experience and the removal of barriers to urban renewal may in fact increase implementation. Similarly, the assumption that all of the projects that were approved will be implemented is based on there being both projects that have been approved but will not be implemented within five years and projects that have not yet been approved but their implementation will begin within less than five years.

²³ The decision to create the Authority was made in 2014 but the Government Urban Renewal Authority Law was only passed in 2016.

²⁴ According to the figures in the Government Authority for Urban Renewal's report for 2017.

²⁵ Glaeser emphasizes that in the domains of transportation and housing, setting policy on the regional-metropolitan level is more efficient than on the municipality level. Edward L. Glaeser (2007), "Do Regional Economies Need Regional Coordination?" Harvard Institute of Economic Research, Discussion Paper No. 2131. Available at SSRN: https://ssrn.com/abstract=968671

With respect to cities in the periphery—and particularly in the northern district, in which there is no planning inventory as of now—it will be very difficult to meet the urban renewal targets there since the current structure of incentives does not create sufficient profitability for developers.

4. CONCLUSION

In 2017, the government set far-reaching targets for urban renewal on the assumption that they are essential for the optimal development of the housing market in Israel.

Meeting the targets in the Dan region will require a massive increase in density, and the costs and benefits of this process should be carefully evaluated. Since there is a close connection between the possibilities and path of increased density and the final route of the mass transit system, it is important to take this into account in the decision-making stage and to plan the projects in both domains in parallel.

With respect to urban renewal outside the areas of high demand, one of the main barriers to this activity is based on the fact that the existing structure of incentives does not generate sufficient profitability for developers. In these areas, the price of land is low and it is possible to build single-family housing. Therefore, it is difficult to reinforce buildings outside the areas of high demand via the existing urban renewal tracks, even though these areas are more exposed than the high-demand areas to earthquakes and security threats.