

Chapter 8

Welfare Issues

The residential distribution and socioeconomic characteristics of ultra-Orthodox Jews and Israeli Arabs

- Most ultra-Orthodox Jews and Israeli Arabs live separately from the rest of the population, mainly due to their unique characteristics. Theoretical research shows that segregation harms the material well-being of minority groups.
- Interlocality segregation of the ultra-Orthodox has increased in recent decades, after new cities were built for them. These cities currently house about one-quarter of the ultra-Orthodox population (about 250,000 people). Within the heterogeneous localities, the ultra-Orthodox are moving to non-ultra-Orthodox neighborhoods.
- Israeli Arabs generally live in Arab localities, but segregation has declined slightly in past decades because a small portion of them have moved to mixed cities and Jewish localities, and because segregation within the mixed localities has declined slightly. Migrants enjoy a stronger socioeconomic background than those who remain.
- In both population groups, internal migration is mainly a result of serious housing shortages and the desire to improve their quality of life.
- The socioeconomic characteristics of the ultra-Orthodox (including income) are stronger in the heterogeneous localities in the center of the country, while they are weaker in Jerusalem and in Bnei Brak, even weaker in the heterogeneous localities in the periphery and in the old ultra-Orthodox towns, and much weaker in the new ultra-Orthodox cities. In general, this ranking is consistent with the extent of religious devotion and/or geographic distance from the center of the country.
- It is important to ensure that there are centers of employment in or near the new ultra-Orthodox cities in order to prevent a poverty trap.
- The socioeconomic characteristics of the Israeli Arabs are stronger in the Jewish localities and in the Jewish neighborhoods of mixed cities, and are weaker in the Arab neighborhoods in the mixed cities and in the Arab localities. As such, additional public resources must be invested in strengthening the Arab localities and their residents.

1. INTRODUCTION

Israeli society is characterized by a multiplicity of rifts—religious, national, ethnic and others—which to a large extent overlap socioeconomic gaps. There are various aspects to these rifts, among the most common of which is geographic segregation: most of the ultra-Orthodox Jews and Israeli Arabs live in neighborhoods or localities that are separate from the residential areas of the majority population.¹ Since it is near certain that there is a link between the place of residence and socioeconomic status, and since the ultra-Orthodox and the Israeli Arabs suffer from high poverty rates (National Insurance Institute, 2016), their location should be taken into account in formulating socioeconomic policy intended to integrate them into the labor market and increase their standard of living.

The theoretical literature shows that residential segregation may have a negative impact on employment and well-being among minority groups due to the distance from centers of employment, reduced relations with the majority population, and reduced diversity.

Research literature shows that geographic segregation may have an effect on socioeconomic status in minority groups in a variety of ways (see for instance Cutler and Glaeser, 1997; Cutler et al., 2008; Alesina and Zhuravskaya, 2011; Galster, 2011; and Topa and Zenou, 2015). Segregation may have negative ramifications because it distances the minority groups from centers of employment and from appropriate and well-paying jobs (spatial mismatch), interferes in their acquisition of skills (including education, fluency in the language of the majority, and professional skills), and thereby lowers their chances of integrating in the labor market and enjoying economic well-being. Another thing that lowers the chances of integration is the dearth of interactions with the majority population in the public sphere, in workplaces, at commerce and leisure sites, and so forth. This phenomenon may also lead to labeling, stigmatization and a lack of trust, at a time when trust and action for the general good are among the cornerstones of social capital—a factor that makes a positive contribution to economic well-being and growth. Lack of trust, for its part, may have a negative impact on the quality of public services (government and municipal) received by geographically segregated minority groups, in addition to the possible negative impact to the variety and quality of the general goods and services available to the residents.

In localities with a homogeneous population, the diversity of the population (religious, ethnic, cultural and so forth) is also reduced, while the economic literature shows that diversity makes a positive contribution to labor productivity, innovation and creativeness (see Alesina and La Ferrara, 2005). Moreover, in homogeneous localities, there are usually small differences in the skills of the residents, which lowers the chances of those with lower education to integrate into the labor market, since there is generally a complementarity of skills in the production process. In this context, it should be noted that the establishment of new localities with the aim of creating segregation—as opposed to expanding existing localities—consumes open areas, involves the building of expensive access infrastructure, and may prevent the full exploitation of the economies of scale inherent in large urban centers.

¹ In recent decades, segregation in the majority population groups by socioeconomic status has increased (Milgrom, 2015), which has also increased the existing segregation in the education system (Blass et al., 2014). These developments are consistent with the finding that economic inequality increased until the middle of the previous decade.

Segregation may have positive ramifications, since those of low socioeconomic standing in the minority group benefit from living in proximity with those of higher standing in that group, *inter alia* because they form connections that help in finding work and in other areas, and because the community enjoys the supply of a variety of unique products and services and can enforce the norms it desires. Homogeneous localities do have a few advantages, including less friction between various population groups due to differences in their preferences, including arrangements in the public sphere, the allocation of local authority resources, and the division of the burden inherent in their financing. This friction sometimes pushes population groups with stronger socioeconomic backgrounds to places with other residents of similar backgrounds. Therefore, the quantity and quality of the municipal services in homogeneous localities may be consistent with the needs of the community (as long as the authority does not suffer from a poor economic status). Research has shown that in heterogeneous localities, the supply of collective public services declines. Furthermore, in homogeneous localities, the minority group manages the local authority, while in heterogeneous localities, the majority holds the reins.

On the bottom line, theoretical literature holds that there are many advantages to a diversified population group living together in large urban localities, as long as the frictions between them can be minimized (for instance by setting universal criteria for the allocation of resources and the division of the burden involved in their financing, or when there is no alternative, by living in separate neighborhoods²). However, empirical research does not lead to unequivocal results concerning the direction in which spatial segregation affects the socioeconomic status of minority groups—population groups that for the most part come from weak socioeconomic backgrounds—due to methodological difficulties: Individuals' choice to live separately is not independent of their personal characteristics or desires, which on their own have an effect on the examined outcomes.

Israelis have a complex attitude toward segregation and residence in proximity to groups of a different religious/ethnic background. The Social Survey of 2009 shows that half of Israeli Jews responded that it is not important to them whether the people in their residential area have the same level of religious observance as they do, while tolerance declined as the level of religious observance increased (with the rate among the ultra-Orthodox being about 1 out of 8). The Social Survey for 2014 shows that 80–90 percent of Israeli Jews believed that people from different backgrounds in the same residential area get along well with each other, and this rate doesn't change substantially with the level of religious observance. A similar rate is found among Jews and Arabs in mixed cities. Smooha (2015) shows that the rate of Jews agreeing that Arabs should live in Jewish neighborhoods increased from about one-third in the

In contrast, segregation may have a positive effect on the socioeconomic status of the minority groups due to the relationships within those groups, the supply of unique services to the community, and reduced friction with the majority population.

Theoretical research holds that when a heterogeneous population lives together in large urban localities, it results in many advantages as long as the frictions between the groups can be minimized. However, empirical research around the world is inconclusive.

² In the US it was found that in heterogeneous urban localities—localities where “non-whites” make up more than 10 percent of the residents—there is a positive correlation between the growth rate of the population (an indication of economic growth) and the level of segregation (Glaeser et al., 1995). In contrast, it was found that in urban localities, there is a negative correlation between the growth rate of income per capita and the level of segregation (Li et al., 2013).

first half of the previous decade to more than one-half in the middle of the current decade, while among Arabs, the rate of agreement to living in Jewish neighborhoods declined from two-thirds to slightly more than one-half.

This chapter focuses on the spatial distribution of the two main minority communities in Israel—the Ultra-Orthodox and the Arabs—and on their socioeconomic characteristics by residential area. In 2014, there were more than 900,000 ultra-Orthodox Jews in Israel, about 11 percent of the country’s population (Malach et al., 2016), and about 1.7 million Arabs, or about 21 percent of the population. The ultra-Orthodox have a high birthrate, and the demographic projection (medium scenario) is that in 20 years, they will account for about 17 percent of the population, while the Arabs will account for 23 percent (Paltiel et al., 2012).

Both population groups experienced internal migration (change in place of residence within the country) in recent decades, which affected their geographic segregation from the majority population. Among the ultra-Orthodox, segregation increased because designated cities were built for them. Those cities currently house about one-quarter of the sector (close to a quarter of a million residents). Among the Arabs, segregation declined slightly because a small portion of them moved to mixed cities and to Jewish localities. In both population groups, internal migration is mainly a result of serious housing shortages—a result of the high natural population growth and of few housing solutions in the neighborhoods and localities in which they had been concentrated in the past—and of a desire to improve their quality of life.

Interest in residential segregation among both groups is connected, inter alia, with the significant changes that have taken place in labor force participation patterns. The employment rate among the ultra-Orthodox and among Arab women increased strongly from the first half of the previous decade (even though they are still much lower than among the majority population), but segregation may delay these processes and have a negative impact on their chances to escape poverty. However, interest in residential segregation is connected to a much broader issue that is not within the scope of this study: the volume and quality of social connections and mutual relationships that the ultra-Orthodox and the Arabs have with the other parts of the population³—in the public sphere, in places of work, in public and educational institutions, and so forth.

The rest of the chapter is divided into two sections. The first deals with the ultra-Orthodox, and the second with the Arabs. Each section opens with an introduction and a description of spatial distribution over time, and then analyzes the flows of internal migration and the factors explaining them. The section then presents the socioeconomic characteristics in the relevant geographic units for each population groups.

Ultra-Orthodox segregation has increased in recent decades, while Arab segregation has declined slightly but remains high. In both groups, internal migration is a result of serious housing shortages.

³ A discussion of the Arabs appears, for instance, in Schnell et al. (2015).

2. THE ULTRA-ORTHODOX

a. General background⁴

The ultra-Orthodox population generally segregates itself physically, socially and culturally from the general population. This segregation allows it to maintain its way of life in the public sphere and in places of work (keeping the Sabbath, gender separation, ensuring modest clothing, and more), makes it easier to maintain social supervision, and in large communities it also provides an economy of scale in the supply of specialized services and goods. This separateness by its nature affects the ultra-Orthodox spatial distribution.

The spatial distribution of the ultra-Orthodox has undergone a few cycles. It was first concentrated in the holy cities, with the cities of Bnei Brak, Haifa and Tel Aviv and rural localities then joining the circle. During the 1960s, the ultra-Orthodox began settling in additional cities in the center of the country, and later began moving to development towns in the periphery. In the past three decades, there were two main developments: the establishment of ultra-Orthodox cities, and the increasing flow of residents to older, non-ultra-Orthodox neighborhoods in heterogeneous cities (cities that host both ultra-Orthodox and other residents).

These developments were first and foremost the result of serious housing shortages, mainly in Jerusalem and Bnei Brak. There are a number of factors to these housing shortages, including short intergenerational gaps and multiplicity of offspring, two components that reduce intergenerational transfers (see Regev, 2014), as well as poverty, physical limitations on the territorial expansion of Jerusalem and Bnei Brak, and large home price increases.⁵ All these factors led to a significant worsening in housing affordability in the ultra-Orthodox community in general, and in the Jerusalem and Bnei Brak communities in particular.

Migration to the new ultra-Orthodox cities is due to the desire to improve housing conditions. While these cities are generally on the edges of the Tel Aviv and Jerusalem metropolitan areas and their distance from employment centers sometimes requires commuting, efficient public transportation and advanced means of communication (Internet and cellphone) make it easier to maintain contact with the older cities.⁶ In

In the past three decades, there were two main developments in the spatial distribution of the ultra-Orthodox: New ultra-Orthodox cities were established, and the move to older non-ultra-Orthodox neighborhoods in heterogeneous cities increased.

⁴ The background is based partly on Shilhav and Friedman (1985), Cahaner (2009), and the Haredi Institute and the Ministry of Construction and Housing (2016).

⁵ If we focus on heterogeneous localities and carry out hedonic estimations of home prices (estimations that take into account the physical characteristics and locations of the dwellings), we find that prices in the ultra-Orthodox neighborhoods increased slightly less than prices in other neighborhoods. From the beginning of 2008 to the end of 2016, home prices in the ultra-Orthodox neighborhoods in Jerusalem and Bnei Brak increased by about 80 percent, while they increased by 120 percent in the new ultra-Orthodox cities. The difference is apparently derived from both strong demand for homes in the new ultra-Orthodox cities and the fact that prices in those cities were relatively low at the beginning of the period.

⁶ All of the new ultra-Orthodox cities are in clusters 1 and 2 out of 10 (1 is the poorest socioeconomic cluster), and it is interesting to note that they were in slightly better fiscal shape in 2014 than the other Jewish towns and local authorities from the same clusters.

this context, it is worth noting Kasif, an ultra-Orthodox city that will be built near Arad. When a population group from a weak socioeconomic background migrates to a periphery area distant from centers of employment, it may worsen their situation (see also the Haredi Institute and the Ministry of Construction and Housing, 2016).

Migration within the heterogeneous localities focuses for the most part on older non-ultra-Orthodox neighborhoods where housing prices are relatively low. There is frequent spillover to neighborhoods in proximity to ultra-Orthodox population centers, mainly in order to maintain close contact with parents (residence within walking distance makes it easier to visit on the Sabbath and holidays and to help care for children). In a few cases, ultra-Orthodox people have migrated to new neighborhoods built for them. Ultra-Orthodox migration to non-ultra-Orthodox neighborhoods is sometimes accompanied by frictions usually concerning arrangements in the public sphere, and it seems that this phenomenon exists only minimally when new neighborhoods are built for them.

b. The spatial distribution of the ultra-Orthodox population

The vast majority of ultra-Orthodox Jews live in the area bounded by greater Jerusalem, Bnei Brak and Ashdod.

Figure 8.1 shows the distribution of localities in which the ultra-Orthodox population lives, and shows that the vast majority of the population lives in the “ultra-Orthodox triangle” in the center of the country—the area bounded by greater Jerusalem, Bnei Brak and Ashdod. Figure 8.2 shows that in most of the Jewish localities that are not ultra-Orthodox, there was a marked increase in the ultra-Orthodox population as a share of first grade students in the Hebrew education stream between 2000 and 2014.

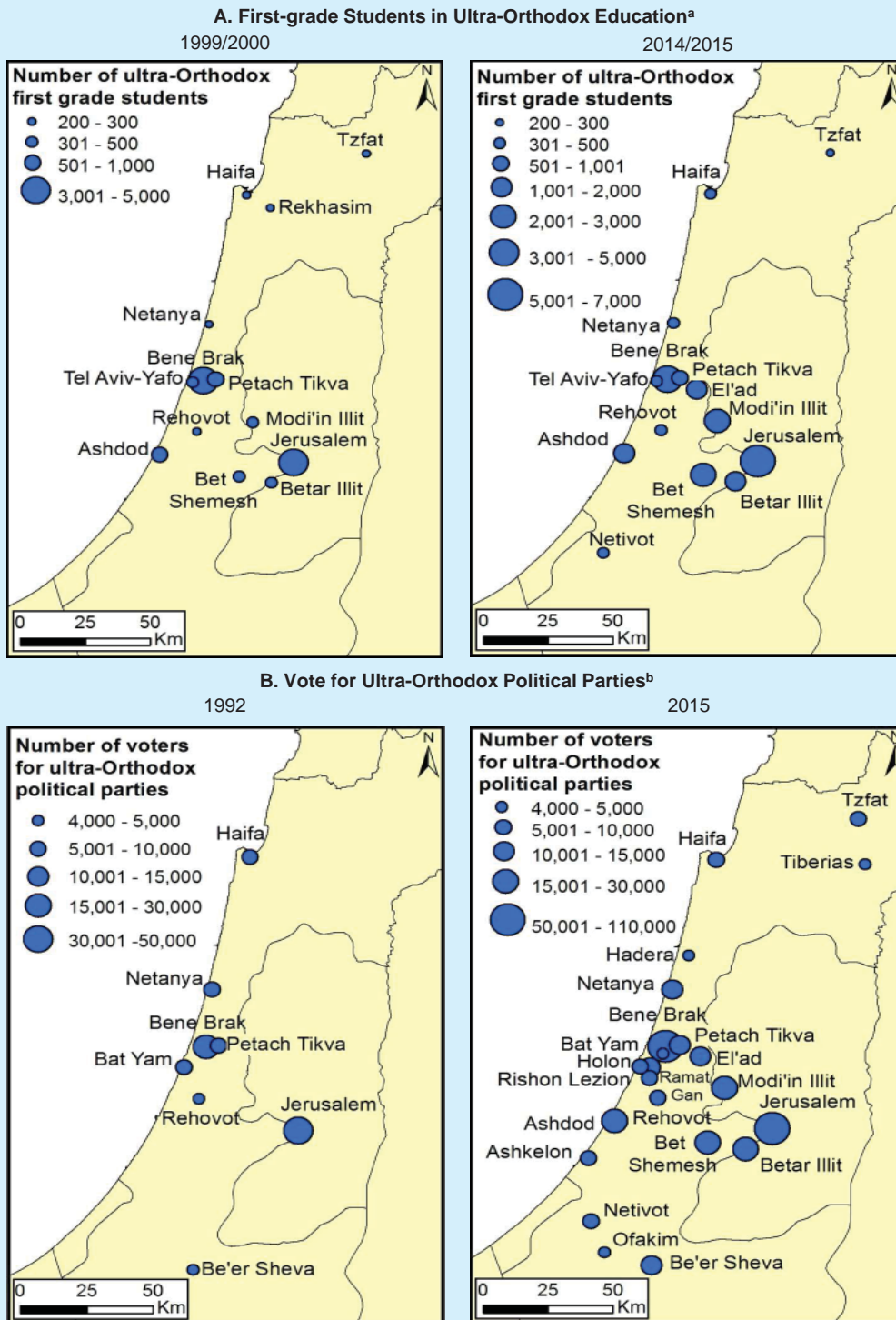
In order to analyze the spatial distribution of the ultra-Orthodox based on individual data, these individuals must be found in the databases through one of a variety of existing statistical methods (Friedman et al., 2011). Since the analysis below also deals with small geographical units and is based, for the most part, on census data⁷, we use two methods to identify ultra-Orthodox individuals. The first examines the level of ultra-Orthodox homogeneity in the statistical area (neighborhood) where the individual lives, according to voting patterns for ultra-Orthodox parties in general elections (Gurovitz and Cohen-Kastro, 2004).⁸ The second examines whether the Jewish males studied at a yeshiva (institute of higher Rabbinic education) for at least

⁷ The 2008 census sampled about 14.3 percent of residents, and the 1995 census sampled 20 percent. The merge between the censuses includes about 2.9 percent (0.20×0.143) of the residents at the time of the 2008 census.

⁸ The level of ultra-Orthodox homogeneity is measured on a scale with values from 1 (the most ultra-Orthodox localities) to 12. A value of 1 means that at least 70 percent vote for the United Torah Judaism or Shas parties and at least 50 percent vote for United Torah Judaism. The inclusion of the Shas party makes it difficult to identify ultra-Orthodox voters since some of its voters are not ultra-Orthodox. For the same reason, including students of the “*Ma’ayan Hachinuch HaTorani*” school system (founded by Shas) in the group of ultra-Orthodox students also makes it difficult to identify ultra-Orthodox individuals.

Figure 8.1

Distribution of Ultra-Orthodox Residents Among Localities by Various Indices



^a Students learning outside their locality of residence are counted with the community in which their school is located.

^b The ultra-Orthodox political parties include United Torah Judaism, Shas, and "Yahad" (headed by Eli Yishai).

SOURCE: Based on Ministry of Education, Ministry of Interior, and Central Bureau of Statistics.

three years⁹, as well as the birthrate and number of children since almost all ultra-Orthodox women marry at a young age, give birth a short time after marriage, and have many children. Individuals are therefore considered to be ultra-Orthodox if they live in ultra-Orthodox localities (details below) and in the most ultra-Orthodox neighborhoods, and if the Jewish household includes a male who studied in a yeshiva for at least three years and/or a married woman or widow who had at least 3 children before the age of 25 and/or had at least 6 children and is not of Asian-African descent.¹⁰

We classified the ultra-Orthodox population into the following geographic units: (1) Jerusalem and Bnei Brak—these two main centers house the rabbinic and political leadership and the leading institutes of rabbinic learning, offer employment opportunities and bustling commercial activity, and more; (2) other heterogeneous localities; (3) ultra-Orthodox localities. This group is divided into two—new cities and other localities, some of which are rural.¹¹

Figure 8.3 relates to these geographic units and uses two indices—first grade students in the ultra-Orthodox education system and the number of ultra-Orthodox residents (according to the identification method described above)—to show how the ultra-Orthodox population was distributed among them in the past three decades. These two indices show a clear increase in the proportion of ultra-Orthodox population who live in the new ultra-Orthodox cities: as stated, about one-quarter of the ultra-Orthodox population (close to a quarter of a million individuals) at the end of 2015.

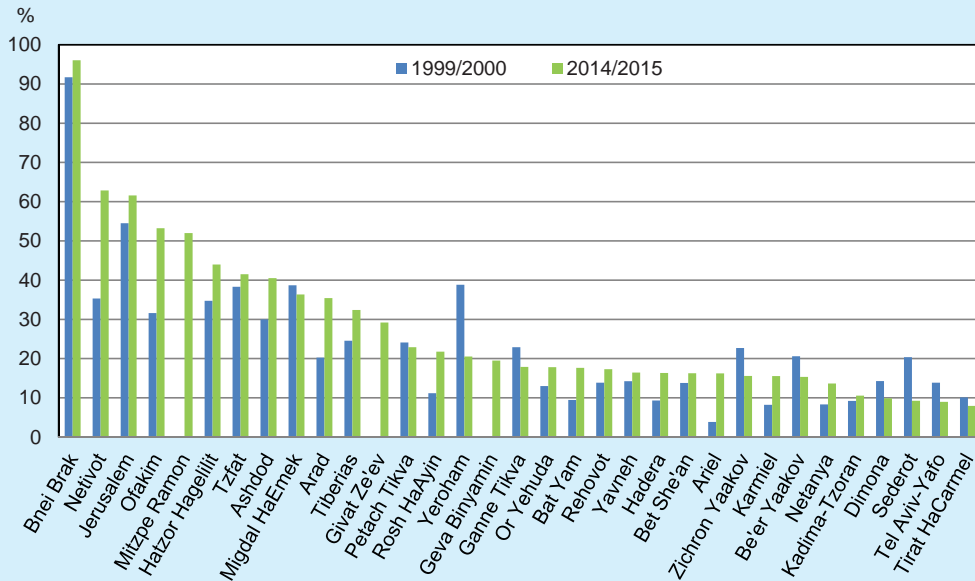
The spatial distribution of the ultra-Orthodox population and the changes in that distribution naturally have an effect on the extent of segregation from the non-ultra-Orthodox Jewish population. It is common to measure the level of segregation between groups through a dissimilarity index—the rate of members of a group that must move between neighborhoods in a locality in order to equalize their proportion in the neighborhoods with their proportion in the locality (intralocality dissimilarity index), or the rate of group members that must move between localities in order to equalize their rate in the localities with their rate in the country (interlocality dissimilarity index). The index values range between 0 (full integration) and 1 (full segregation). To illustrate, the value within a locality is 0 when there is the same rate

⁹ While ultra-Orthodox males also study at institutes of higher general education, this is a relatively new phenomenon. In addition, the last school of the adults is not necessarily a *yeshiva*. Some of the national religious community study at *hesder yeshivot*, but they generally study there for less than 3 years.

¹⁰ Since the multiplicity of children has been common among non-ultra-Orthodox families where the mother was born in Asia-Africa.

¹¹ The new ultra-Orthodox cities include: Immanu'el (established in 1983), Betar Illit (1985), Ramat Bet Shemesh (the first neighborhood was established in 1998, and to this day includes a significant non-ultra-Orthodox population), Modi'in Illit (1993), and El'ad (1998). The other ultra-Orthodox communities include: Aluma, Asfar (Meitzad), Bet Hilkiyah, Yesodot, Kefar Gid'on, Ma'ale Amos, Matityahu, Komemiyut, Kiryat Ye'arim (Telz Stone), Rekhasim, Tel Zion (an expansion of Kochav Yaakov), and Tifrah. Kefar Habad is not included here due to its uniqueness: For instance, the men have a high employment rate and some households are sent as emissaries abroad.

Figure 8.2
First-Grade Students in Ultra-Orthodox Education as a Share of First Grade Students in Jewish Education in Heterogeneous Urban Localities^a, 1999/2000 and 2014/2015



^a The Figure shows only urban localities where more than 10 percent of students in one of the examined cohorts are ultra-Orthodox. For a few localities there are no data for 1999/2000. Students learning outside their locality of residence are counted with the locality in which their school is located. Some of the unofficial recognized schools may belong administratively to the ultra-Orthodox education stream even though their students do not appear to be ultra-Orthodox.

SOURCE: Based on Ministry of Education.

of ultra-Orthodox residents in all neighborhoods, and is 1 when all ultra-Orthodox residents are concentrated in separate neighborhoods.¹²

The intralocality dissimilarity index among the ultra-Orthodox was 0.33 in 1995, and increased to 0.45 in 2008. The interlocality dissimilarity index climbed from 0.44 to 0.64 during the same period. The increasing segregation is first and foremost connect with the establishment and rapid expansion of the new ultra-Orthodox cities.

Ultra-Orthodox residential segregation increased between 1995 and 2008: The intralocality dissimilarity index increased from 0.33 to 0.45, and the interlocality dissimilarity index increased from 0.44 to 0.64.

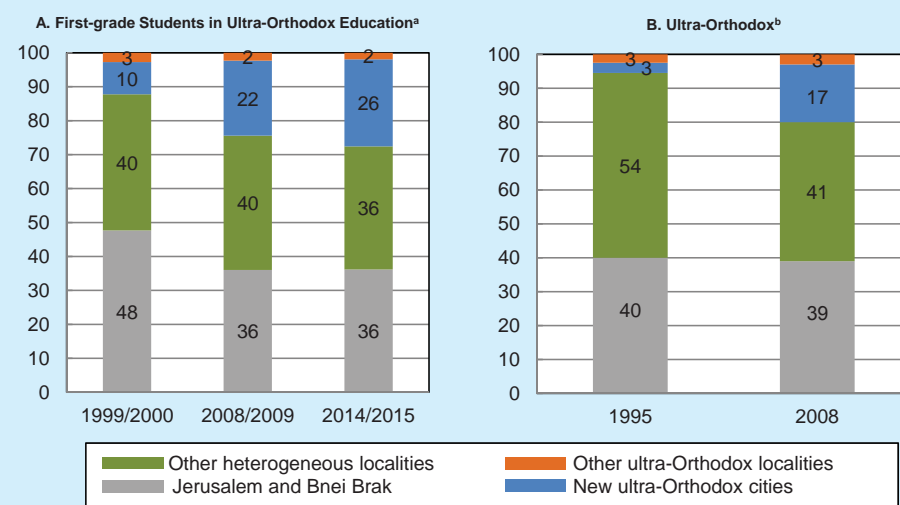
¹² The intralocality dissimilarity index (at the country-wide level) is calculated as follows:

$$D = \sum_{i=1}^J \left[1/2 \cdot \sum_{j=1}^J \left| \frac{UO_i}{UO_j} - \frac{nonUO_i}{nonUO_j} \right| \right] \cdot W_j$$

where UO_i is the number of ultra-Orthodox residents in neighborhood i in locality j ; UO_j is the number of ultra-Orthodox residents in locality j ; the same for the two values that represent non-ultra-Orthodox Jews ($nonUO$); and W_j is the rate of Jewish residents in locality j as a share of total Jewish residents in the country. In the case of a completely homogeneous locality (for instance ultra-Orthodox), the value of the expression in the square brackets is 1. The calculation does not include Arab localities. (Segregation indices for the Israeli Arab population are calculated later on in the chapter, and do not include ultra-Orthodox localities.) In order to compare the dissimilarity index according to the 1995 census with the index according to the 2008 census, we equalized the statistical areas in the two censuses.

We also calculated an interlocality dissimilarity index, which includes only the expression in the square brackets, where i represents a locality instead of a neighborhood, and j represents Israel instead of a locality.

Figure 8.3
Distribution of Ultra-Orthodox Residents in Geographic Units by Various Indices (percent)



^a Students learning outside their locality of residence are counted with the locality in which their school is located.

^b Section B relates to how the ultra-Orthodox are identified.

SOURCE: Based on Ministry of Education, and Central Bureau of Statistics 1995 and 2008 censuses.

c. Internal migration of the ultra-Orthodox population¹³

Most of the migrants to the new ultra-Orthodox cities come from Jerusalem / Bnei Brak and from other heterogeneous localities, and their share in the destination cities is similar to their share in the original localities.

In order to examine the internal migration patterns of the ultra-Orthodox population, we used a pair of censuses, from 1995 and 2008 (the most recent). About 27 percent of ultra-Orthodox Jews reported a different residential locality in 2008 than they did in 1995, while another approximately 20 percent changed neighborhood in the same locality. These migration rates are similar to the rates among non-ultra-Orthodox Jews, since about 28 percent of them changed their residential locality during the same period¹⁴ and about 21 percent more changed neighborhoods. Table 8.1 shows how the geographic units in which the ultra-Orthodox residents lived in 2008 are distributed according to the place of residence 13 years earlier.¹⁵ Those migrating from Jerusalem and Bnei Brak mainly move to the new ultra-Orthodox cities and to other heterogeneous localities. Jerusalem and Bnei Brak as destinations absorb ultra-Orthodox residents mainly from the other heterogeneous localities. Most of the migrants to the new ultra-Orthodox cities come from Jerusalem/Bnei Brak and from other heterogeneous localities, and the share of these migrants from each type

¹³ All of the data in this section relate to individuals who were 18 years old or older in 1995. The migration of Jewish residents between localities is discussed in Braude and Navon (2007).

¹⁴ Not including the residents evacuated from the Gaza Strip and northern Samaria as part of the Disengagement Plan in 2005.

¹⁵ In order to clarify how to read the Table, let us look at the two upper right cells. The cell in Part A of the Table tells us that 84 percent the individuals who lived in Jerusalem and Bnei Brak in 1995 remained there in 2008. The cell in Part B of the Table tells us that 89 percent of those who lived in Jerusalem and Bnei Brak in 2008 had also been living there in 1995.

of locality is proportional to the percentage of ultra-Orthodox residents in the cities of departure as a share of the overall ultra-Orthodox population in 1995.

Table 8.1
How the geographic units of ultra-Orthodox residency^a in 2008 are distributed according to the 1995 point of departure (percent)

(Grey shading indicates migration that exceeds 10 percent of total migrants)

A. By point of departure (rows total 100 percent)

Departure (1995)	Destination (2008)			
	Jerusalem and Bnei Brak	Other heterogeneous localities	New ultra-Orthodox cities	Other ultra-Orthodox localities
Jerusalem and Bnei Brak	84	7	8	1
Other heterogeneous localities	9	81	9	1
New ultra-Orthodox cities	8	4	84	4
Other ultra-Orthodox localities	8	3	7	82

B. By destination (columns total 100 percent^b)

Departure (1995)	Destination (2008)			
	Jerusalem and Bnei Brak	Other heterogeneous localities	New ultra-Orthodox cities	Other ultra-Orthodox localities
Jerusalem and Bnei Brak	89	6	35	23
Other heterogeneous localities	11	93	45	17
New ultra-Orthodox cities	0	0	19	4
Other ultra-Orthodox localities	0	0	1	56

^a Individuals aged 18 or more in 1995. Not including ultra-Orthodox people who lived abroad at one of the two dates. Individuals along the diagonal did not change their locality of residency or moved to another locality within the same geographic unit.

^b The total may be approximate due to rounding.

SOURCE: Based on Central Bureau of Statistics, 1995 and 2008 censuses.

In order to examine how the personal characteristics of the ultra-Orthodox residents in a certain geographic unit in 1995 contributed to their decision to remain there until 2008 or to move to a particular other unit (given the possibility of choosing an alternative unit), we estimated a multinomial logistic regression. The explanatory variables in the estimations include demographic and socioeconomic characteristics, as well as characteristics that indicate the level of religious observance, all as of

The likelihood of ultra-Orthodox Jews migrating is higher among young people, singles, those with few children, and individuals whose level of religious observance is consistent with the level in the destination locality.

1995.^{16,17} The results of the estimations are presented in Table 8.2. The likelihood of migrating from Jerusalem/Bnei Brak to other heterogeneous localities or to the new ultra-Orthodox cities is significantly higher among young people, singles, individuals born outside their locality of departure, and individuals with a low level of religious observance (particularly regarding migration to heterogeneous localities).¹⁸ Contrary to expectations, it was employed people who chose to move to the new ultra-Orthodox localities, even though they offer fewer employment opportunities¹⁹, and it was not found that high residential density increased the chances of migration. Given the personal characteristics of the ultra-Orthodox residents who lived in Jerusalem/Bnei Brak, their likelihood of moving to the new ultra-Orthodox cities exceeded the likelihood that they would move to the other heterogeneous localities (the estimated intercept is higher among the former).

The ultra-Orthodox residents of the other heterogeneous localities have a significantly higher likelihood of migrating to Jerusalem/Bnei Brak or the new ultra-Orthodox cities if they are single, have few children, live in the center of the country (close to the destination localities) or have a high level of religious observance, consistent with the level in the destination localities. In the case of migration to Jerusalem or Bnei Brak, the likelihood also increases if residential density is low, and it seems that this is due to the fact that low density is frequently associated with high family income, and high income for its part makes it easier for households to migrate to expensive cities such as Jerusalem or Bnei Brak.

Figure 8.4 shows the changes that took place in past decades in the spatial distribution of the ultra-Orthodox residents in Jerusalem and in Ashdod, cities with many ultra-Orthodox residents that underwent significant changes in terms of their spatial distribution in recent decades. The changes were characterized by three main patterns: spillover to non-ultra-Orthodox neighborhoods in proximity to the ultra-Orthodox concentrations, settling in other, older non-ultra-Orthodox neighborhoods, and new construction for the ultra-Orthodox.

¹⁶ The estimations do not take into account the possibility that some of the characteristics changed between 1995 and the date of migration (and in any case, at this time, most of them are unknown).

¹⁷ The ultra-Orthodox choice of place of residence is mainly guided by the following considerations: the ultra-Orthodox community is large and provides the necessary services; there is easy access to the original community (generally in Jerusalem or Bnei Brak), housing prices are reasonable, and the location offers employment opportunities and has a positive image (the Haredi Institute and the Ministry of Construction and Housing, 2016). These considerations are connected with the characteristics of the place of residence (as opposed to the individual's personal characteristics) or are subjective and unknown to us, and are therefore not included in the estimation.

¹⁸ The low level of religious observance is reflected in low ultra-Orthodox homogeneity in the neighborhood of departure (high value on the homogeneity scale) and/or in a high right of television or computer ownership.

¹⁹ Goltzman (2010) focused on the period between 1999 and 2005 and showed that the husband's employment increased the likelihood that the ultra-Orthodox household would migrate, and the wife's employment increased the likelihood of moving to the new ultra-Orthodox cities (which would also allow the husband to study at a *yeshiva*) and lowered the likelihood of moving to other heterogeneous localities in the center of the country. The more the household's income increased, the greater the tendency to migrate to Jerusalem or Bnei Brak, cities with a high cost of living.

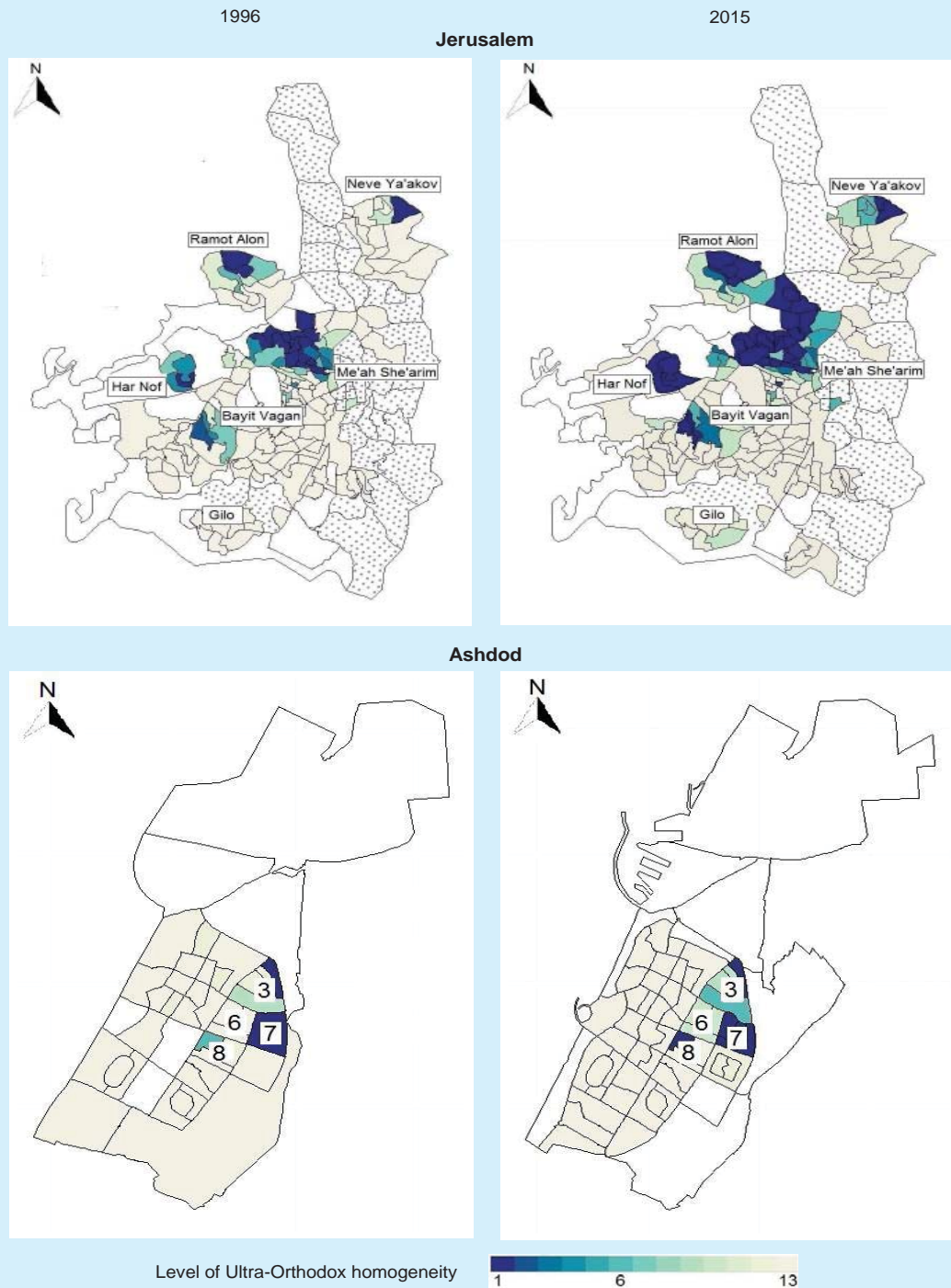
Table 8.2**The personal characteristics explaining internal migration of ultra-Orthodox Jews between geographic units, 1995 to 2008^a**(The likelihood of immigrating to a destination compared to the likelihood of remaining in the unit of departure or moving to another destination^b)

Departure:	Jerusalem/Bnei Brak		Other heterogeneous localities	
Destination:	Other heterogeneous localities	New ultra-Orthodox cities	Jerusalem/Bnei Brak	New ultra-Orthodox cities
Explanatory variables (as of 1995)				
Men	0.86	1.85**	1.01	1.13
Age (years)	0.93***	0.88***	1.00	0.99***
Married	0.31***	0.25***	0.20***	0.35***
Number of children	0.87**	1.06	0.93*	0.83***
Residency in the periphery ^c			0.50***	0.23
Born in the locality of residence	0.32***	0.35***	0.85	1.38 ⁺
Employed in the annual work force	1.22	2.10**	0.73 ⁺	1.35
Residential density (people per room)	0.90	0.92	0.37***	0.80 ⁺
Level of ultra-Orthodox homogeneity ^d	1.06 ⁺	1.01	1.05	1.06
Television ownership	2.97***	0.96	0.44***	0.76
Computer ownership	2.73***	1.74*	0.93	0.89
Intercept	1.21	6.38***	0.83	0.28**
Number of observations	1,751		2,581	
<i>of which: migrants</i>	131	89	176	165
Number of observations extrapolated to the population	12,873		17,435	
<i>of which: migrants</i>	670	728	1,382	1,426
Pseudo R ²	0.23		0.14	

⁺ significant at 15 percent; * significant at 10 percent; ** significant at 5 percent; ***significant at 1 percent.^a Individuals aged 18 or more in 1995. The estimations do not include the explanatory variables "Household income", or "home ownership" since the information on those variables in the census file for 1995 is incomplete.^b Relative risk ratio. Where the value is, for instance, 1.1 (0.9), the likelihood of a certain group migrating to a destination are 10 percent higher (lower) than those of the comparison group.^c The northern and southern districts.^d Ultra-Orthodox homogeneity in the statistical area in which the household lives is measured according to voting rates for the ultra-Orthodox political parties in the elections for the 14th Knesset (1996) (see Gurevitz and Cohen-Castro, 2004). Values range between 1 (the most ultra-Orthodox neighborhoods) to 12.

SOURCE: Based on Central Bureau of Statistics 1995 and 2008 censuses.

Figure 8.4
Ultra-Orthodox Homogeneity^a in Jerusalem and Ashdod by Neighborhood^b, 1996 and 2015



^a Ultra-Orthodox homogeneity is measured by the rate of voters for ultra-Orthodox political parties for the 14th Knesset (1996) and the 20th Knesset (2015) (see Gurovitz and Cohen-Kastro, 2004). Values range from 1 (the most ultra-Orthodox neighborhoods) to 12.

^b The Figures for 1996 are by statistical area (neighborhood) in 1995, and the Figures for 2015 are by areas in 2011. The white areas denote statistical areas where there were no voting booths. The dotted areas denote Arab neighborhoods.

SOURCE: Based on Central Bureau of Statistics and Ministry of Interior.

In Jerusalem, significant spillover to the string of neighborhoods to the north and west of the ultra-Orthodox concentration in the center of the city—Ramot, Shmuel Hanavi, Ramat Eshkol, Ma'alot Dafna, and Giv'at Hamivtar—began in the late 1980s. Increases in the ultra-Orthodox population also took place in neighborhoods that do not border on the ultra-Orthodox neighborhoods, such as Gilo in the south of the city and Pisgat Ze'ev in the north. In the past decade, there has been a marked momentum of construction for ultra-Orthodox residents in Romema, the Schneller Compound, Giv'at Shaul, and other neighborhoods. Residential segregation in the ultra-Orthodox community was high to begin with, and increased slightly. The dissimilarity index increased from 0.64 in 1995 to 0.72 in 2008.

In Ashdod, new ultra-Orthodox neighborhoods were built in the 1980s (in the third and eighth quarters) and the early 1990s (the seventh quarter). In the 2000s, the rate of ultra-Orthodox residents in these neighborhoods and in the nearby sixth quarter increased. The dissimilarity index of the ultra-Orthodox in Ashdod increased greatly—from 0.54 in 1995 to 0.80 in 2008.

d. The demographic and socioeconomic characteristics of the ultra-Orthodox by geographic unit

Table 8.3 shows the demographic and socioeconomic characteristics of the ultra-Orthodox residents of the various geographic units, and is based on the 2008 census. The ultra-Orthodox residents of Jerusalem and Bnei Brak have lower employment rate than the general ultra-Orthodox population, they naturally tend to work in their residential locality, the equivalized family income is medium, and there is high residential density. The socioeconomic ranking of their residential neighborhoods is basically similar to the average in the ultra-Orthodox community. The ultra-Orthodox residents of heterogeneous localities in the periphery have socioeconomic characteristics that are medium compared to the overall ultra-Orthodox community. In contrast, ultra-Orthodox residents of the heterogeneous localities in the center of the country have stronger characteristics, with relatively high employment rates and income, and a tendency to work outside the ultra-Orthodox sector. Therefore, the socioeconomic ranking of their residential neighborhoods is also much higher than the average in the ultra-Orthodox sector.

The new ultra-Orthodox cities are characterized by a young population with many children, low employment rates, and employment that is broadly within the ultra-Orthodox sector. They are therefore also characterized by low income per household and per capita. Additionally, the rate of those working outside the residential locality is relatively high due to the lack of employment opportunities in the locality and efficient public transit to centers of employment.²⁰ The rate of home ownership is high, but residential density is also high due to the multiplicity of children. In total,

The socioeconomic characteristics of the ultra-Orthodox are stronger in the heterogeneous localities in the center of the country. They are weaker in Jerusalem and Bnei Brak, weaker still in the heterogeneous localities in the periphery and in the older ultra-Orthodox localities, and much weaker in the new ultra-Orthodox cities.

²⁰ Betar Illit and Ramat Bet Shemesh have spatial, economic and cultural affinity to Jerusalem; El'ad has affinity to Bnei Brak; and Modi'in Illit has affinity to both (Cahaner, 2009).

Table 8.3**The demographic and socioeconomic characteristics of the ultra-Orthodox by geographic unit, 2008**

	Jerusalem and Bnei Brak	Other heterogeneous localities		New ultra- Orthodox cities	Other ultra- Orthodox localities	Total ultra- Orthodox	Total non-ultra- Orthodox Jews ^b
		Periphery ^a	Center				
Distribution of the population (percent)	39	16	25	17	3	100	
Median age of the head of household (years)	41	39	41	32	39	38	49
Percentage of children aged 0–14	44	46	42	58	43	46	22
Percentage of men born abroad	11	15	15	11	14	13	32
Years of schooling among those aged 25–44 ^c	Men	12.8	12.3	12.7	12.8	12.7	14.0
	Women	14.3	13.1	13.9	14.1	14.4	14.5
Percentage of men with academic degrees among those aged 25–44 ^c	Men	11	11	22	12	6	14
Employment rate among those aged 25–44 ^c (percent)	Men	35.2	55.8	70.7	42.4	49.0	49.6
	Women	59.9	60.9	70.7	56.0	67.4	62.4
Percentage of women working in the education and social and community services industries		64	62	58	62	70	62
Percentage of women working in an ultra-Orthodox neighborhood ^d		41	11	8	53	45	28
Percentage working in their locality of residence	Men	70	53	37	34	31	49
	Women	79	70	50	61	47	65
General weekly work hours among those aged 25–44 ^c	Men	36.8	42.4	41.1	39.3	37.6	39.8
	Women	28.6	30.2	31.6	29.9	25.7	29.9
Socioeconomic ranking of the residential neighborhood ^e		6.4	6.4	10.1	4.1	5.4	6.8
Total yearly income per household (NIS thousand)		110.3	129.9	179.6	95.9	118.0	128.5
Total equivalized yearly income (NIS thousand)		36.7	35.3	50.5	26.3	35.0	38.2
Gross yearly income per household from National Insurance payments (NIS thousand)		20.2	22.0	19.9	16.2	19.6	19.7
Home ownership rate (percent)		75	73	74	81	69	75
Housing density of households of those aged 25–44 ^{c,f} (persons per room)		1.74	1.55	1.47	1.60	1.44	1.61
Percentage of households with a vehicle		23	39	57	29	36	35
Indices of religious observance:							
Level of ultra-Orthodox homogeneity ^g		3.6	9.4	11.9	3.2	4.2	6.5
Median marriage age among women aged 40 or less (years)		20	20	21	20	21	20
Median number of children among women aged 40 or more		6	6	6	5	5	6
Years of yeshiva schooling among men aged 20–29 who studied at a yeshiva		5.2	4.6	4.6	6.3	4.3	5.2
Television ownership rate (percent)		14	43	47	10	13	26
Computer ownership rate (percent)		48	62	75	48	54	57
Internet subscription rate (percent)			41	58	25	31	35
First-grade students in the stream as a share of all ultra-Orthodox first-graders ^h	Ma'ayan Hachinuch	13	38	19	32	26	16
	HaTorani						
	Chinuch Atzmai	43	41	53	34	59	44
	Exempt and other institutions	43	21	28	34	15	41

^a Northern and southern districts.^b Jewish and "other" (Non-Arab Christians, members of other non-Arab religions and those with no religion).^c We limited the population group to those aged 25–44 because age structure is different in each geographic unit, and age affects the value of the examined variable.^d Statistical area where the level of ultra-Orthodox homogeneity ranges between 1 and 6.^e The socioeconomic ranking of the statistical area in which the household lives. Ranking values range between 1 and 20, with 20 being the most established area.^f Age of the head of household.^g Ultra-Orthodox homogeneity in the statistical area in which the household lives is measured according to the voting rates for the ultra-Orthodox political parties in elections for the 18th Knesset (2009) (see Gurovitz and Cohen-Kastro, 2004). Values range between 1 (the most ultra-Orthodox neighborhoods) and 12. Many of the ultra-Orthodox in other heterogeneous localities live in concentrations within statistical areas that also house non-ultra-Orthodox residents (sometimes because there is only one statistical area in the locality), so the level of ultra-Orthodox homogeneity is low (a high value on the homogeneity scale).^h The 2008/9 school year. The rates in the columns do not necessarily add up to 100 due to rounding.

SOURCE: Based on Central Bureau of Statistics 2008 census, Central Bureau of Statistics (2013), and Ministry of Education.

the residents of the new ultra-Orthodox cities belong to the very low socioeconomic layer.

It should be noted that the government has taken proactive action to encourage employment in the new ultra-Orthodox cities, including professional training (for instance on computers), establishing guidance and retraining centers, subsidizing wages as part of the “Track to Employment” program (for instance in the high technology industries and in call centers), expanding the supply of day care centers, and more.

All of the direct and indirect indices of religious observance—a variable that may have a significant effect on the readiness to integrate into the labor market—show that it is high in the new ultra-Orthodox cities and in Jerusalem and Bnei Brak, while it is lower in the other heterogeneous localities.

Since 2008, there have been changes in the patterns of ultra-Orthodox participation in the labor market, and the population in the new ultra-Orthodox cities has increased greatly. Therefore, we will present selected updated data on ultra-Orthodox employment and income relying on Labor Force Surveys and Household Expenditure Surveys for 2014–2015.²¹ Figure 8.5 shows that since 2008, the employment rates among ultra-Orthodox men in Jerusalem and Bnei Brak, as well as in the other heterogeneous cities, increased greatly, while in the new ultra-Orthodox cities it declined slightly. At the same time, there was a sweeping decline in the average number of work hours, apparently because many of the ultra-Orthodox joined the labor market in part time positions. The employment rate among women increased in all geographic units, but the scope of their employment declined on average. There was an increase in the rate of men and women employed in their residential locality, particularly in the new ultra-Orthodox cities.

The ultra-Orthodox households in Jerusalem, Bnei Brak and in the heterogeneous localities in the center of the country earned more than ultra-Orthodox households in the heterogeneous localities in the periphery, which, in turn, earned more than households in the new ultra-Orthodox cities (Table 8.4). These differences are mainly the result of the fact that the two latter groups are characterized by low income from labor. Since they are also characterized by larger households, the poverty rate among those groups is higher and equalized consumption is lower. The socioeconomic ranking of the various geographic units, as well as the order of the level of religious observance, were maintained between 2008 (Table 8.3 above) and 2014–15.

Since 2008, the employment rate has greatly increased among ultra-Orthodox men in Jerusalem, in Bnei Brak, and in the other heterogeneous cities, while it declined slightly in the new ultra-Orthodox cities. The employment rate among ultra-Orthodox women increased in all geographic units.

²¹ The number of those surveyed is much smaller than their number in the censuses. The survey findings brought below are therefore only of limited reliability, (particularly the Household Expenditure Surveys), particularly regarding ultra-Orthodox residents of the new ultra-Orthodox cities and Arabs in the mixed localities.

Table 8.4
The economic characteristics of ultra-Orthodox households^a in municipal localities^b by geographic unit, 2014–15

	Jerusalem and Bnei Brak	Other heterogeneous localities		New ultra- Orthodox cities ^d	Total ultra- Orthodox ^e	Total non-ultra- Orthodox Jews ^f
		Periphery ^c	Center			
Number of persons	5.2	5.6	5.1	5.8	5.2	3.1
Number of breadwinners ^g	1.3	1.5	1.3	1.1	1.3	1.5
Gross monthly monetary income ^h (NIS thousand ⁱ)	12.6	9.9	12.4	9.4	11.8	19.6
of which: From work (NIS thousand ⁱ)	7.6	7.3	9.3	6.5	7.9	15.2
From benefit and support payments (NIS thousand ⁱ)	3.5	1.9	2.3	2.6	2.9	2.1
Equivalized net monthly monetary income ^h (NIS ⁱ)	3,461	2,485	3,248	2,214	3,109	6,429
Rate of poor households (percent)	45.4	59.6	45.5	63.3	51.7	13.7
Equivalized monthly consumption ^j (NIS ⁱ)	3,155	2,757	2,972	2,228	2,878	5,082
Home ownership rate (percent)	66	70	69	75	71	66
Housing density among households of those aged 25–44 ^k (persons per room)	1.81	1.66	1.56	1.76	1.71	1.03
Percentage of households with a vehicle	32	45	44	16	40	69
Indices of religious observance:						
Percentage of those aged 18–29 who study in a yeshiva	67	47	31	79	46	
Television ownership rate (percent)	5	1	16	0	14	87
Computer ownership rate (percent)	56	52	63	44	56	82
Internet subscription rate (percent)	27	25	42	26	29	78

^a According to the definition of the surveyed individual.

^b Localities that have at least 50,000 residents (as identified in the Household Expenditure Surveys in our possession).

^c Northern and southern districts.

^d Modi'in Illit and the ultra-Orthodox population of Bet Shemesh. In 2014, it was not possible to identify Modi'in Illit.

^e All ultra-Orthodox residents in Israel, including those in localities that are not identified in the Household Expenditure Surveys in our possession.

^f Jews and "others" (Non-Arab Christians, non-Arab members of other religions, and those with no religion).

^g Those aged 18 and over.

^h Income from work and pension, benefit and support payments, and capital. Not including "in-kind income" (including the attributed value of the use of an owned dwelling).

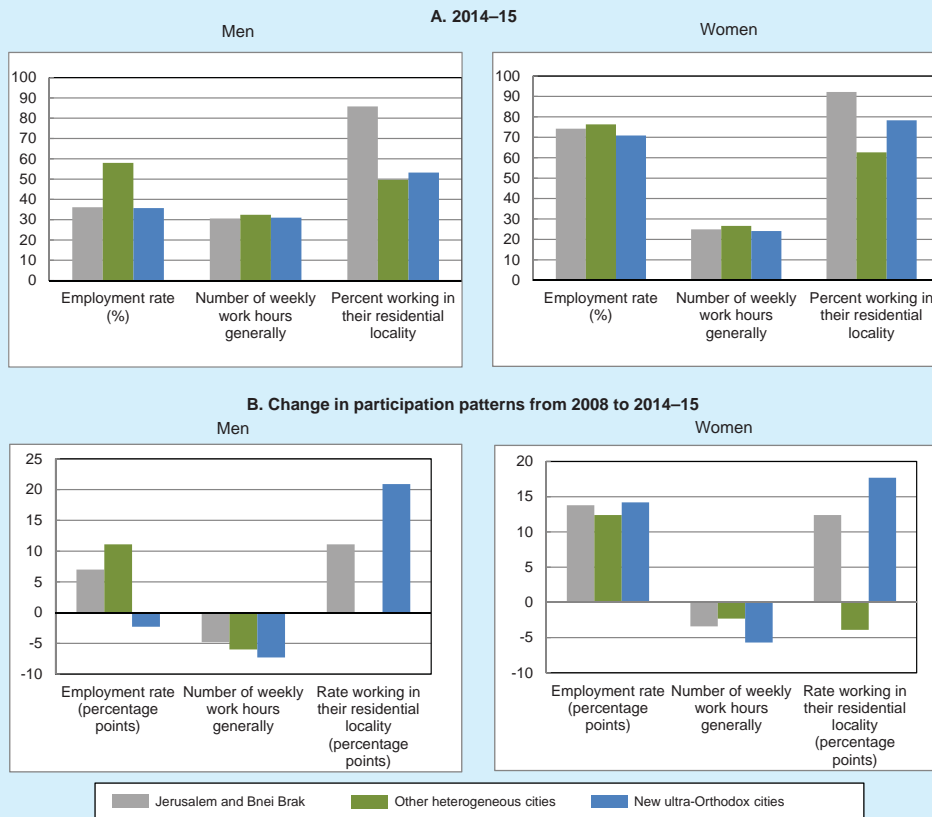
ⁱ In current prices.

^j Excluding consumption of housing in owned dwellings.

^k Age of the head of household.

SOURCE: Based on Central Bureau of Statistics Household Expenditure Surveys for 2014 and 2015.

Figure 8.5
Labor Market Participation Patterns^a Among the Ultra-Orthodox^b residents of Urban Localities^c, by Gender and Geographic Unit of the Residential Location^d: 2014–15 and 2008



^a Participation rates and number of weekly work hours among those aged 25–44.

^b Individuals living in the new ultra-Orthodox cities (other than El'ad and Ramat Bet Shemesh, because those are not identified in the Labor Force Surveys in our possession), and/or belonging to households with a man whose last school was a *yeshiva*.

^c Localities with at least 10,000 residents (that are identified in the Labor Force Surveys in our possession).

^d In the Labor Force Surveys in our possession, it is not possible to identify ultra-Orthodox localities that are not new cities (except for Rehovot).

SOURCE: Based on Central Bureau of Statistics 2008 census and Labor Force Surveys for 2014 and 2015.

3. ISRAELI ARABS²²

a. General background

The Israeli Arab population did not undergo typical urbanization (migration from village to city). Rather, their villages instead became towns and cities without proper planning. This had a significant effect on their spatial distribution and on their residential patterns and socioeconomic characteristics (Khamaisi, 2005). There were a number of barriers that delayed these processes: The main urban centers in Arab society contracted in 1948; a military administration ruled over the Arab localities until the mid-1960s; the Arab society is traditional and its children customarily live in

Israeli Arabs did not undergo typical urbanization for historical reasons and due to social and other barriers. Instead, their villages turned into towns and cities without proper planning.

²² Including Druze. The section does not relate to Jerusalem since almost all of the city's Arab residents are not Israeli citizens.

proximity to the broad family; members of the Arab sector avoid selling private land to buyers who do not belong to the broad family; and more.

Israeli Arabs suffer from a serious housing shortage because their localities have small jurisdictions, there are no approved and detailed outline plans, there is no registration of land rights, resulting in difficulties for contractors in obtaining credit from banks and for households in taking out mortgages. There are few private land reserves, and until recently, the State marketed very little land in the Arab localities. There is little construction in the Arab localities, residents refrained from building new high-rise neighborhoods, and natural population growth is relatively rapid (see Ministry of Finance, 2015). It should be noted that other than Bedouin localities, no new Arab communities have been built thus far.

When Israeli Arabs migrate to mixed cities and to Jewish localities, they do so due to housing shortages in the Arab localities and as a result of cultural and socioeconomic processes.

While the ultra-Orthodox segregate from the majority population and migrate mainly due to the lack of housing, among Israeli Arabs there are individuals who seek residence in Jewish localities or Jewish neighborhoods in mixed cities²³ out of a desire to improve their housing conditions, but also for other reasons: an increase in the level of education (particularly among women) leading to integration in employment, including in the Jewish sector; an increase in the standard of living and a desire to improve the quality of life and to make their lifestyle more modern (to consumer higher quality services, culture and more); and an increase in the importance of the nuclear family and a release from the bounds of tradition.²⁴

Due to the lack of housing in the Arab localities, the socioeconomic processes outlined above, and the difficulty in settling in rural Jewish localities, Israeli Arabs increased migration in recent decades to mixed-Jewish urban localities where there is free trade in ownership rights (see Totry-Jubran, forthcoming). The migration occasionally encountered opposition on the part of the local authorities and some of the Jewish population.

In this section, we will discuss the spatial distribution of Israeli Arabs, and we will focus on residence in mixed cities and in Jewish localities. We will also examine migration from Arab localities to mixed/Jewish localities, and migration within

²³ According to the Central Bureau of Statistics definition, the term “mixed localities” denotes Jewish localities where Arabs constitute more than 10 percent of the residents. In 2015, this group included Haifa, Jerusalem, Lod, Ma’alot-Tarshiha, Neve Shalom, Nazareth Illit, Akko, Ramla and Tel Aviv-Yafo. In this section, we also include Be’er Sheva and Karmi’el, because there are many Arabs living in those localities as well (details below).

²⁴ Arabs are sometimes interested in settling in communal Jewish localities in close proximity to their place of residence due to the high quality of life, but they have difficulty doing so. While in 1995, the Supreme Court prohibited discrimination based on nationality in the leasing of land from the Israel Land Administration (Supreme Court 6698/95, referred to as “the Ka’adan case”), a legislative amendment was passed by the Knesset in 2011 concerning communal localities that include less than 400 residents, enabling their acceptance committee’s to reject candidates who are not consistent with the social life in the community or with the sociocultural texture of the locality (Amendment to the Mutual Associations Ordinance Law (number 8), 5771–2011. In 2014, an appeal against the amendment was rejected by a slim majority (Supreme Court 2311/11, Supreme Court 2504/11)). It should be noted that the Israel Land Authority (formerly the Israel Lands Administration) is permitted to allocate designated land to the Bedouin in the Negev and to the ultra-Orthodox.

the mixed cities from Arab to Jewish neighborhoods. Finally, we will outline the socioeconomic characteristics of the residents of the various places.

b. The spatial distribution of the Arab population

The Arab population in the mixed and Jewish localities remains about one-tenth of the Arab population (between the 1995 and 2008 censuses), despite the fact that natural population growth in the Arab localities is more rapid. This shows that there was internal migration to the mixed and Jewish localities (details below). In most mixed localities there was, during the same time, a significant increase in the number of Arab residents (Figure 8.6). In 2014, the number (according to the Population Registry) reached about 120,000, some 8.5 percent of Israeli Arabs. The rate of Arabs as a share of total residents in the mixed localities increased from about 7.8 percent in 2001 (the first year for which we have Registry data) to about 9.9 percent in 2014 (Figure 8.7). The rate of Arabs is higher than 1 percent in many of the Jewish localities as well, particularly in the north of the country. In 2014, there were about 17,000 Arab residents in these localities, while another small number live in other Jewish localities.

The intralocality dissimilarity index among Israeli Arabs was 0.69 in 1995, and declined to 0.63 in 2008. As detailed below, the reduction in segregation is a result of the fact that some Arabs migrate from Arab localities to mixed or Jewish localities, and of the slight decline in segregation within the mixed localities (from 0.73 to 0.71).

c. Internal migration of the Israeli Arab population²⁵

The internal migration of Israeli Arabs is not a very common phenomenon. To illustrate, between 1950 and 2007, less than 10 percent of Israeli Arabs moved to a different locality (Hleihel, 2011).

During that period, migration was mainly a result of marriage (and it was mostly women who migrated). Only a small portion migrated due to studies or work, but this portion increased in the past two decades.

About 12 percent of Israeli Arabs in the 2008 census reported a different residential locality from what they reported in the 1995 census, while another 6 percent changed neighborhoods within the same locality. Internal migration from Arab localities to other geographic units (Arab or Jews neighborhoods in mixed cities²⁶, and Jewish cities) is very low, while migration from the other units is more considerable (Table 8.5). To illustrate, about 90 percent of Israeli Arabs lived in Arab localities in 1995, but residents of Arab localities account for only 35 percent of migrants to Arab neighborhoods in mixed cities and only about 53 percent of Arab migrants to Jewish neighborhoods. In absolute terms, there is significant migration from Arab localities to Jewish neighborhoods in mixed cities and to Jewish neighborhoods, from Arab neighborhoods to Jewish neighborhoods in mixed cities, and from Jewish

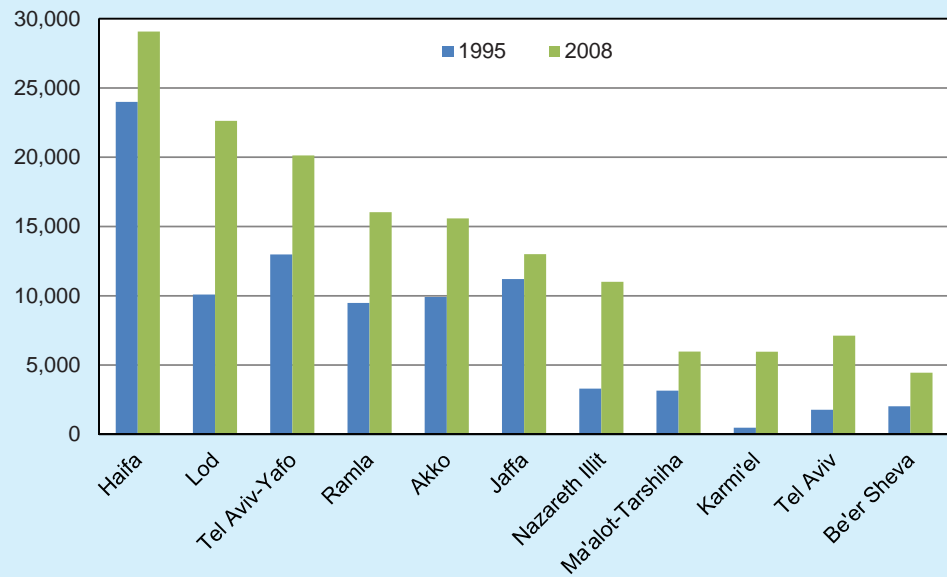
In 2014, about 8.5 percent of Israeli Arabs lived in mixed cities. Their share of the total population of these cities increased from 7.8 percent in 2001 to 9.9 percent in 2014.

The internal migration of Israeli Arabs is a small phenomenon.

²⁵ Individuals who were 18 years old or older in 1995.

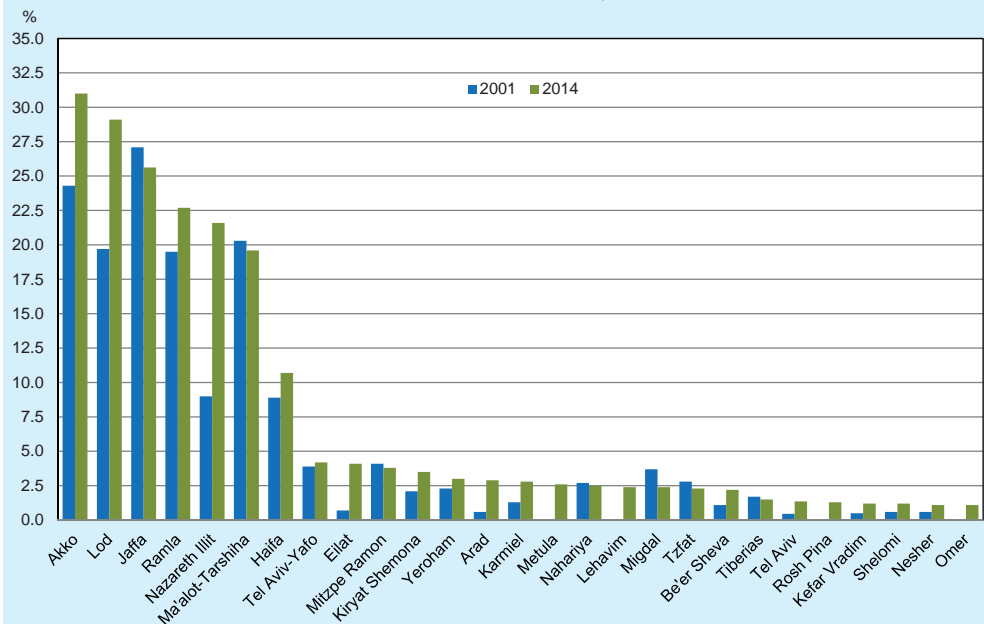
²⁶ Jerusalem is not included in the analyses in Section C, but it does attract educated Israeli Arabs, particularly from the north of the country. See Masry-Herzallah et al. (2011).

Figure 8.6
Number of Arabs in the Mixed Cities, 1995 and 2008



SOURCE: Based on Central Bureau of Statistics 1995 and 2008 censuses.

Figure 8.7
Rate of Arabs in the Mixed Cities and Jewish Urban Localities^{a,b}, 2001 and 2014



^a Localities (municipalities and local authorities) containing more than 1 percent of the Arab population in 2014. End-of-year data. Tel Aviv and Jaffa are presented separately in order to compare between the two parts of the city.

^b Based on the Population Registry (Ministry of Interior). Some of the Arabs apparently do not report changes of address to the Ministry of Interior when moving to a Jewish or mixed locality so that they will be able to send their children to educational institutions in Arab localities and receive different services there. Therefore, the rates in the Figure are apparently downward biased, particularly in the Jewish cities.

SOURCE: Based on Central Bureau of Statistics—Local Authorities in Israel, and Statistical Yearbook of Tel Aviv-Yafo.

neighborhoods to Arab neighborhoods in mixed cities and to Arab localities (the grey cells in the Table).

If we focus on Arabs that migrated between localities²⁷, we obtain the following results (not shown in the Table): Among those who migrated from an Arab locality, about 84 percent moved to another Arab locality, about 11 percent to a mixed locality (of which about 29 percent moved to an Arab neighborhood), and about 6 percent to a Jewish locality. Among those who migrated from an Arab neighborhood in a mixed city, about 62 percent moved to an Arab locality, about 31 percent to another mixed locality (of which about 91 percent to a Jewish neighborhood), and about 7 percent to a Jewish locality. These distributions are consistent with the findings of Hleihel (2011) based on residential address records in the Population Registry.

Surveys show that there are different considerations guiding migrants from the Arab localities in choosing a destination locality, with proximity to the locality of departure central among them, since it frequently includes the place of work, family and friends, and can provide various services, including Arab education, which a Jewish destination locality generally does not provide (Hamdan, 2006; Hleihel, 2011). This phenomenon is observed in the north of the country, and is prominent in Karmi'el and in Nazareth Illit. The migration of students is guided by considerations concerning institutions of higher education, but some of them establish families in the destination city and integrate into the local labor market. Migration of educated people can also be found to mixed or Jewish localities due to government policies intended to integrate them in the public service—for instance, migration to Jerusalem in order to work in the public service or migration to Be'er Sheva to work as teachers in the Bedouin schools.²⁸

Pairing the 1995 and 2008 censuses makes it possible to examine the socioeconomic and demographic factors that explain the likelihood of Arabs to migrate from an Arab locality to a Jewish neighborhood in a mixed city or a Jewish locality or from an Arab neighborhood in a mixed city to either destination. The logistic regressions include explanatory variables with values as of 1995, and Table 8.6 shows the results. The likelihood of moving from an Arab locality is significantly higher among Christians, men, unmarried individuals, those with few children, those who are educated, the unemployed, those who live in the northern district, those who were born outside their locality of departure, and individuals who live in high density conditions. Generally similar, but far less significant, results were obtained in estimating the factors explaining the likelihood of moving from an Arab neighborhood in a mixed city to a Jewish neighborhood or a Jewish locality. Due to a small number of migrants, particularly in the last estimation, the results should be viewed with necessary caution.

The likelihood of moving from an Arab locality is higher among men, young people, those with higher education, the unemployed, individuals living in the northern district, and individuals living in high density conditions.

²⁷ We omitted Arabs aged 18–25 who lived in Jewish or mixed localities in 1995 and studied at institutes of higher education, since the vast majority of them are there temporarily.

²⁸ In addition to these, there is another migration phenomenon—young men moving to a distant Jewish locality (such as Eilat) during the week in order to work, returning to their parent locality for the weekends.

Table 8.5**The distribution of the Arab^a residential geographic units in 2008 according to units of departure in 1995 (percent)**

(The gray background denotes flows of migration that constitute more than 10 percent of total migrants)

A. By point of departure (the rows add up to 100 percent^b)

Departure (1995)	Destination (2008)			
	Arab locality	Mixed city - Arab neighborhood ^c	Mixed city - Jewish neighborhood	Jewish locality
Arab locality	98	0	1	1
Mixed city - Arab neighborhood ^c	6	79	15	1
Mixed city - Jewish neighborhood	16	12	70	2
Jewish locality	42	4	1	52

B. By destination (the columns add up to 100 percent)

Departure (1995)	Destination (2008)			
	Arab locality	Mixed city - Arab neighborhood ^c	Mixed city - Jewish neighborhood	Jewish locality
Arab locality	99	7	17	52
Mixed city - Arab neighborhood ^c	0	80	15	3
Mixed city - Jewish neighborhood	1	12	68	9
Jewish locality	0	1	0	36

^a Individuals aged 18 or more in 1995. The individuals located along the diagonal did not change their geographic unit.^b The total may be approximate due to rounding.^c A statistical area in which Arabs account for more than 50 percent of residents. If the residential neighborhood of the individuals changed from Arab to Jewish (from Jewish to Arab) but they did not change their place of residence, we left them in An Arab (Jewish) neighborhood.

SOURCE: Based on Central Bureau of Statistics censuses for 1995 and 2008.

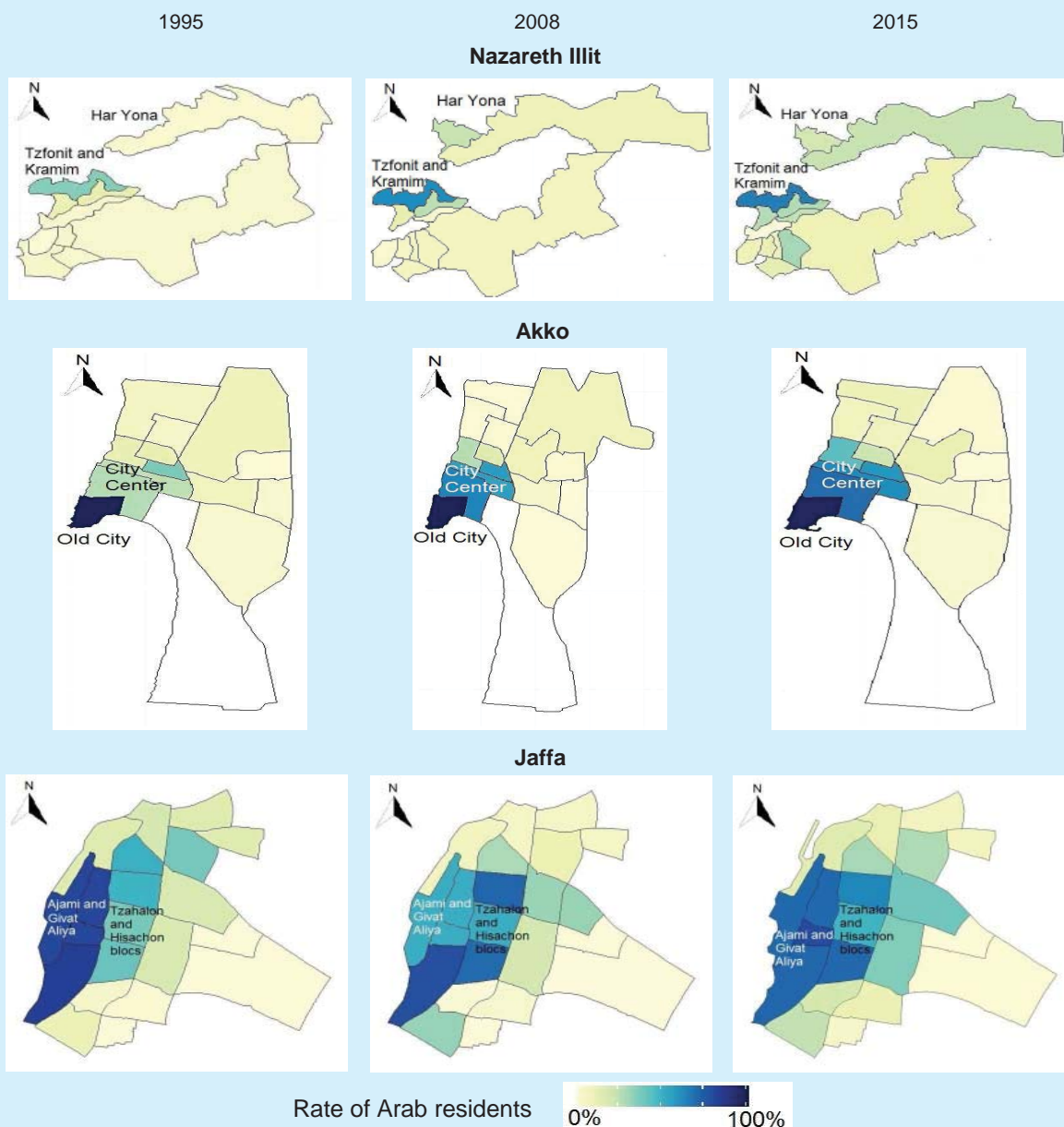
Table 8.6**The factors explaining Arab migration^a to a Jewish neighborhood in a mixed city or Jewish locality, 1995–2008^b**(The ratio between the likelihood of migrating and the likelihood of remaining in the point of departure^c)

The explanatory variables (as of 1995)	Departure:	Arab locality	Mixed city - Arab neighborhood ^d
Religion (compared to Muslim)	Christian	1.93***	0.84 ⁺
	Druze	0.87	
Men		1.76***	1.24*
Age (years)		0.98***	0.96***
Married		0.40***	0.68***
Number of children born		0.94***	1.03
Residence in the northern district		3.00***	0.31***
Born in the locality of residence		0.81**	0.52***
Schooling		1.03	1.21
Post-secondary education		1.22*	1.80***
Employed in the annual workforce		0.82**	0.94
Residential density (persons per room)		1.17***	0.72***
Number of observations		9,786	582
of which: Migrants		122	57
Number of observations extrapolated to the population		66,936	3,148
of which: Migrants		959	494
Wald chi-squared		902	196

⁺ Significant at 15 percent; * significant at 10 percent; ** significant at 5 percent; *** significant at 1 percent.^a Individuals aged 18 or over in 1995. The estimations do not include the explanatory variables "household income" or "home ownership" because the information on them in the census file for 1995 is incomplete.^b A logit estimation was conducted. Due to the low number of migrants, the penalized likelihood (firthlogit) procedure was selected.^c When the odds ratio is, for instance, 1.1 (0.9), the likelihood of a certain group migrating to a destination are 10 percent higher (lower) than the likelihood of the comparison group.^d Statistical area in which Arabs account for more than 50 percent of residents.

SOURCE: Based on Central Bureau of Statistics censuses for 1995 and 2008.

Figure 8.8
Rate of Arabs in the Neighborhoods^a of Selected Mixed Cities, 1995, 2008^b and 2015



^a Neighborhoods—statistical areas. We combined small statistical areas that in the 2008 census were attached to other areas. The statistical areas that serve as industrial zones are colored white.

^b The maps for 1995 and 2008 are based on census data, and the maps for 2015 (end-of-year data) are based on the Population Registry. Caution should therefore be exercised in comparing the 2015 maps to those from 1995 and 2008. For the same reason, the segregation indices were calculated only for the years 1995 and 2008.

SOURCE: Based on Central Bureau of Statistics 1995 and 2008 censuses and Population Registry.

Figure 8.8 shows the changes that took place between 1995 and 2015 in the spatial distribution of Israeli Arabs in three mixed cities that underwent significant changes. In Nazareth Illit and in Akko, the share of Arabs increased significantly, while it declined in Jaffa. Arabs began moving to Nazareth Illit—mainly from surrounding localities, particularly from Nazareth—back in the 1960s, and their share of the population increased steadily over the years (Hamdan, 2006). The Figure shows that the rate of Arabs increased in many neighborhoods throughout the city, so that residential segregation remained almost unchanged (the dissimilarity index declined from 0.47 in 1995 to 0.45 in 2008). However, in Akko, the Arab population converged, with their share of the general population increasing greatly in the neighborhoods surrounding the Old City (which is populated by Arabs) and declining in the more distant neighborhoods. Therefore, the dissimilarity index increased from 0.56 to 0.71.

Jaffa is a magnet for many Jews, some of which are well-off. There was therefore a decline in the rate of Arabs living in the neighborhoods they had previously populated, and the dissimilarity index declined slightly—from 0.64 in 1995 to 0.62 in 2008. Gentrification has been accompanied by an increase in home prices, which may push households from weaker socioeconomic backgrounds, both Arabs and Jews, to distance themselves from their places of work (leading to a spatial mismatch between residential and employment localities), and leading to an unraveling of the communal fabric.

d. The demographic and socioeconomic characteristics of the Israeli Arab population by geographic unit

The demographic and socioeconomic characteristics Israeli Arabs who lived in Arab neighborhoods in mixed cities at the time of the 2008 census were slightly higher than the characteristics of residents of the Arab localities (Table 8.7). The former enjoyed a slightly higher wage—inter alia because the employment rate of women was almost double—but the rate of home ownership among the former was significantly lower and residential density was higher. The Arabs living in the Jewish localities and in the Jewish neighborhoods in mixed cities had much stronger socioeconomic backgrounds. Some were students in institutions of higher education²⁹, many were men, young, had small families, were more educated than Arabs in the other geographic units, had greater participation in the labor market, and had higher equivalized family income. It is interesting to note that a significant portion of the Arabs who lived in the Jewish localities worked outside the locality. It should be noted that if the younger population (aged 18–24) is omitted, the socioeconomic characteristics in the various geographic units remains almost unchanged, and only Arabs in the Jewish localities greatly increased their income relative to the other Arabs.

²⁹ About one-third of adult Arabs in the Jewish localities are between 18–24 years old, and about half of them are students. Many of them live in those localities (such as Nesher, Tzfat, Kiryat Shemona and Ramat Gan) apparently because of their proximity to institutions of higher education. Eilat and Nahariya are exceptions, since most of the young Arabs living there are not students.

The mixed cities show various trends in residential segregation. In Jaffa and Nazareth Illit, for instance, it is almost unchanged, while it increased greatly in Akko.

Israeli Arabs have socioeconomic characteristics that are relatively strong in the Jewish localities and in the Jewish neighborhoods in the mixed cities, and much weaker characteristics in the Arab neighborhoods in the mixed cities and in the Arab localities.

Table 8.7
The demographic and socioeconomic characteristics of Israeli Arabs^a by geographic unit, 2008

		Mixed cities				Total Arabs	Total Jews ^c
		Arab localities	Arab neighborhoods ^b	Jewish neighborhoods	Jewish localities		
Distribution of the population (percent)		91	5	3	2	100 ^d	
Percentage of those belonging to the religion	Muslim	78	65	63	78	77	
	Christian	10	35	35	11	12	
	Druze	12	0	2	11	11	
Percentage of men		50.0	50.0	52.8	67.6	50.5	48.2
Median age of the head of household (years)		41	44	36	31	41	48
Percentage of married individuals		71	62	64	46	70	61
Median age of marriage of women up to age 40 (years)		21	21	22	21	21	23
Median number of children for women aged 40 and up		5	4	3	3	5	3
Percentage of those aged 0–14		38	31	31	19	37	25
Percentage of students among those aged 18–25			22	41	47	21	32
Years of schooling among those aged 25–44 ^e	Men	11.5	11.4	12.5	11.3	11.6	13.8 ^f
	Women	11.0	11.7	13.0	12.5	11.2	14.4
Percentage of those with an academic degree among those aged 25–44 ^e	Men	13	11	25	14	14	30
	Women	14	15	29	26	14	40
Employment rate among those aged 25–44 ^e (percent)	Men	73.2	74.6	83.3	77.7	73.8	80.2
	Women	27.0	45.9	57.5	52.0	29.3	77.8
General weekly work hours among those aged 25–44 ^e	Men	44.9	46.9	47.4	49.5	45.2	46.4
	Women	32.0	32.7	34.2	35.8	32.3	37.1
Percentage of those working in their residential locality	Men	30	53	48	38	33	38
	Women	58	71	52	42	59	51
Socioeconomic ranking of the residential neighborhood ^g		4.7	6.3	8.9	10.1	5.0	11.3
Total household annual income (NIS thousand)		102.4	119.0	126.5	104.0	104.1	183.0
Equivalized total income of households of those 25 and older ^h (NIS thousand)		33.0	39.8	47.4	48.4	34.1	72.2
Gross annual household income from National Insurance Institute payments (NIS thousand)		21.6	25.0	17.5	18.5	21.7	21.7
Home ownership rate (percent)		86	59	55	30	83	68
Residential density of households of those aged 25–44 ^{e,h} (persons per room)		1.35	1.48	1.20	0.96	1.45	1.04
Percentage of households with a vehicle		56	49	52	41	55	55

^a Aged 18 and above.

^b A statistical area in which Arabs constitute more than 50 percent of the residents.

^c Jews and "others" (non-Arab Christians, non-Arab members of other religions, and those with no religion) in all of Israel.

^d The percentages in the row do not add up to 100 due to rounding.

^e We limited the population group to those aged 25–44 because age structure is different in each geographic unit, and age affects the value of the examined variable.

^f Not including years of schooling in a yeshiva academy.

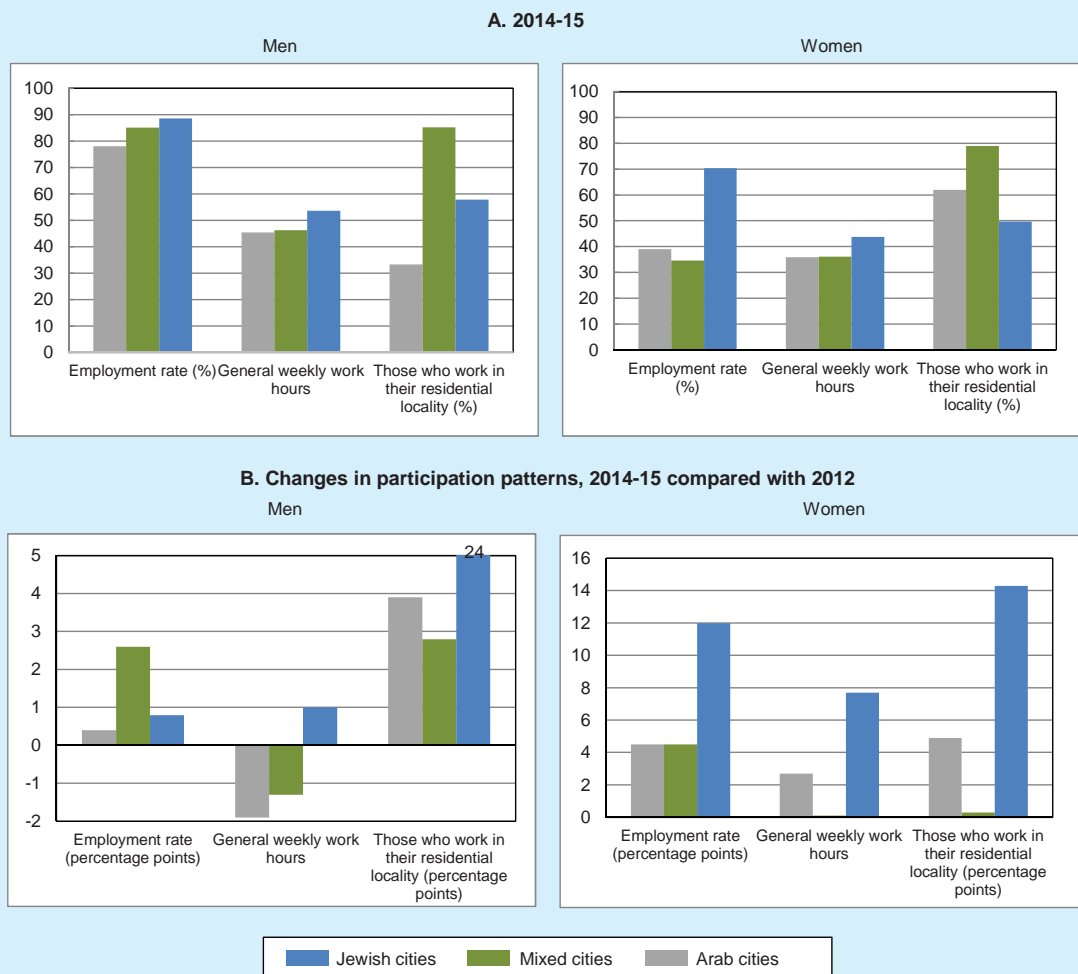
^g The socioeconomic ranking of the statistical area in which the household lives. Ranking values range between 1 and 20, with 20 being the most established area.

^h Age of the head of household.

SOURCE: Based on Central Bureau of Statistics 2008 census and Central Bureau of Statistics (2013).

Labor Force Surveys for 2014 and 2015 show that the employment rates among Arab men living in Jewish cities is higher than the rates in the mixed cities or the Arab localities, and the gaps widen among Arab women (Figure 8.9, Part A). The situation is the same concerning weekly work hours. A low percentage of Arab women living in Jewish localities also worked in those localities. Of particular prominence is the sharp increase since 2012 in the employment rate and extent of employment (full-time or part-time) of Arab women living in Jewish localities (Figure 8.9, Part B).³⁰

Figure 8.9
Labor Market Participation Patterns^a Among Arabs Living in Urban Localities^b, by Gender and Geographic Unit^c, 2014-15 and 2014-15 compared with 2012



^a Participation rates and the number of weekly work hours among those aged 25-44.

^b Localities containing at least 10,000 residents (identified by the Labor Force Surveys in our possession).

^c The Labor Force Surveys in our possession do not make it possible to distinguish between Arab and Jewish neighborhoods in mixed cities.

SOURCE: Based on Central Bureau of Statistics Labor Force Surveys for 2012, 2014 and 2015

³⁰ Significant changes were made to the Labor Force Survey in 2012, so it is not possible to compare the data regarding Arabs to the data in the Labor Force Survey from 2008.

Table 8.8
The economic characteristics of Israeli Arab households in urban localities by geographic unit^a, 2014–15

	Arab urban localities	Mixed cities ^b	Total urban localities ^c	Total Arabs ^d	Total Jews ^e
Number of persons					
Number of breadwinners ^f	1.4	1.3	1.4	1.4	1.5
Gross monthly monetary income ^g (NIS thousand ^h)	12.0	11.8	11.9	11.1	19.6
<i>of which</i> : From work (NIS thousand ^h)	9.6	9.1	9.6	8.9	15.2
From support and benefit payments (NIS thousand ^h)	1.7	2.2	1.7	1.6	2.1
Equivalized net monthly monetary income ^g (NIS ^h)	3,158	3,689	3,202	2,945	6,429
Rate of poor households (percent)	47.6	37.7	46.8	52.9	13.7
Equivalized monthly consumption ⁱ (NIS ^h)	3,646	3,553	3,652	3,465	5,082
Home ownership rate (percent)	90	48	86	78	66
Housing density among households of those aged 25–44 ^j (persons per room)	1.27	1.11	1.25	1.39	1.03
Percentage of households with a vehicle	74	50	72	69	69

^a The Expenditure Surveys in our possession make it possible to identify localities with at least 50,000 residents. We cannot therefore identify some of the mixed localities. Since these are classified in the files as Jewish, we omitted the category of Jewish localities from the Table.

^b Be'er Sheva, Haifa, Lod, Ramla, and Tel Aviv-Yafo. We could not identify the following mixed cities in the files in our possession: Karmi'el, Ma'alot-Tarshiha, Nazareth Illit and Akko.

^c All of the urban localities in the country, except for Jerusalem.

^d All localities in the country except for Jerusalem, including those that are not urban.

^e Jews and "others" (non-Arab Christians, non-Arab members of other religions, and those with no religion) in all of Israel.

^f Aged 18 and above.

^g Income from work and pension, benefit and support payments, and capital. Not including "in-kind income" (including the consumption of housing in owned dwellings).

^h In current prices.

ⁱ Excluding consumption of housing in owned dwellings.

^j Age of the head of household.

SOURCE: Based on Central Bureau of Statistics Household Expenditure Surveys for 2014 and 2015.

Looking at the number of breadwinners and the income of Arab households, we find that residents of the mixed cities were similar to residents of the Arab localities in 2014–15 (Table 8.8). The number of persons per household was much lower among the former, and they therefore enjoyed a higher equivalized income and lower incidence of poverty. Another prominent difference between the two population groups concerns the rate of home ownership—which is much lower among residents of the mixed cities. These findings are in line with data from the 2008 census (Table 8.8).

In summation, Israeli Arabs have relatively strong socioeconomic characteristics in the Jewish localities and in Jewish neighborhoods in the mixed cities, and much weaker characteristics in the Arab neighborhoods in mixed cities and in the Arab localities. Policy makers therefore need to focus on improving the well-being of residents of the Arab localities, particularly increasing the income and employment rates among them, and extracting many of them from poverty.

BIBLIOGRAPHY

- Alesina, A. and E. La Ferrara (2005), “Ethnic Diversity and Economic Performance”, *Journal of Economic Literature*, XLIII, pp. 762–800.
- Alesina, A. and E. Zhuravskaya (2011), “Segregation and the Quality of Government in a Cross-Section of Countries”, *American Economic Review*, 101(5), pp. 1872–1911.
- Blass, N., N. Zussman and S. Tsur (2014), “Segregation of Students in Primary and Middle Schools”, Bank of Israel Research Department, Discussion Paper 2014.07, Jerusalem. [in Hebrew]
- Braude, K. and G. Navon (2007), “Internal Migration in Israel”, *Economic Quarterly*, 54, 229–288. [in Hebrew]
- Cahaner, L. (2009), “The Development of the Spatial and Hierarchic Structure of the Ultra-Orthodox Jewish Population in Israel”, Ph.D. dissertation, University of Haifa, Department of Geography & Environmental Studies. [in Hebrew]
- Central Bureau of Statistics (2013), “Specification of Geographical Units and Classification by Socioeconomic Level of the Population in 2008”, Jerusalem. [in Hebrew]
- Cutler, D. M. and E. L. Glaeser, (1997), “Are Ghettos Good or Bad?”, *Quarterly Journal of Economics*, 112(3), pp. 827–872.
- Cutler, D. M., E. L. Glaeser, and J. L. Vigdor, J.L. (2008), “When are Ghettos Bad? Lessons from Immigrant Segregation in the United States”, *Journal of Urban Economics*, 63(3), pp. 759–774.

- Friedman et al. (2011), "Measurement and Estimates of the Population of Ultra-Orthodox Jews", Central Bureau of Statistics, Jerusalem. [in Hebrew]
- Galster, G. C. (2011), "The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications", in: M. van-Ham et al. (eds.), *Neighborhood Effects Research: New Perspectives*, Springer.
- Glaeser, E. L., J. A. Scheinkman, and A. Shleifer (1995), "Economic Growth in a Cross-Section of Cities, *Journal of Monetary Economics*, 36(1), pp. 117–143.
- Goltzman, M. (2010), "Internal Migration and Employment Amongst the Ultra-Orthodox Jewry in Israel", M.A. thesis, Tel Aviv University.
- Gurovitz, N. and A. Cohen-Kastro (2004), "Ultra-Orthodox Jews: Geographic Distribution and Demographic, Social and Economic Characteristics of the Ultra-Orthodox Jewish Population in Israel, 1996–2001", Central Bureau of Statistics, Working Paper Series number 5, Jerusalem. [in Hebrew]
- Hamdan, H. (2006), "Nazareth Illit as a Mixed City: Palestinian Migration to it and Spatial and Cultural Behavior", in H. Yacobi and T. Fenster (eds.), *Israeli City or City in Israel? Questions of Identity, Meaning and Power*, Van Leer Jerusalem Institute and Hakibbutz Hameuchad Publishing House, Jerusalem. [in Hebrew]
- Haredi Institute and Ministry of Construction and Housing (2016), "Strategic Housing Plan for the Haredi Population: 2016–2035", Jerusalem. [in Hebrew]
- Hleihel, A. (2011), "Barriers to Internal Migration Among Israeli Arabs", in R. Khamaisi (ed.), *Arab Society in Israel: Population, Society, Economy* (4), Van Leer Jerusalem Institute and Hakibbutz Hameuchad Publishing House, pp. 63–80, Jerusalem. [in Hebrew]
- Khamaisi, R. (2005), "Urbanization and Urbanism of Arab Localities in Israel", *Horizons in Geography*, 64/65, pp. 293–310, University of Haifa. [in Hebrew]
- Li, H., H. Campbell and S. Fernandez (2013), "Residential Segregation, Spatial Mismatch and Economic Growth Across US Metropolitan Areas", *Urban Studies*, 50(13), pp. 2642–2660.
- Malach, G., M. Choshen, and L. Cahaner (2016), "Statistical Report on Ultra-Orthodox Society in Israel, 2016", Israel Democracy Institute and Jerusalem Institute for Israel Studies, Jerusalem.
- Masry-Herzallah, A., A. Razin and M. Choshen (2011), "Jerusalem as an Internal Migration Destination for Israeli-Palestinian Families", Jerusalem Institute for Israel Studies, and Floersheimer Studies, Institute of Urban and Regional Studies, Hebrew University of Jerusalem. [in Hebrew]

- Milgrom, M. (2015), “Economic Segregation in Israel, 1983–2008”, Institute for Structural Reforms, Tel Aviv. [in Hebrew]
- Ministry of Finance (2015), “Report of the 120-Day Team For Dealing with the Housing Shortage in Minority Localities”, Jerusalem. [in Hebrew]
- National Insurance Institute (2016), “Dimensions of Poverty and Social Gaps, 2015”, Research and Planning Administration, Jerusalem. [in Hebrew]
- Paltiel, A., M. Sepulchre, I. Kornilenko, and M. Maldonado (2012), “Long-Range Population Projections for Israel, 2009–2059”, Central Bureau of Statistics, Jerusalem. [in Hebrew]
- Regev, E. (2014), “Making Ends Meet: Household Income, Expenditures and Savings in Israel”, Policy Paper 2014.07, Taub Center for Social Policy Studies in Israel, Jerusalem.
- Schnell, I., A. Diab Abu Baker and I. Benenson (2015), “A Global Index for Measuring Socio-Spatial Segregation versus Integration”, *Applied Geography*, Vol. 58, pp. 179–188.
- Shilhav, Y. and M. Friedman (1985), “Spreading Out by Closing In: The Ultra-Orthodox Community in Jerusalem”, Jerusalem Institute for Israel Studies, Jerusalem. [in Hebrew]
- Smootha, S. (2015), “Still Playing by the Rules: Index of Arab-Jewish Relations in Israel, 2015”, University of Haifa. [in Hebrew]
- Topa, G. and Y. Zenou (2015), “Neighborhood and Network Effects”, in Gilles Duranton, J. Vernon Henderson and William C. Strange (eds.), *Handbook of Regional and Urban Economics*, Volume 5A, pp. 561–624, North Holland, Amsterdam.
- Totry-Jubran, M. (forthcoming), “The Emergence of Mixed Cities: Between Private and Public”, *Din Udvarim – Haifa Law Review*. [in Hebrew]