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# Socio-Economic Mobility of Development Towns in Israel

## Abstract

This study reveals that, over the past six decades, development towns have improved their socioeconomic status both in terms of absolute mobility (compared to their past position) and relative mobility (progressing at a faster rate than other Jewish cities and towns). Between 1961 and 2019, economic mobility was evident in the narrowing gap between development towns and nondevelopment towns (NDT) across five key economic development indicators: population size, median age, education level, income per capita, and ranking on a socioeconomic index. Despite this progress, development towns remain, on average, below the median socio-economic ranking. The empirical analysis also provides measures of absolute and conditional convergence. It demonstrates that the change in socio-economic rankings between 1961 and 2019 was more significant in localities that were ranked lower in 1961. The degree of conditional convergence was even more substantial when differences in the characteristics of the localities were accounted for. This paper shows that the two standard measures of immobility and convergence which appear in two separate literatures are in fact interconnected, representing two sides of the same coin. I speculate that the reduction in socioeconomic inequality between development towns and NDT can be attributed to factors such as free universal public education, Israel's advanced healthcare system, and cultural diffusion resulting from interactions with the host population.

JEL-Codes: J620, N950, R110, R580.

Keywords: development towns, mobility, economic convergence.

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#### Introduction

The purpose of this study is to examine whether Development Towns have progressed over six decades since their establishment. The initial economic disadvantages of these towns make this question particularly important due to the significant challenge of overcoming them. The establishment of Development Towns was a strategic initiative by Israel's policymakers at the time, leveraging the large waves of immigration from Asia and Africa to establish Jewish sovereignty on the ground in remote areas through immigrant settlement. The initial disadvantages stemmed from the educational and occupational backgrounds of the immigrants, as well as inadequate planning in setting up Development Towns. This poor planning manifested in weak economic foundations, distance from economic hubs, an unbalanced mix of veteran residents and newcomers, and the small population size of a typical Development Town. The term "Development Town" itself implies a low starting point, requiring compensatory government support for economic and social development to occur. The economic dependence of immigrants from Asia and Africa further allowed policymakers to exert significant control over where immigrants were settled, making the starting conditions of Development Towns largely exogenous.

This research necessitates defining the term "Development Town." It turns out there is no agreed-upon definition for Development Towns, even though the term has been part of public discourse for decades. From the outset, different government ministries used varying lists of towns eligible for governmental aid (Efrat, 1987: 111). Similarly, there has been no uniform definition among researchers. Additionally, it is essential to determine the variables by which economic and social development should be measured. The empirical analysis offers two measures of the economic progress of development towns: absolute mobility, which evaluates their progress relative to themselves, and relative mobility, which compares their progress to a reference group of localities, requiring a well-defined and compelling definition of the reference group of non-development towns (NDT). This study presents a long-term analysis spanning six decades to capture the impact of policies whose full effects are felt only after decades. This long timeframe necessitates compromises regarding the variables used to measure socio-economic development due to data availability issues.

Compared to research on regional inequality, studies on inequality between localities in Israel—especially the socio-economic status of Development Towns—have drawn more attention from scholars. Development Towns have been widely studied from various perspectives, particularly during Israel's first five decades. While the volume of research has declined significantly over the past two decades, it continues to this day. The substantial academic and non-academic interest reflects the public attention that Development Towns have consistently garnered.

This study does not aim to provide a comprehensive review of the extensive body of research on Development Towns but highlights those that have examined their socio-economic evolution. Comprehensive reviews of studies on Development Towns during Israel's first four decades are provided by Lifshitz (1990) and Efrat (1987). Given this study's focus on economic mobility, it references only research that examined the socio-economic changes of Development Towns over time.

Efrat (1987) analyzed the socio-economic status of Development Towns in the late 1970s and reached bleak conclusions, stating, "Most are today at risk of survival and continued consolidation" (Efrat, 1987: 171). Lifshitz (1990), who conducted a more systematic analysis of the economic mobility of Development Towns using various variables from 1972 to 1983, found a more nuanced picture, particularly highlighting significant socio-economic variation among Development Towns. Yustman and Spivak (2001) analyzed the economic mobility of 100 localities, specifically addressing Development Towns, using more advanced methods. Their study, covering the years 1983 to 1995, found a negative coefficient for Development Towns in regression models measuring changes in socio-economic rankings, indicating deterioration. These findings held even without controlling for locality characteristics such as geographic region, immigrant population share, and initial socio-economic status in 1983.

Investigating economic inequality between regions and localities naturally evolved from empirical literature on economic convergence among countries. Pioneering studies found evidence of economic convergence, whereby poorer countries grew faster than richer ones when controlling for differences in characteristics (Mankiw, Romer & Weil, 1992; Barro & Sala-i-Martin, 1992). More recent studies indicate that in recent years, convergence has occurred even without controlling for differences in characteristics (Kremer et al., 2022), although some scholars question these findings due to the short observation period (Johnson & Papageorgiou, 2020).

The contribution of the current research lies in several areas. First, it offers a comprehensive evaluation of an extraordinary Israeli project—the establishment of dozens of localities in a

short period, with particularly disadvantaged starting conditions. The study's extended timeframe allows for tracking processes whose full maturation spans several decades. Second, for the first time, this study measures ethnic convergence among localities, with the definition of Development Towns based on population composition by the continent of birth.

The next section presents the conceptual framework that inspires the empirical examination. Section 3 describes the methodology for measuring absolute and conditional convergence of Development Towns, based on economic growth literature for countries and localities, and connects it to measuring economic mobility. Section 4 defines Development Towns, introduces data sources, and details the processing required for measuring convergence and mobility. Section 5 presents the findings, followed by a discussion in the concluding section.

#### 2. The Conceptual Framework

#### 2.1 Benabou's residential choice model

The conceptual framework guiding the empirical examination of whether development towns have reduced gaps with other Jewish non-development towns (convergence) or increased them (divergence) is in the spirit of Benabou's (1996) residential choice model. This model outlines the conditions that encourage or prevent spatial segregation of populations based on human capital levels, making it suitable for understanding the factors influencing settlement mobility. According to the model, the interaction between parents' educational background and the level of human capital in the residential environment is a key factor shaping spatial inequality through the production of human capital in children.

Benabou's (1996) model predicts that a positive interaction will lead to divergence and persistence of spatial inequality if the pull of an educated environment is stronger for children of educated parents compared to those of less-educated parents. The inequality in educational attainment in the children's generation is expected to be greater than in the parents' generation if an educated environment provides greater benefits to the children of educated parents. This is because children gain not only from their family background but also from the human capital in their residential location through exposure, imitation of role models, local behavioral norms, and network connections.

The forces driving divergence and persistence are amplified under conditions of imperfect capital markets for financing housing purchases. The implicit rent for those who self-finance housing purchases is lower than for those reliant on loans in an imperfect capital market. This advantage allows the educated to outcompete others for housing in educated locations. Differences in parental financial wealth further exacerbate segregation if parents with higher education and resources attribute lower marginal utility to consumption compared to those with limited resources (the wealth effect). This means that an educated parent values their children's quality more than consumption and is willing to pay higher rents to provide their children access to an educated neighborhood.

Finally, local taxation combined with a positive interaction between parental education and locally funded education increases the willingness of educated parents to pay higher local taxes, thereby pushing less-educated parents and their children to less-educated areas.

#### 2.2 Poor Planning

The flawed economic planning during the establishment of development towns further strengthened the forces driving divergence. The construction of development towns without adequate planning for employment opportunities created a mismatch between residents' skills (educational and occupational backgrounds) and local employer needs. Many development towns were intended to serve as service centers for rural settlements, with their residents expected to work in agriculture. However, the needs of rural settlements were insufficient to sustain the development towns economically. Furthermore, Kibbutzim and Moshavim developed their own services, reducing their reliance on nearby development towns and further shrinking economic growth potential. Studies showed that Kibbutzim purchases from adjacent development towns were minimal (Cohen, 1967; Amiram & Shahar, 1975; Kipnis, 1972).

Additionally, the planning to position residents of development towns in agricultural jobs did not align with their backgrounds and initially conflicted with the Kibbutzim's ideological opposition to hired labor. The starting point was also disadvantaged by an unbalanced composition of immigrants and veteran residents, slowing the emergence of local leadership.

#### 2.3 Population Size

Many researchers studying development towns viewed their relatively small size as a barrier to economic development. For example, Efrat (1987) argued that the proliferation of development towns instead of a single large city was a planning error. He attributed the failure

of small development towns to achieve economic growth to their population size and even specified a "magic number" of 10,000 residents as the minimum required for economic development (Efrat, 1987: p. 45). A settlement that is too small limits the development of a variety of services and employment opportunities, which are part of the economics of scale.

For example, in education, settlement size is particularly important for individuals at the lower end of the economic spectrum who suffer from limited transportation mobility. The education of their children depends on local schooling options. A small a remote settlement provides less diverse educational tracks, increasing the likelihood of a mismatch between educational pathways and children's skills. It is important to note that settlement size is less relevant if the population primarily comprises affluent families who can overcome the limitations of small size through regional cooperation with neighboring settlements and funding transportation systems for their children to regional schools.

Small settlement size can create a vicious cycle: a population that is too small results in failure to attract more residents, leaving the settlement stagnant and small. The wave of immigration in the early 1990s helped break this cycle. This wave increased the population size in development towns, contributed to realizing the benefits of scale in providing urban services, and boosted their attractiveness to the business sector. Due to the economic disadvantages stemming from their size, development towns were expected to benefit more significantly from the positive differential impact of the immigration wave compared to other Jewish settlements.

#### 2.4 The wave of immigration in the 1990s

In the early 1990s, a wave of immigration significantly increased Israel's population over a relatively short period. At the start of this wave, more immigrants settled in development towns, likely due to the lower housing costs. The cumulative proportion of immigrants arriving between 1990 and 1995 was 17% of the population in development towns, compared to 12% in NDT.

Over time, the share of 1990s immigrants in development towns declined relative to its growth in NDT. In recent years, the proportion has equalized between the two groups of localities, stabilizing at around 15%. This equal distribution of immigrants between the two groups still leaves open the question of whether the current economic ranking of a locality that absorbed more immigrants has been adversely affected.

#### 2.5 A peripheral location

Incorporating the distance from economic activity centers into the theoretical model reinforces the forces sustaining spatial inequality if there are fixed costs associated with migration. Most development towns were located far from economic activity centers, a disadvantage that becomes significant when migration costs are partly fixed and represent a lower proportion of income for high-income individuals. The study by Broide and Navon (2007), which showed that high-income individuals tend to migrate more than low-income individuals is in line with fixed costs of migration. The persistence of inequality is exacerbated if there is an economic advantage to clustering large numbers of people in one place due to production or consumption benefits (agglomeration).

The importance of location can vary over time, amplifying or weakening persistence forces. In the past, the negative impact of a peripheral location appeared weaker than it does today. According to Lifshitz (1990), peripherality did not necessarily negatively affect economic development. In 1983, many development towns in central locations, such as Beit Dagan, Kfar Yona, Or Yehuda, Tirat Carmel, Kiryat Ekron, Rosh HaAyin, and Ramla, were ranked at the bottom in terms of education levels (Figure 4.2, p. 48). Later, these locations turned into an advantage, and some of these towns became suburban communities for affluent populations from major cities, possibly due to rising housing prices.

#### 2.6 Migration of Ultra-orthodox Jews

The increasing share of the ultra-Orthodox group in the Israeli population has been one of Israel's most significant social phenomena in recent decades. Generally, the ultra-Orthodox education system dedicates considerable time to Torah study and does not prepare its graduates for the labor market. Learning continues beyond the age of 18, leading to relatively low labor force participation among ultra-Orthodox men. These characteristics, combined with high birth rates, result in low per capita income.

The rapid expansion of the ultra-Orthodox population has increased the demand for housing. Due to low income and a lack of suitable human capital, ultra-Orthodox individuals who remain out of the workforce for extended periods cannot afford housing in expensive areas and are compelled to relocate to less expensive settlements. Unlike the general population, ultra-Orthodox migration is community-based due to the importance of religious communal life. This results in concentrated ultra-Orthodox migration to specific settlements such as Arad and Beit Shemesh.

Ultra-Orthodox migration is sensitive to housing costs and much less so to income levels or secular education in the destination settlement due to limited earning potential and low labor market participation. This type of migration tends to worsen the economic situation of the receiving settlement, as demonstrated by the decline in the socioeconomic rankings of towns like Arad and Beit Shemesh. Therefore, the extent of inequality between development towns and NDT is expected, depending on the share of ultra-Orthodox migrants.

#### 2.7 Government policies

Alongside the forces that perpetuate or exacerbate inequality between development towns and NDT, there are factors that promote socio-economic mobility. The population of the development towns was composed of new immigrants who came from countries that were economically less developed compared to Israel. These immigrants, and even more so their children, were expected to be influenced by their encounter with a new country, with a population and institutions different from those of their countries of origin.

The transition to a country with more advanced healthcare services and the natural tendency to adapt behavioral patterns to those prevalent in the host society have driven significant demographic changes, chief among them the reduction of inequality in family size and age at marriage. These changes were more pronounced among the descendants of the immigrant generation, requiring a relatively long period to observe their full effects.

Another important institution with the potential to impact economic mobility is publicly funded progressive national education, as predicted by Benabou (1996). Children from poor families who receive free public education can narrow the gap with children from affluent families, thereby reducing inequality compared to the parent generation. Immigrants from Asia and Africa who arrived in development towns had low levels of education, but their children received education in Israel. This policy holds potential for the children of immigrants born in Israel, a potential that only manifests economically after several decades. Children born in the 1960s first encountered the labor market in the 1980s and reached the peak of their working careers in the 2000s or later. Thus, the fruits of such a policy become evident only after decades, highlighting the advantage of studies spanning long periods.

Additionally, successive Israeli governments have implemented compensatory regional development policies, partly stemming from recognition of the "original sin" of channeling immigrants from Asia and Africa into development towns. Over the years, capital investments in these towns were incentivized with generous grants, tax benefits were provided to residents, and local authorities received grants based on the socio-economic profile of the residents and the geographic location. These policies aimed to encourage residents to stay in development areas and attract highly educated and skilled professionals from central regions to the periphery.

In principle, such governmental intervention is supposed to create economic mobility for localities. However, various studies have pointed to the limited effectiveness of some of these policies, particularly the Law for the Encouragement of Capital Investments, in improving the economic status of development towns (see, for example, Schwartz 1986, Schwartz 1988). Moreover, since the 1980s, competition has emerged from settlements in the West Bank and Gaza, which receive extensive government support and incentives to encourage migration to these areas.

In conclusion, the forces driving the divergence between localities until reaching equilibrium and its persistence include the socioeconomic background at the starting point, including the size of the locality, its location as influenced by the changing economic advantages of agglomeration and ultra-Orthodox migration. Conversely, the factors working in the opposite direction include the benefits of more advanced healthcare and education systems, as well as regional development policies aimed at benefiting the periphery. The overall impact of absorbing immigrants who arrived in the 1990s on mobility is the only factor that may go either way.

#### 3. Methodology

To examine the extent to which a locality's current economic status is influenced by initial conditions from 60 years ago, the following statistical model is estimated:

(1)  $Y_{i,t} = a + b Y_{i,0} + \varepsilon_{i,t}$ 

Where  $Y_{i,t}$  is the outcome variable of a specific locality i in a given year t. The outcome variable can be the socio-economic ranking, income level, or the percentage of academics in the locality. The main outcome variable is the socio-economic ranking percentile of the locality, calculated as its position on the economic ranking scale from 1 (lowest) to 93 (highest), divided by the maximum position of 93. For comparability across estimates, a fixed group of localities is used over time.

The initial conditions of the locality are represented in Equation (1) by the variable  $Y_{i,0}$ , measured at the start of the studied period (1961). The coefficient *b* measures the degree of socio-economic immobility if the socio-economic percentile in 1961 represents the starting point. Measuring locality-level economic immobility in this way allows comparison of the estimation results in this study with estimates of individual-level immobility, as typically measured in a similar equation:  $\log Y_{i,t} = a + b \log Y_{i,0} + \varepsilon_{i,t}$ , where  $Y_{i,t}$  and  $Y_{i,0}$  represents the income percentile of children and their parents, respectively. In the empirical section, absolute mobility indices are presented, comparing the level of economic development at two points in time, such as income or education levels.

The coefficient b in Equation (1) indirectly measures ethnic immobility when the independent variable is a dummy variable for a development town. This estimation answers whether the development town category still relevant to the current socio-economic status, based on the correlation between current economic status (dependent variable) and being classified as a development town (independent variable). In the empirical analysis, a direct estimation of ethnic immobility is offered by replacing the development town dummy with the proportion of Mizrahi residents, allowing for the utilization of ethnic variation within both groups (development towns and NDT).

The relationship between current economic rankings and past initial conditions is also examined using alternative economic development indicators, such as median age, median years of schooling, or population size, as measured in 1961.

A complementary question is to what extent the economic gap between development towns and NDT has narrowed. For this purpose, the following model is estimated:

(2) 
$$Y_{i,t}-Y_{i,0} = \Delta Y_{i,t} = \alpha + \beta Y_{i,0} + \gamma X_{i,t} + e_{i,t}$$

The dependent variable in Equation (2) is the change in the outcome variable between two points in time (t, and t-n=0), such as the change in the socio-economic percentile from 1961 to 2019. The independent variables include initial conditions  $Y_{i,0}$  and a range of contemporary variables  $X_{i,t}$ , expected to influence the current socio-economic status. The coefficient  $\beta$  indicates absolute convergence if the coefficient is negative and absolute divergence if the coefficient is positive, assuming the socio-economic percentile in 1961 represents the initial condition.

The term "absolute convergence" signifies a reduction in inequality between localities over time that is unconditional on locality characteristics, which may influence the locality's economic status. The convergence coefficient  $\beta$  in Equation (2) equals the immobility coefficient *b* in Equation (1) minus one. If the convergence coefficient equals zero, it implies that the current economic ranking is perfectly correlated with the initial economic level, meaning inequality between localities is replicated over time. In this case, the immobility coefficient *b* reaches its maximum of one. Conversely, if the convergence coefficient equals minus one, it indicates that the current socio-economic ranking is random (plus a constant) and unrelated to the initial socio-economic conditions, signifying maximum mobility where b=0, and no connection exists between current and past rankings as per Equation (1).

In addition to standard estimation of convergence based on socio-economic rankings, ethniceconomic convergence is estimated using a development town dummy variable (or the proportion of Mizrahim in 1961), replacing the economic ranking at the starting point. Since the development town dummy variable represents low economic development at the starting point, a positive coefficient indicates convergence, while a negative coefficient reflects divergence between localities over time.

Furthermore, conditional convergence estimation is presented, where the list of independent variables includes, in addition to the economic ranking at the beginning of the studied period, various other locality characteristics, such as immigrants share, ultra-Orthodox share and distance from the center, which potentially influence the current economic status. For instance, the convergence rate of a locality may have appeared different without the migration of ultra-Orthodox residents. Note that ultra-Orthodox internal migration and external immigration are expected to be influenced by the locality's ranking (e.g., due to low housing prices), but it is unclear if this also applies to changes in the locality's ranking.

#### 4. Data

#### 4.1 Data sources

**Socio-economic Index**: The research focuses on five variables to reflect economic performance: socio-economic ranking, income per capita (or per standard person), education, median age, and population size. These variables were chosen based on two considerations. First, variables directly representing the economic status of residents, such as income per capita or socio-economic ranking, were selected. For years without available economic data, alternative variables, such as median age and education, were used due to their strong correlation with the socioeconomic index.

The second consideration was the availability of data for these variables over the longest possible period and for the most comprehensive list of localities. It is worth noting that only population size and its composition, represented by median age, were measured consistently over the entire period. In contrast, the education level of residents is represented by the median years of schooling in 1961 and by the percentage of residents with an academic degree in variable age groups in subsequent years.

In this study, priority was given to the socio-economic ranking to analyze the economic mobility of development towns, as it provides a multidimensional perspective on residents' profiles. The Central Bureau of Statistics (CBS) has systematically published a socioeconomic ranking of settlements since 1983, though at irregular intervals depending on census dates (1983, 1995, 2008). In recent years, the socioeconomic index has been published biennially, making data available for 2013, 2015, 2017, and 2019, which is the latest available year. It should be noted that the list of variables included in the socioeconomic ranking has evolved over time, as has the list of cities and towns for which the ranking is available.

To construct a time series spanning six decades, a socioeconomic ranking for the researched population in 1961 was calculated as a simple average of rankings based on median age and median years of schooling. This calculation relied on the high correlation between these two variables and the socioeconomic index in later years. According to Table 1, median age and education level correlate with socioeconomic ranking at all five time points examined (1972, 1983, 1995, 2008, 2019). It appears that in the past, median age better represented economic status, judging by the high correlation between median age and socioeconomic ranking in 1983.

The original socio-economic ranking of cities and towns was re-ranked internally for the research population only, to ensure that changes in relative positioning of development towns and NDT over time are not caused by shifts in the economic mobility of localities excluded from the research population. Otherwise, a variable list of localities could artificially raise or lower the socioeconomic ranking of localities simply because new settlements at the bottom or top of the ranking were added.

The socioeconomic ranking for 1972 is based on a study published by Moshe Egozi in 1978, which relied on 15 characteristics from the 1972 census, covering economic status (income, occupation, economic sector, vehicle ownership, housing density), education, demography, and more. All localities were divided into ten equal deciles, and each locality received a socioeconomic score ranging from 1 to 10. Completing the information on socioeconomic rankings for the two census years, 1961 and 1972, generates six time points spanning 60 years: 1961, 1972, 1983, 1995, 2008, and 2019.

**Income per capita**: Another natural economic variable for examining the economic mobility of development towns over time compared to NDT is income per capita. Income per capita (or per equivalent person) is included in the socioeconomic index and is thus available for all years in which the CBS published a socioeconomic index. It should be noted that the 1961 census did not collect income data. Income per capita in 1972 was derived from Egozi's work (1978), which relied on the 1972 census data. The income definition included in the socioeconomic index primarily encompasses income from work and allowances, and therefore does not reflect significant differences in capital income and wealth.

**Median age, population size and education level**: Data on median age and population size by locality were obtained from the 1961 and 1972 census publications and the CBS socioeconomic index publications. The education level of residents is represented by the median years of schooling in 1961 and by the percentage of residents with an academic degree in variable age groups in subsequent years.

**Mizrahi Population Share**: Data on the population composition by continent of birth for 1961, used to calculate the share of Mizrahi residents in a locality, were taken from the 1961 census publications. To examine the evolution of population composition, the dataset includes population composition by continent of birth in all studied years. The Mizrahi share in a settlement was calculated as the proportion of immigrants from Asia and Africa among foreign-

born residents in 1961, 1972, 1983, 1995, and 2008. For 2020, the Mizrahi share was calculated based on the proportion of immigrants from Asia and Africa among foreign-born and Israeliborn residents (two generations) using data provided by Aviel Kranzler from the CBS.

**Distance from Tel Aviv District:** The peripheral level of a settlement in this study is measured by the shortest distance in kilometers from the center of the settlement to the Tel Aviv district border via road networks. These data were obtained from the CBS peripheral index, regularly published since 2015 at five-year intervals. Before that, a pilot peripheral index was published in 2004. The most recent index refers to 2020. The peripheral index is based on a notion combining physical distance from other settlements weighted by population size. In Israel, the index is a mix of a predefined center, measured by the distance from the Tel Aviv district border, and a center determined by population concentrations. The preference for a peripheral index based on distance in this study aims to neutralize changes in population distribution, which are inherently endogenous.

**Ultra-Orthodox Share**: The ultra-Orthodox share in a settlement was calculated based on the percentage of votes received by the United Torah Judaism (and its predecessors under the Hebrew letters such as "Gimel," and "Dalet,") and Shas parties in Knesset elections. Including Shas may overestimate the ultra-Orthodox weight in a settlement because not all Shas voters are ultra-Orthodox. However, excluding Shas would lead to an opposite bias, underestimating their weight. This bias exists even in years before Shas's establishment, when some Mizrahi ultra-Orthodox voted for parties like "Tami" led by Aharon Abuhatzeira. Election data were matched to the closest study year when elections occurred in a different year. Relying on Knesset election data reflects data availability issues, as the CBS only began publishing data on ultra-Orthodox proportions by settlement in 2020.

**Share of 1990s Immigrants**: The share of immigrants who arrived in Israel from 1990 onward by settlement was obtained from the 1995 census for 1995 and from the CBS local authority files for subsequent years: 2010 and 2019.

#### 4.2 The definition of a Development Town

A locality is defined as a development town if, in 1961, two-thirds or more of its foreign-born residents originated from Asia or Africa (Mizrahim). The definition based on two-thirds or more Mizrahi residents results in a group of 31 development towns, representing one-third of

the study population, and a comparison group of 62 local authorities. This definition is flexible as the list of development towns can change depending on the degree of homogeneity of residents by continent of birth.

The degree of homogeneity and the number of localities in each group varies with the threshold for inclusion in the list of development towns. Seven localities (Or Akiva, Ashdod, Beit Dagan, Tirat Carmel, Yavne'el, Kfar Yona, Kiryat Shmona) drop off the list if the threshold defining a development town rises from two-thirds to three-quarters. If the threshold increases to 80%, an additional four localities drop off: Dimona, Migdal HaEmek, Tiberias, and Kadima (Table 2). If the definition of development towns had been based on the top third of localities by Mizrahi proportion in 1972 instead of 1961, the list would have included Tel Mond, Kiryat Gat, Be'er Ya'akov, Yokneam Illit, and Yehud, while excluding Pardesiya, Tirat Carmel, Yavne'el, Migdal HaEmek, and Ashkelon.

The main advantage of defining development towns based on the population's composition by origin lies in the association of development towns with the Mizrahi population in public discourse. An origin-based definition creates a conceptually coherent category, enabling the study of socio-economic and ethnic convergence. In this study, the list of development towns is fixed because the definition is based on the population's composition in 1961. This choice facilitates identifying sources of change over time.

The category of development towns was initially created for policy purposes to target localities requiring economic development assistance. The ethnic similarity among development towns at their inception led the government to treat them as a homogeneous group necessitating uniform policies. However, according to Naor (1973) and Efrat (1987), government ministries used different and changing lists of development towns.<sup>2</sup> This variability may result from a combination of diverse goals and the heterogeneity of the localities. Additionally, the economic benefits associated with being classified as a development town led politicians to advocate for including localities that might support their re-election, even if they did not meet strict criteria. Including localities for political reasons "contaminates" the category of development towns from a research perspective, making it unclear what it represents.

<sup>&</sup>lt;sup>2</sup> Ministry of Labor and Welfare (1968, 1978)

The multiplicity of definitions, or even chaos, also characterized research on development towns, which defined them based on residents' socio-economic profiles, origin composition, geographic location, population size (small urban localities), year of establishment (before and after statehood) and eligibility for government support. Differences between the lists stemmed from the weight assigned to these criteria, but it is unclear what these definitions capture.<sup>3</sup>

The definition of development towns in this study also reflects the locality's lower economic development level in the early 1960s, without explicitly including development in the definition—another significant advantage. In the early 1960s, there was a strong correlation between a person's country of origin and their economic status (Patinkin 1959). The relationship between socio-economic profile (education level, family size, initial capital, language barriers) and residents' origin was also evident at the regional level (Lifshitz 1984). Further evidence of the link between economic development and development towns will be presented later.

The chosen definition adds several small localities that were not included in conventional lists of development towns, such as Elyakhin, Bnei Ayish, Yavne'el, Pardesiya, and Kadima. This addition facilitates comparing economic development between small localities and larger development towns.

#### 4.3 Study population

The primary study population will include 93 Jewish local authorities established before 1970, consisting of 31 localities defined as development towns and an additional 62 other Jewish Non Development Towns (NDT). A fixed list of local authorities ensures that changes in the level of inequality between development towns and NDT are not "contaminated" by changes in the list of localities. The study population does not include 54 regional councils, 81 Arab localities, and 27 Jewish localities established after 1970. The latter group was excluded as their development cannot be compared since 1961 (or 1972).

<sup>&</sup>lt;sup>3</sup> Fourteen settlements mentioned in all lists of development towns are: Ofakim, Beit She'an, Dimona, Hatzor, Yeruham, Migdal HaEmek, Ma'alot, Mitzpe Ramon, Nazareth Illit, Netivot, Kiryat Gat, Kiryat Malachi, Kiryat Shmona, and Sderot.

The number of localities in some analyses is smaller than 93 due to a lack of data in the 1961 census for Karmiel, Arad, and Omer, whose population that year was only 64 residents, or due to limited availability of the socio-economic index for certain localities in other years.

The study population accounted for 83% of the 2.2 million residents of the country in 1961, of which development towns comprised 8% of the population, and an additional 75% lived in the other 62 Jewish local authorities. The Arab population in non-mixed urban localities constituted about 10%, while 7% lived in rural Jewish localities organized under regional councils.

By 2019, the study population covered 70% of the country's 9 million residents. Of these, development towns accounted for 12.5% of the population, and 57.5% resided in the other 62 Non-Development Towns. The population excluded from the study in 2019 consisted of 1.3 million residents living in non-mixed Arab urban localities (14.4%), about 1 million residents in regional councils (10.5%), and approximately half a million in Jewish local localities established after 1970 (5%).

#### 4.3 The Study Period: 1961 to 2019

The vast majority of development towns were established in the 1950s, and some took time to consolidate as separate and independent local authorities. This, along with the 1961 census, which provides comprehensive data on localities, informed the choice of 1961 as the start of the study period. The study period ends in 2019 as this is the most recent year for which a socio-economic index is available.

#### **5.** Findings

#### 5.1 Absolute and relative mobility

Table 3 shows absolute mobility in development towns based on three socio-economic development indicators: population size, median age, and education level. Population growth is a common metric for measuring the economic development of cities and towns, as it reflects a "vote with one's feet" (e.g., Glaeser et al., 1995). Thriving localities attract residents, while declining ones repel them. Population size has also been prominently recognized as a success measure among researchers studying development towns (e.g., Efrat, 1987). By this measure,

development towns demonstrated remarkable mobility, as their average population increased sevenfold between 1961 and 2019, now averaging over 36,000 residents (Table 3).

Absolute mobility in development towns is also evident in median age, another recognized socio-economic development indicator. A higher median age indicates lower birth rates and longer life expectancy—symbols of a more developed society at both national and regional levels. The median age in development towns rose from 17.7 in 1961 to 30.7 in 2019 (Table 3). Education level, measured as the percentage of residents with academic degrees, is another key socio-economic development indicator used to assess economic mobility. The percentage of residents with academic degrees has increased significantly over the period, indicating absolute mobility by this measure as well.

The absence of income data for 1961 and inflation beginning in the early 1970s are two issues that prevent the assessment of absolute mobility based on income. Due to Israel's high inflation rates, comparing income levels over a long period is problematic, even when attempting to adjust for price increases. Small timing errors in income data collection can distort calculations. Therefore, income levels are only used to assess relative mobility, inherently accounting for the dramatic changes in prices over six decades.

This study finds that development towns also achieved relative mobility during the study period, as measured by their relative ranking in socio-economic indicators. Table 3 shows the average percentile ranking of development towns in a fixed group of 93 localities included in the study. Development towns ranked in the 36th socio-economic percentile in 2019, nearly double their rank in 1961. Relative mobility in development towns was also documented using four additional metrics: relative population size, relative median age, relative percentage of residents with academic degrees, and log income in development towns compared to Non-Development Towns (Table 3).

The population size of development towns relative to NDT increased between 1961 and 1972, remained relatively unchanged between 1972 and 1983, but grew significantly after 1983, fueled by a wave of immigration. In 2019, the average size of a development town was 43% of the average size of NDT in the study population, compared to 22% in 1961. The ratio of the log income per capita of development towns to NDT grew from 1972 to 2019, indicating economic mobility by the most widely used economic metric for mobility (Table 3).

It is worth noting that the relatively small income inequality between development towns and NDT is downwardly biased due to the definition of income, which includes allowances but excludes capital income. In any case, the economic climb of development towns over the past 25 years aligns with findings from household-based studies showing a narrowing gap between Ashkenazim and Mizrahim (Dahan, 2013; Gordon et al., 2022).

To complement the picture drawn from average comparisons, it should be noted that 19 out of 31 development towns improved their relative socio-economic ranking in 2019 compared to 1961, while six maintained their relative position, and six declined. Another perspective on the relative mobility of development towns, highlighting the extent of upward movement on the socio-economic scale, is the relative position attained by several towns from the bottom 31 ranks. Only three development towns were ranked above the bottom 31 in 1961, a number that grew to 14 in 2019 (Table 4). Of these, nine climbed above the median socio-economic ranking, and two reached the top two deciles in 2019.

Although development towns have achieved impressive economic mobility as a group, some have declined in ranking. This finding is unsurprising given the diverse characteristics of development towns at the starting point and beyond. Development towns vary in geographical attributes, with some located far from economic centers and relatively few situated in central Israel. They also differ in their year of establishment, size, population composition at the starting point, and proximity to borders. The heterogeneity of development towns was further shaped by population dynamics, including the immigration wave of the 1990s and the substantial emigration of the growing ultra-Orthodox population.

Table 5 provides an estimation of immobility using a basic regression model with a single independent variable, assessing whether a locality's current socio-economic rank is influenced by its classification as a development town, based on the origin of its residents in 1961. The regression shows a significant negative relationship between residents' origins six decades ago and the current economic state, with the coefficient size being substantial. In 2019, the socio-economic rank of development towns was, on average, 21 percentiles lower than that of NDT.

Similar findings were obtained using a regression of the 2019 socio-economic percentile rank with the proportion of Mizrahi residents as the single independent variable instead of a dummy variable for development towns (Table 5). The current economic state is significantly

associated with past characteristics, such as the socio-economic rank and median age, but not with initial education levels or population size.

At first glance, there seems to be a contradiction between the description at the beginning of the section, indicating mobility of development towns, and this regression analysis, which suggests immobility. This apparent contradiction arises because development towns have climbed the socio-economic scale but remain as a group below the median percentile, with limited presence in the top deciles.

An intriguing finding is the size of the socio-economic percentile coefficient in 1961 in the regression for the 2019 percentile rank, which stands at 0.37—higher than estimates of economic immobility in Israel based on income data of parents and children (Table 5). Recent studies on the intergenerational income elasticity in Israel report lower estimates of immobility: 0.24 (Aloni and Krill, 2017), 0.25 (Heller, 2020), 0.28 (Gordon, Flug, and Kenet-Portal, 2022), and 0.29 (Batz and Krill, 2022). It is plausible that the migration of economically successful residents from development towns to other localities accounts for part of the gap, but determining the source of the differences requires separate research. This study spans a longer period, uses a socio-economic index instead of income, and examines localities rather than individuals, unlike mobility studies.

#### 5.2 Absolute and conditional convergence

Table 6 presents an estimation of the coefficients for both absolute and conditional convergence using two different measures of economic status at the starting point. One measure represents the level of economic development at the starting point through a dummy variable for development towns (based on origin in 1961), while the other uses the socio-economic percentile of 1961. The data show that the convergence coefficient for development towns is positive and significant, indicating that the socio-economic ranking of development towns relative to NDT over the entire period is equivalent to 27 percentiles, as indicated by its coefficient. The annual convergence rate for development towns is calculated at 2% using a standard formula.<sup>4</sup>

 $<sup>^{4}</sup>$  b =  $\frac{1}{\pi}$ log(1 -  $\beta$ T) where b is the speed of convergence & T is the length of the investigated period.

The coefficient for absolute convergence is negative and significant when the socio-economic status at the starting point is represented by the socio-economic percentile of 1961. This estimate implies that the change in socio-economic ranking between the two points in time was greater for localities ranked lower in 1961. Figure 1 visually illustrates the relative improvement in socio-economic percentile rankings from 1961 to 2019 for localities that were at the bottom of the socio-economic hierarchy in 1961, including many development towns.

As described in the methodology section, the estimated coefficient for absolute convergence can also be computed without additional regression, using the socio-economic percentile as the starting point for a locality. The estimated convergence coefficient is -0.63 (Table 6), which equals one minus the immobility estimate of 0.37 (Table 5), according to the formula provided below Equation (2). Higher absolute values of the convergence coefficient imply greater economic mobility. Comparing these two estimates allows us to link the literature on economic mobility with that on economic convergence, as convergence rates can be derived from immobility estimates and vice versa. While the convergence coefficient (Table 6) reflects the "glass half full" perspective of mobility, the immobility coefficient (Table 5) represents the "glass half empty" view.

In the literature on economic growth of countries, conditional convergence estimation distinguishes between differences arising from initial distance to the long-term equilibrium (absolute convergence) and differences reflecting gaps in country characteristics such as institutional quality, which determine long-term equilibrium output levels. Similarly, at the locality level, conditional convergence estimation accounts for differences in fundamental characteristics such as geographic location. A locality's geographic position encapsulates various traits like distance from urban centers, isolation, topography, proximity to the coast or borders, climate, and the presence of historical landmarks. These traits, along with factors like regional policies, determine the locality's economic pull and its long-term economic potential. Three key variables representing a locality's economic pull are included in the conditional convergence estimation: distance from Tel Aviv, the percentage of ultra-Orthodox residents, and the percentage of immigrants from the former Soviet Union in the 1990s.

The estimated coefficient for conditional convergence is larger (in absolute value) than that for absolute convergence. This suggests that disregarding differences in characteristics between localities underestimates the degree of convergence and economic mobility of development towns (Table 6). The convergence coefficient increases from -0.63 to -0.82, indicating that

economic mobility for localities at the bottom of the ranking is greater after accounting for differences in characteristics. The estimated coefficient for convergence approaches -1, indicating full mobility, where the current ranking is independent of the starting point and fluctuates randomly around a fixed constant, as described in the methodology section.

This study also reveals that localities closer to the center climbed the socio-economic ladder at the expense of more distant localities. Both the percentage of ultra-Orthodox residents and the share of 1990s immigrants, representing the two main population growth sources in Israel over the past three decades, have pushed down the current socio-economic ranking of localities compared to their past ranking (Table 6). The negative effect of the share of 1990s immigrants on a locality's socio-economic ranking change is surprising. While immigrant absorption initially was expected to lower the economic ranking of localities, as immigrants integrated into Israeli society, their effective education level, relevant to the Israeli labor market, and consequently their income level, increased. Arellano-Bover and San (2024) demonstrate that immigrants' wages were initially lower than those of veteran residents but grew at a faster rate, closing the gap within about 30 years. Similarly, the mobility of immigrants' children relative to their parents (based on income ranking) was higher compared to veteran residents, a phenomenon that raises average income levels over time (Gordon, Flug, and Kenneth-Portal, 2022). Therefore, one might expect stability in the socio-economic ranking of localities with higher immigrant shares. A possible explanation for the negative effect lies in increased internal migration of successful immigrants from weaker to stronger localities with fewer immigrants.

The signs of the coefficients for distance, the percentage of ultra-Orthodox residents, and the percentage of immigrants are consistent, whether the starting point is represented by development towns or by the socio-economic percentile of 1961. Including both development towns dummy and socio-economic percentile of 1961 nullifies the significance of development towns, but caution is needed in drawing definitive conclusions due to the high correlation between these two variables.

The central findings remain unchanged when substituting the development towns variable with the share of Mizrahi residents, which serves as a continuous definition of development towns. The coefficient for the Mizrahi variable is positive, at 0.62, indicating improvements in the economic ranking of localities with higher Mizrahi shares, similar to development towns (Table 7). This coefficient increases when accounting for differences in geographic location and the

share of ultra-Orthodox and immigrant residents. The estimated coefficient for absolute convergence remains similar when redefining development towns, for example, by raising the threshold for including a locality as a development town to three-quarters of residents born abroad originating from Asia and Africa, or two-thirds of such residents in 1972, or by omitting one locality at a time (these results are not reported here but can be provided by the author).

The estimation of absolute and conditional convergence was also conducted based on income per capita (instead of the socio-economic index) but for a shorter period covering 1972 to 2019, due to the lack of income data for 1961. The patterns revealed by the convergence coefficients are similar to those based on economic percentile rankings, also indicating the economic mobility of development towns (Table 8).

#### 6. Discussion and conclusion

This study finds that development towns have achieved significant socio-economic mobility over the past six decades. Absolute mobility in development towns was identified using three socio-economic development measures. The population size of development towns is significantly larger today compared to the early 1960s, the median age has substantially increased, and so has the percentage of educated residents. The study also reveals relative mobility of development towns according to a socio-economic index. By 2019, development towns were ranked nearly twice as high on the socio-economic percentile scale compared to their ranking in 1961, in contrast to a decline in the socio-economic ranking of NDT. Despite this notable progress, the average socio-economic percentile of development towns remains at 36, below the median socio-economic ranking.

Relative mobility of development towns was also documented using four additional indicators: relative population size, relative median age, percentage of residents with academic degrees, and relative income—a leading indicator of economic development. The relative income of development towns increased compared to NDT between 1972 and 2019. The population size of development towns also grew relative to NDT. In 2019, the average population size of a development town was 43% of the average size of NDT, compared to 22% in 1961.

The socio-economic mobility of development towns was not uniform. Some towns experienced a strong upward mobility on the socio-economic ladder (e.g., Rosh HaAyin, Pardesiya, Mevaseret Zion, Yavne, Gan Yavne, and Elyakhin). Others rose after a temporary decline (e.g., Kadima, Kfar Yona, Tirat Carmel, Beit Dagan, Or Akiva, and Or Yehuda) or showed moderate upward progress (e.g., Shlomi, Sderot, Kiryat Shmona, Kiryat Ekron, Ma'alot, and Bnei Ayish). Development towns closer to the center of the country experienced greater improvements in socio-economic rankings compared to more remote towns, though proximity to the center also positively impacted NDT. This phenomenon is likely linked to migration by middle-to-upper-class individuals seeking more affordable housing in the second and third geographical rings around the Tel Aviv metropolitan area, a trend that intensified as housing prices increased. Nine development towns maintained their relative position on the socioeconomic ladder, whereas four (Ashdod, Beit Shemesh, Tiberias, and Yavne'el) saw their rankings decline, with Yavne'el and Beit Shemesh experiencing particularly sharp drops.

As with any relative measure, relative mobility can stem from a decline in the standing of comparison groups. The expansion of the ultra-Orthodox population resulting from a rise in family size and a decline in labor force participation reflect a central trend in Israeli society and economy. This trend has led to economic declines in localities with a high proportion of ultra-Orthodox residents. Localities such as Rechasim, Bnei Brak, Safed, Jerusalem, and Arad have now taken the place of development towns at the lower end of the socio-economic spectrum. Similarly, Jewish localities with large Arab populations (25% or more) that have grown—such as Ramla, Lod, Acre, Jerusalem, and Nof HaGalil—have also dropped in rankings, replacing development towns at the bottom of the socio-economic ladder.

The upward socio-economic mobility of development towns is impressive, given their significant initial disadvantages, the disproportionate absorption of ultra-Orthodox residents, partial emigration of educated residents to other Jewish localities, and the growing economic inequality between the center and periphery and between households (Dahan, 2020). What explains the socio-economic mobility of development towns over the past six decades? This question calls for future research that identifies a specific characteristic that changed randomly to establish causality. Until then, several hypotheses with supportive or contradicting indications are proposed.

The central hypothesis attributes the narrowing of socio-economic inequality between development towns and NDT to free universal public education and a relatively advanced healthcare system compared to countries of origin. The children of immigrants from Asia and Africa, integrated into the Israeli education system, acquired higher levels of education than their parents, who arrived with lower educational levels. This reduced the gap between development towns and NDT. The full impact of education on earnings became apparent gradually, as these children completed their studies in the 1980s. The cumulative effect of education acquisition fully materialized in work careers only 20 to 30 years later, meaning six decades were required to observe its full impact.

In addition to education, the encounter with Israel's advanced healthcare system relative to countries of origin also played a role. Israel's low infant mortality rate compared to countries of origin reduced family sizes, with potential direct effects (e.g., increased income per capita for a fixed income) and indirect effects through increased female labor force participation. Decisions regarding family size, age of marriage, and women's participation in the workforce were likely also influenced by natural cultural diffusion. The combination of an advanced healthcare system and cultural diffusion significantly and relatively quickly reduced differences in family size and marriage age between immigrants from Asia and Africa and those from Europe and America. These developments also contributed to reducing inequality between development towns and NDT.

The ethnic composition of development towns became more similar to that of NDT between 1961 and 2019, primarily due to a decrease in the proportion of Mizrahi residents following the immigration wave starting in 1990 (Table 9). However, the study shows that the improvement in the relative status of development towns cannot be attributed to the diversification of their population by ethnic origin. Localities that absorbed more immigrants saw their socio-economic rankings decline, even within the group of development towns. Moreover, the economic mobility of development towns occurred between 1961 and 1983 without significant changes in the proportion of Mizrahim in these towns. Even within the development towns themselves, no clear distinction in the proportion of Mizrahim emerged between towns that improved their status and those that did not (Table 10).

It is plausible that regional policies played a minimal role in the economic mobility of development towns. The Encouragement of Capital Investment Law was the cornerstone of regional policy. Industrial plants established with government support under this law were not tied to local raw materials, proximity to markets, or a pool of skilled professionals. The economic foundation was a government grant to individual factories employing hundreds of residents, without diversification and with significant risk and dependency on a single investor. This precarious economic base led to the opening and closing of factories and employment volatility. Consequently, it is unsurprising that many studies have reached bleak conclusions

about the effectiveness of the Encouragement of Capital Investment Law. Other components of regional policy, such as the "Build Your Home" project and neighborhood rehabilitation initiatives, were temporary and budget-limited measures that lacked the capacity to drive long-term economic change.

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	Number of localities	correlation
1961	90	1.00
1972	93	0.92
1983	150	0.94
1995	186	0.87
2008	199	0.91
2019	255	0.93

Table 1: The correlation between Socio-economic index and median age and education

Note: The correlation is calculated between the socio-economic ranking and the average rankings of median age and education.

	-		
%	of	Number	Name of localities
Mizrahim		of	
		localities	
			Kfar Shmaryahu, Savyon, Mazkeret Batya, Nof HaGalil, Yesod
0%-17%		9	HaMa'ala, Kiryat Motzkin, Metula, Givatayim, Haifa
			Kiryat Bialik, Kiryat Tivon, Rosh Pina, Tel Aviv, Ramat
18%-32%		9	Yishai, Azor, Nahariya, Rechasim, Ramat Gan
			Even Yehuda, Nesher, Pardes Hanna, Givat Shmuel, Bnei Brak,
32%-38%		9	Holon, Bat Yam, Netanya, Hadera
			Rishon LeZion, Rehovot, Kfar Tavor, Ra'anana, Kfar Saba,
38%-43%		9	Kiryat Yam, Herzliya, Petah Tikva, Eilat
			Kiryat Ata, Ramat HaSharon, Jerusalem, Hod HaSharon,
44%-53%		9	Mitzpe Ramon, Afula, Gedera, Zichron Ya'akov, Ganei Tikva
			Acre, Kiryat Ono, Safed (Tzfat), Yokneam Illit, Ness Ziona,
53%-61%		9	Binyamina, Lod, Be'er Ya'akov, Be'er Sheva
		_	
61%-66%		5	Yehud, Ramla, Migdal, Kiryat Gat, Tel Mond
			Or Akiva, Tirat Carmel, Yavne'el, Beit Dagan, Kiryat Shmona,
67%-74%		7	Ashdod, Kfar Yona
			Kadima, Tiberias, Migdal HaEmek, Dimona, Gan Yavne, Beit
75%-83%		9	Shemesh, Yavne, Beit She'an, Pardesiya
			Hatzor, Yeruham, Kiryat Ekron, Ofakim, Kiryat Malachi,
84%-95%		9	Sderot, Shlomi, Ma'alot, Ashkelon
			Or Yehuda, Mevaseret Zion, Bnei Ayish, Netivot, Elyakhin,
96%-99%		6	Rosh HaAyin

Table 2: Localities by the share of Mizrahim in 1961

	Absolute	Relative mobility						
	Population size		% With academic degree		Median age		Socio- economic	DT income
	DT	NDT	DT	NDT	DT	NDT	percentile	relative to NDT
1961	5,732	26,462	2%	6%	18	26	19%	
1972	10,126	36,629	1%	4%	19	25	19%	0.940
1983	12,934	45,360	3%	9%	23	26	23%	0.948
1995	20,699	58,730	10%	16%	26	30	30%	0.965
2008	29,306	71,273	17%	27%	29	32	32%	0.966
2019	36,483	84,391	27%	41%	31	34	36%	0.977

Table 3: Absolute and relative mobility of Development Towns

Note: DT and NDT stands for development town and non development towns, respectively.

#### Table 4: Socio-economic mobility of DT by their ranking

	1961	1972	1983	1995	2008	2019
DT above the bottom 31 localities	3	5	8	12	12	14
DT above the socio-economic median	0	0	2	7	7	9
DT in top two deciles	0	0	0	2	0	2
Total number of (ranked) localities	90	93	87	93	93	93

1. The socio-economic ranking in 1961 is calculated using the average ranking by median age and education. According to this ranking, three DT are above the lowest 31 places.

2. In 1983, the CBS has not calculated the socio-economic index of five small localities.

3. DT and NDT stands for development town and non development towns, respectively.

<b>^</b>	(1)	(2)	(3)	(4)	(5)	(6)
Development Town	-0.21***					
	(0.06)					
% Mizrahim, 1961		-0.42***				
		(0.11)				
Socio-economic			0.37***			
percentile, 1961			(0.10)			
Median years of				0.34		
schooling (Log), 1961				(0.18)		
Median age (Log), 1961					1.14***	
					(0.29)	
Population size (Log),						-0.07
1961						(0.05)
Constant	0.58***	0.73***	0.32***	0.19	-1.03**	0.78***
	(0.03)	(0.06)	(0.06)	(0.15)	(0.39)	(0.18)
Number of observations	93	90	90	75	90	90
R <sup>2</sup>	0.12	0.15	0.14	0.05	0.15	0.03

Table 5: Estimating relative immobilityThe dependent variable: Socio-economic percentile in 2019

\*, \*\*, \*\*\* indicate the level of significance of 5%, 1% and 0.1%.

Table 6: Estimating absolute and conditional convergence, Development Towns The dependent variable: the change in socio-economic percentile between 1961 and 2019

^	<u> </u>	î	· · ·	T	r
	(1)	(2)	(3)	(4)	(5)
Socio-economic			-0.63***	-0.82***	-0.85***
percentile, 1961			(0.10)	(0.06)	(0.09)
Development Town	0.27***				-0.02
	(0.07)				(0.05)
% Ultra-orthodox Jew,		0.37***		-1.17***	-1.17***
2019		(0.05)		(0.10)	(0.11)
% 90s Immigrants, 2019		-1.13***		-1.36***	-1.36***
-		(0.15)		(0.18)	(0.18)
Distance from Tel-Aviv		-1.50***		-0.11***	-0.11***
(Log)		(0.25)		(0.02)	(0.02)
Constant	-0.09*	-0.07*	0.32***	0.88***	0.91***
	(0.04)	(0.03)	(0.06)	(0.05)	(0.07)
Number of observations		0.31***			
	90	(0.06)	90	90	90
$\mathbf{R}^2$	0.16	90	0.32	0.81	0.60

\*, \*\*, \*\*\* indicate the level of significance of 5%, 1% and 0.1%.

	8				
	(1)	(2)	(3)	(4)	(5)
Socio-economic			-0.63***	-0.82***	-0.95***
percentile, 1961			(0.10)	(0.06)	(0.09)
% Mizrahim, 1961	0.62***	0.82***			-0.16
	(0.11)	(0.07)			(0.18)
% Ultra-orthodox Jew,		-1.20***		-1.17***	-1.16***
2019		(0.12)		(0.10)	(0.11)
% 90s Immigrants, 2019		-1.55***		-1.36***	-1.33***
		(0.21)		(0.18)	(0.18)
Distance from Tel-Aviv		-0.07**		-0.11***	-0.11***
(Log)		(0.03)		(0.02)	(0.02)
Constant	-0.33***	0.01	0.32***	0.88***	1.03***
	(0.07)	(0.05)	(0.06)	(0.05)	(0.18)
Number of observations	90	90	90	90	90
$R^2$	0.25	0.73	0.32	0.81	0.81

Table 7: Estimating absolute and conditional convergence, share of Mizrahim The dependent variable: the change in socio-economic percentile between 1961 and 2019

\*, \*\*, \*\*\* indicate the level of significance of 5%, 1% and 0.1%.

Table 8: Estimating absolute and conditional convergence by log income per capita The dependent variable: the change in log income per capita between 1972 and 2019

	(1)	(2)	(3)	(4)	(5)
log income per capita,			-0.60***	-0.85***	-0.81***
1972			(0.10)	(0.05)	(0.08)
Development Town	0.12***	0.18***			0.01
-	(0.03)	(0.02)			(0.02)
% Ultra-orthodox Jew,		-0.66***		-0.71***	-0.71***
2019		(0.08)		(0.05)	(0.05)
% 90s Immigrants, 2019		-0.47***		-0.42***	-0.42***
		(0.12)		(0.08)	(0.08)
Distance from Tel-Aviv		-0.03**		-0.05***	-0.05***
(Log)		(0.02)		(0.01)	(0.01)
Constant	-0.28***	0.45***	2.44***	3.50***	3.37***
	(0.02)	(0.03)	(0.36)	(0.20)	(0.29)
Number of observations	78	78	78	78	78
$\mathbf{R}^2$	0.17	0.62	0.31	0.84	0.84

\*, \*\*, \*\*\* indicate the level of significance of 5%, 1% and 0.1%.

	% Mizrahim		% Ultra-orthodox		% 90s immigrants		Distance from Tel-	
			Jews				Aviv (kn	1)
	DT	NDT	DT	NDT	DT	NDT	DT	NDT
1961	84%	40%	3.0%	3.1%				
1972	87%	53%	5.7%	3.3%				
1983	84%	54%	6.5%	4.0%				
1995	65%	46%	18.7%	11.0%	16.9%	11.9%		
2008	59%	44%	18.4%	10.5%	17.0%	14.8%		
2019	64%	47%	18.0%	10.5%	14.9%	14.7%	62	54

Table 9: The characteristics of Development Towns and NDT

Note: DT and NDT stands for development town and non development towns, respectively.

Table 10: The characteristics	of mobile and non-mobi	le Development Towns
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	% Mizrahim		% Ultra-orthodox Jews		% 90s immigrants		Distance from Tel- Aviv (km)	
	DT	NDT	DT	NDT	DT	NDT	DT	NDT
1961	85.9%	82.4%	4.3%	2.0%				
1972	90.4%	84.9%	6.0%	5.5%				
1983	85.9%	83.0%	6.1%	6.9%				
1995	69.0%	62.0%	14.1%	22.5%	12.0%	21.0%		
2008	60.8%	57.9%	12.0%	23.7%	12.5%	20.6%		
2019	67.2%	61.6%	7.2%	20.6%	11.6%	17.5%	30	88

Note: A development town is defined as "mobile" if its socio-economic ranking is above the 31 lowestranked localities. There are 14 mobile development towns and 17 immobile development towns. DT and NDT stands for development town and non development towns, respectively.



Figure 1: Socio-economic convergence of DT and NDT

Note: The gray dots represent Development Towns (DT), while Non-Development Towns (NDT) are shown in black. The difference between the two slopes is not statistically significant.