

Shoresh Research Paper

editor: Dan Ben-David

Consumption Inequality in Israel

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Abstract

While income inequality has been on a downward trend over the past two decades, there are still large gaps in Israel between the consumption levels of households at different income levels and from different population groups. This study examines inequality in Israel's standard of living by analyzing total household consumption patterns during the years 2003-2018. Among the findings: low-income households consume less food per capita; their food basket is less varied; their housing density is higher; and their mobility is constrained by the cost of vehicle ownership. Similar – and even larger – gaps were found when comparing Arab-Israeli households with Jewish households that share similar characteristics. By contrast, home ownership rates among Haredi (ultra-Orthodox) Jewish households is far higher than that of the other population groups – even when comparing households with similar characteristics.

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* Yoav Tuvia is a researcher at the Shoresh Institution for Socioeconomic Research. The author thanks colleagues at the Shoresh Institution for their helpful comments, and especially Prof. Ayal Kimhi for his close guidance throughout the research process. Additionally, the author thanks the CBS staff for providing the data and for clarifying several aspects of the household expenditure surveys.

1. The Inequality Picture

Introduction

Household income is commonly used as a proxy for living standards, primarily because income data are available and easy to use. However, income bundles together current living standards (consumption) and future living standards (savings). This study focuses on inequality in household consumption, which provides a more focused look at current gaps between households.

The economics literature has devoted considerable attention to measuring inequality on the basis of consumption data.¹ While household income is subject to fluctuations – either because of personal life events or because of labor market and macroeconomic shocks – households tend to smooth consumption over time to keep a stable standard of living consistent with the income they expect to have over their lifetimes.

A common inequality measure is the Gini index, which ranges between two hypothetical extremes – zero under perfect equality (all households have the same income/consumption) and one under complete inequality (all income/consumption is concentrated in a single household). Figure 1 presents trends in the Gini coefficients of disposable income (gross income minus taxes plus benefits) and of total consumption in 2003-2023.² As shown, inequality in

Figure 1
Inequality trends in disposable income and total consumption in Israeli households*



* Data per equivalized person

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research

Data: Central Bureau of Statistics

¹ For example, Norris and Pendakur, 2015; Aguiar and Bils, 2015; Heathcote, Perri, and Violante, 2010; Attanasio, Battistin, and Ichimura, 2004; Attanasio and Pistaferri, 2014.

² This study uses data from the annual expenditure surveys of the Central Bureau of Statistics (CBS) for the years 2003-2023, though most of the analysis focuses on the period of 2003-2018. This is because the 2019 survey had low response rates, while the 2020-2021 surveys were conducted during a period in which consumption patterns changed extremely (and temporarily) due to the COVID-19 pandemic and lockdown policies.

disposable income is higher than inequality in total consumption, but both measures exhibit a gradual downward trend in recent years.

Averages of disposable income and total consumption per equivalized person,³ by quintiles of disposable income in 2018, are displayed in Figure 2. Households in the bottom two quintiles spend more on consumption than their disposable income. The remaining households spend less on consumption than their disposable income

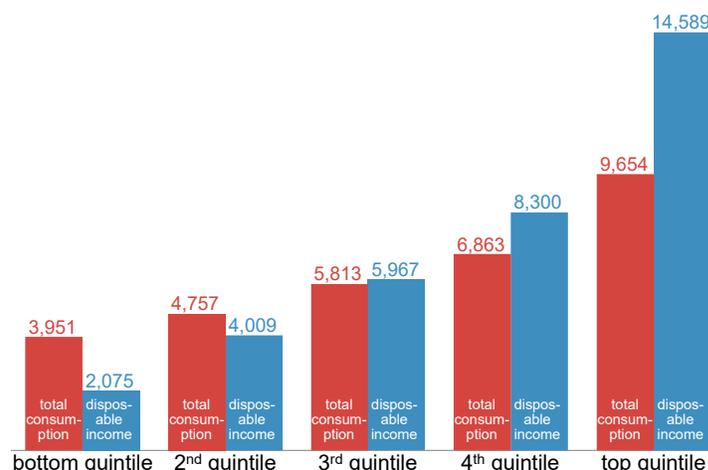
while the gap between income and consumption grows with income. The finding regarding the two bottom quintiles is similar to previous findings by Regev (2014), and may stem from under-reporting of income among households in the lower income quintiles.

Decomposing Consumption Inequality

When inequality is examined through consumption data, it is important to remember that total consumption is an aggregate of different goods – some are basic necessities, while others are luxuries – with each treated differently in the public discourse on inequality. This study examines inequality across different consumption categories as well as differences in consumption patterns among population groups.

Figure 3 shows that three categories – housing, food, and transportation – make up about 60% of household consumption. As such, this study focuses on them.

Figure 2
Disposable income and total consumption in households quintiles by disposable income per capita, monthly shekels, 2018



Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

³ The calculation takes into account the fact that households twice the size, for example, do not need double the expenditure to reach the same standard of living. The calculation of equivalent household size assigns each person beyond the first two a weight of less than 1, which gradually decreases as the number of household members increases. A full specification of the equivalence scale according to household size can be found in CBS publications.

- The largest expenditure category is housing, which consists mainly of rental payments for tenants and imputed rent for those who own the home they live in.⁴ While this category accounts for between a quarter and a third of total household consumption, its share of total consumption declines as income rises. Households in the bottom quintile devote 31% of their total consumption to housing, compared with 26% for households in the top quintile.

Figure 3
Composition of household consumption basket in Israel
quintiles by disposable income per capita, monthly shekels, 2018



Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

- The share of food expenditure out of total consumption also declines with income: 24% in the bottom quintile versus 17% in the top quintile.
- The picture is reversed for transportation: the higher a household's income, the larger the share of its total consumption devoted to transportation. Households in the bottom quintile devote only 9% of their consumption to transportation, while households in the top quintile devote 18%.⁵ The shares of the remaining consumption categories do not change markedly with income.

Substantive differences also exist between the consumption baskets of households from different population groups: non-Haredi Jews, Haredi Jews,⁶ and Arab-Israelis.⁷ 82% of

⁴ The imputed value of an owned apartment is calculated by the CBS based on the average rent paid for similar apartments.

⁵ Until 2013, transportation expenses included the imputed value of an owned vehicle, whereas thereafter the expenses included the cost of buying a new vehicle. Consequently, these values were not included in the transportation expenses analyzed in this study.

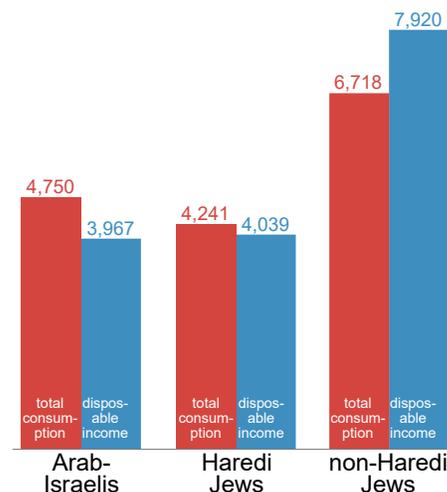
⁶ A Jewish household is classified as Haredi if the last educational institution of at least one of the household members was a "large yeshiva".

⁷ Arab-Israeli households also include Druze and Bedouins, who are identified in surveys, although their numbers are too low to allow for separate analyses.

households included in the expenditure surveys are non-Haredi Jews. Arab-Israeli households constitute 12%, while the share of Haredi households is 6%. Non-Haredi Jewish households have higher disposable income per capita and higher consumption per capita than the other two groups, and – unlike the other two groups – they tend to consume less than their disposable income (Figure 4). In addition, while the disposable income of Haredi households is similar to that of Arab-Israeli households, their average monthly per capita consumption is about 11% lower.

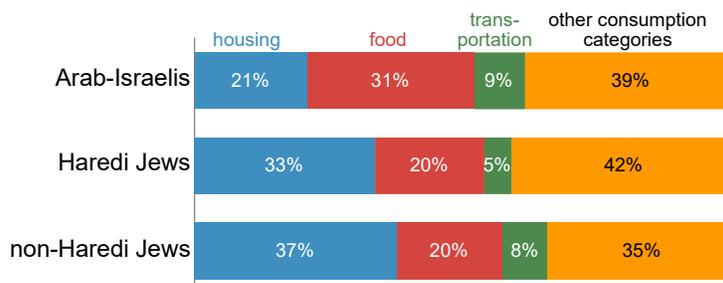
The composition of total consumption also differs between population groups. Given the high poverty rates among Haredim and Arab-Israelis, a simple comparison of the consumption habits of these groups with those of non-Haredi Jews – who have a much lower poverty rate – would mostly reflect income gaps. Therefore, Figure 5 compares consumption patterns among households in the bottom income quintile only.⁸ As shown in the figure, Arab-

Figure 4
Household disposable income and total consumption
by population groups, monthly shekels, 2018



Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Figure 5
Composition of household consumption basket in bottom quintile
by population groups, 2018



Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

⁸ The quintiles are calculated from the entire population.

Israeli households devote a smaller share of their total consumption to housing than do non-Haredi Jewish households: 21% versus 37%. By contrast, they devote a larger share of their total consumption to food: 31% versus 20%. The share of transportation expenditure among Haredi households is slightly lower than among non-Haredi Jewish households – 5% versus 8%, respectively – and so is the expenditure share devoted to housing: 33% versus 37%, respectively.

Consumption distribution of the different population groups in the top income quintile (Figure 6) differs from that in the bottom income quintile. In the top quintile the transportation share of Haredi households is larger than that of non-Haredi Jewish households, and their food share is smaller; whereas in the bottom quintile their shares of food and transportation were not very different.

However, there also appear to be differences in

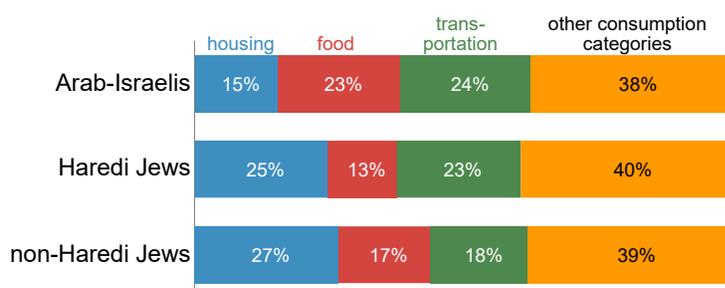
consumption patterns across the groups that are not related to income. This is evidenced in the lower housing share and higher food share among Arab-Israeli households.

The following sections provide in-depth examinations of inequality and consumption trends in each of the three main consumption categories.

2. Inequality in Food Expenditure⁹

Food is the most basic consumption good for households. Governments and NGOs seek to ensure that citizens have a basic level of nutrition by various means, including support for agriculture, price controls on food, food stamps, and delivery of food baskets for families in need.

Figure 6
Composition of household consumption basket in top quintile
by population groups, 2018

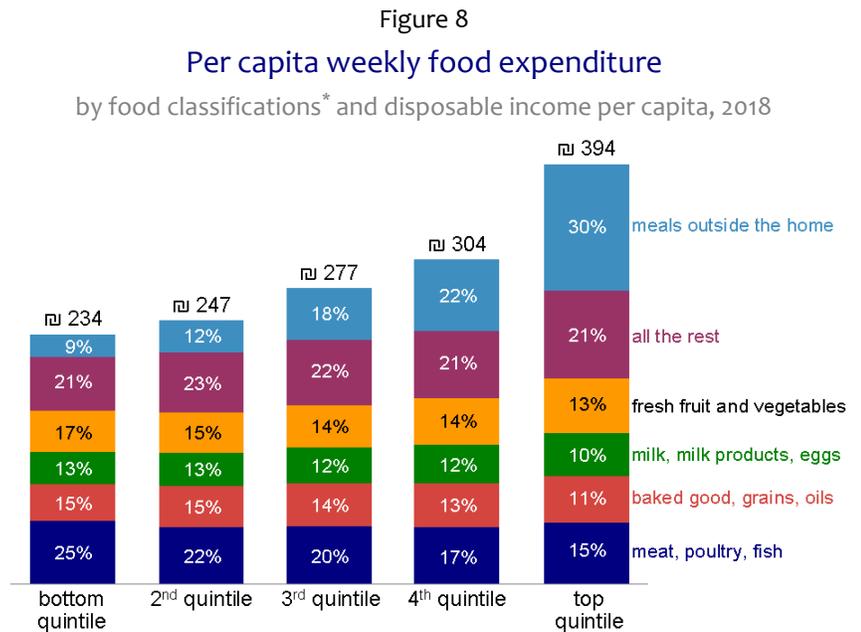
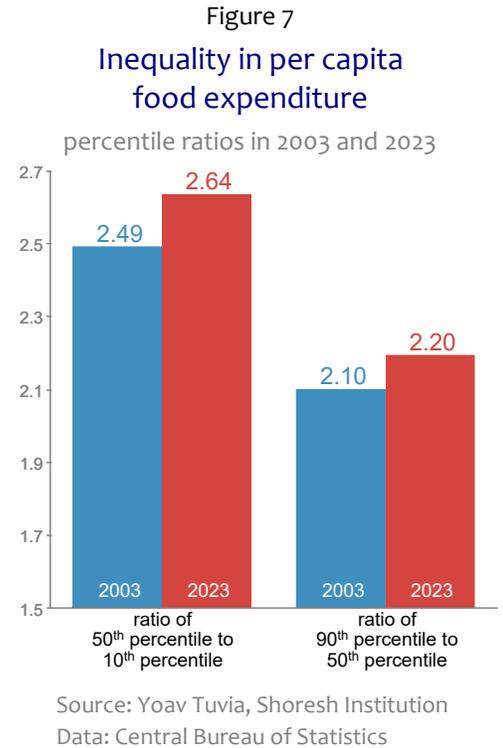


Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

⁹ In 2016, the method of recording data in the diary – on which all food items are based – changed from bi-weekly to weekly recording. To allow reliable comparisons across the entire period under study, the analyses in this section are based only on the diary data recorded in the first week.

The gap between per capita expenditure on food of households at the 50th percentile (median) of the expenditure distribution and that of a household at the 10th percentile widened over the period examined (Figure 7), whereas the gap between the 90th percentile and the 50th percentile changed by less. In other words, inequality in the lower part of the distribution of food expenditures has increased, while inequality in the upper part of the distribution exhibited a smaller change. Overall, the expenditure gap between the 90th and 10th percentiles – i.e., the product of the two gaps shown in the figure – grew during the period, from 5.2 in 2003 to 5.8 in 2023.

Per capita spending on food rises with income – especially when comparing the top income quintile with the quintile below it – yet the shares of most food subcategories out of total food expenditure do not differ much across income quintiles (Figure 8). Exceptions are spending on meals outside the home, whose share of total food expenditure rises with income – from 9% among households in the bottom quintile to 30% in the top quintile – and spending on meat, poultry, and fish, whose share declines with income – from 25% in the bottom quintile to 15% in the top quintile. It is important to stress that the composition of food expenditure does not translate directly into the household's



* The percentages represent each expenditure category's share of the total food expenditures for each income quintile.

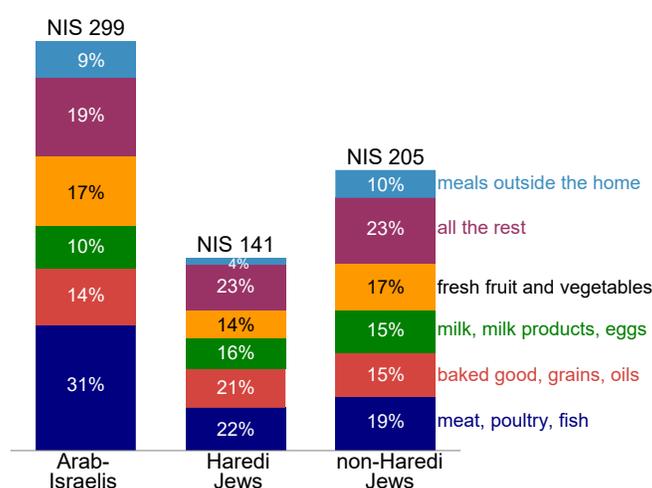
Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

diet; that is, low or high spending on a given type of food does not necessarily indicate the quantity consumed, nor its quality or nutritional value. Nevertheless, it is reasonable to assume that the gaps in food expenditure levels across income quintiles reflect differences in households' dietary habits.¹⁰

Gaps in Food Consumption Patterns Across Population Groups

Even when comparing only households in the bottom income quintile,¹¹ weekly per capita expenditure of Haredi households on food in 2018 was markedly lower than that of the other population groups (Figure 9). This can be attributed to the purchasing habits of many of them in low-cost supermarket chains and to the lower per-unit cost when buying in bulk (Paltin, 2022). By contrast, Arab-Israeli households spent much more per capita on food than Jewish households.¹² In addition to gaps in total food expenditure, there are differences in the composition of food spending across the population groups. One notable difference is that Arab-Israeli households devoted 31% of their food expenditure to meat, poultry, and fish, compared with 22% among Haredim and 19% among non-Haredi Jews. Another difference is that non-Haredi Jewish and Arab-Israeli households

Figure 9
Per capita weekly food expenditure in the bottom income quintile by food classifications* and population groups, 2018



* The percentages represent each expenditure category's share of the total food expenditures for each income quintile.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

¹⁰ It is possible that households in different income quintiles pay different prices for the same food depending on the area of residence, place of purchase, and so on. Nevertheless, in an examination that takes into account the different prices paid by households – based on food price indices by income quintile calculated by the Central Bureau of Statistics – no significant differences were found compared to figure 8.

¹¹ The emphasis is on the bottom quintile as the poorest households are more exposed to the risks of malnutrition.

¹² In the examination of food prices recorded in the expenditure survey diary files, no significant differences were found in the prices paid by Arab-Israelis and Jews for food.

devoted about a tenth of their total food consumption to meals outside the home, while Haredi households devoted only 4%.

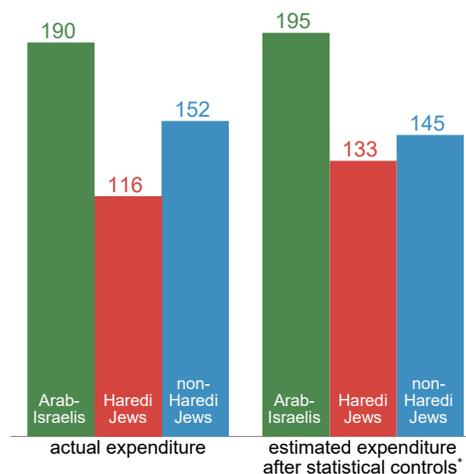
Total spending on food – as well as spending on the different food subcategories – depends on a variety of attributes. Gaps in food spending across population groups may reflect differences in consumption preferences, but they may also be an outcome of differences in socioeconomic characteristics – income level, household size, age of the household head, marital status, and similar – that affect both the level and composition of food spending. To examine this, a multivariate empirical analysis (see box insert) was conducted to estimate the expenditure gap between the groups while controlling for other characteristics.¹³

Among households in the bottom income quintile, the gaps in weekly per capita food spending between Haredi households and non-Haredi Jewish households fell considerably when comparing households with similar background characteristics (Figure 10). By contrast, the gaps between Arab-Israeli households and the two other Jewish groups remained high. This may suggest that food expenditure gaps between Haredim and non-Haredi Jewish households stem mainly from differences in background characteristics, whereas the food expenditure gaps between Arab-Israelis and Jews reflect different food consumption preferences.¹⁴

This study employs multivariate empirical analyses that make it possible to examine expenditure gaps between households from different population groups while statistically controlling for their background characteristics.

In this section, for example, this method allows us to examine the expenditure gap between Jewish and Arab-Israeli households that are similar in income level, household size, in the age of the household head, in their marital status, and that were surveyed in the same year.

Figure 10
Per capita weekly food expenditure in the bottom income quintile, 2003-2018
shekels, 2018 prices



* Expenditure calculated after controlling for other variables, as described in the appendix.

Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

¹³ Details on the multivariate analysis can be found in the appendix.

¹⁴ In the examination of specific food items – primarily the expenditure on meat, poultry, and fish, as well as on fresh vegetables and fruits – similar qualitative findings emerge as in Figure 10. The exception is the expenditure on meals outside the home, which is low among Haredi households even after controlling for background characteristics.

Inequality in Essential Food Items

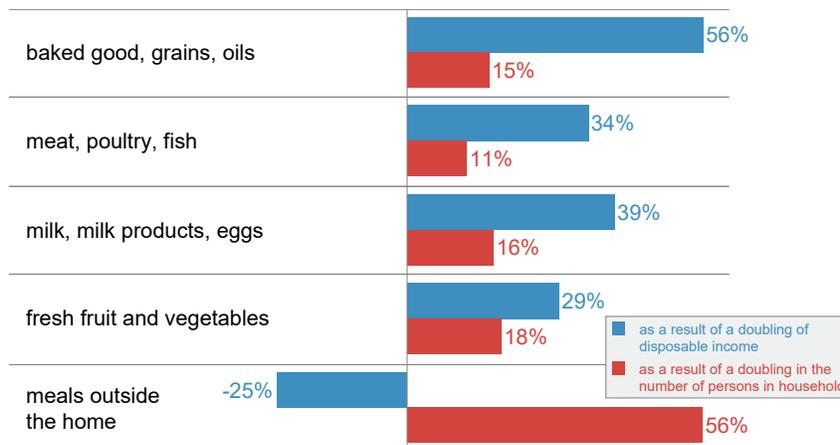
Some food items – such as bread, simple grains, and milk – are considered household necessities.¹⁵ Other expenditure categories, such as meals in restaurants, are considered luxuries. Chernichovsky and Regev (2014) defined spending on food as essential if it changes only slightly when household income changes, but changes more substantially when there is a change in household size.

To examine this, a multivariate empirical analysis was conducted to calculate the change in expenditure on each food category when income rises and when household size rises. For most food categories, the percent change in expenditure due to an increase in household size is larger than the percent change due to an increase in income (Figure 11). Spending on baked goods, grains, and oils rises markedly with household size, but rises by much less when income rises. The

Figure 11

Rate of change in food expenditure by main classifications

as a result of a doubling of disposable income
or in the number of persons in household,* 2003-2018



* According to Chernichovsky and Regev's (2014) methodology.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research

Data: Central Bureau of Statistics

Conversely, the gap in expenditure on meals outside the home between Arab-Israeli and Jewish households disappears after controlling for background characteristics.

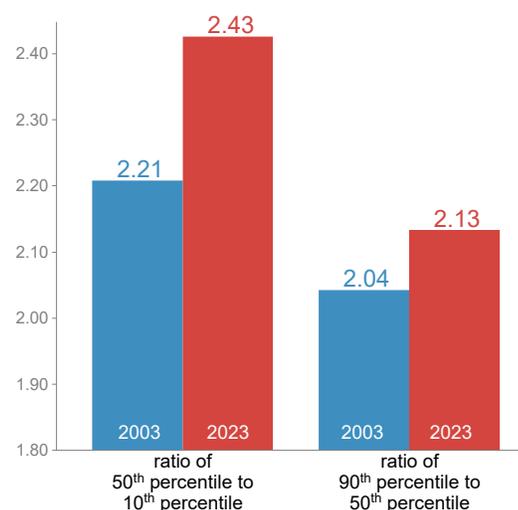
¹⁵ It is important to note that the concept of 'necessity' does not refer to the nutritional necessity of foods, but rather to necessity in terms of household preferences. In other words, households would prefer to reduce expenditure in other categories rather than in the categories that are more essential to them.

findings are similar for meat, poultry and fish, for milk, dairy products and eggs, and for fresh vegetables and fruit. In other words, these food categories can be considered essential for households. By contrast, spending on meals outside the home rises substantially with income but falls when household size grows, implying that this spending can be defined as a luxury.

3. Inequality in Housing Expenditure

As with food, housing expenditure is a necessity. The government pursues various policy measures designed to promote affordable housing. Some programs subsidize home purchases – for example, the “Price for the Tenant” (*mechir lamishtaken*) program of the Ministry of Construction and Housing – while others provide rental assistance for tenant households in need. At the same time, frequent increases in housing prices and mortgage payments increase the economic burden of housing expenditures and may lead to greater inequality in households’ housing conditions. Indeed, inequality in housing expenditure did increase over the years (Figure 12), and particularly so in the lower part of the housing expenditure distribution.

Figure 12
Inequality in per capita housing expenditure*
percentile ratios in 2003 and 2023



* Households living in rental housing from a public housing company or under protected tenancy (“key money”) were not included in the analysis.

Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Gaps in Housing Characteristics of Renters¹⁶ vs. Owner-Occupiers

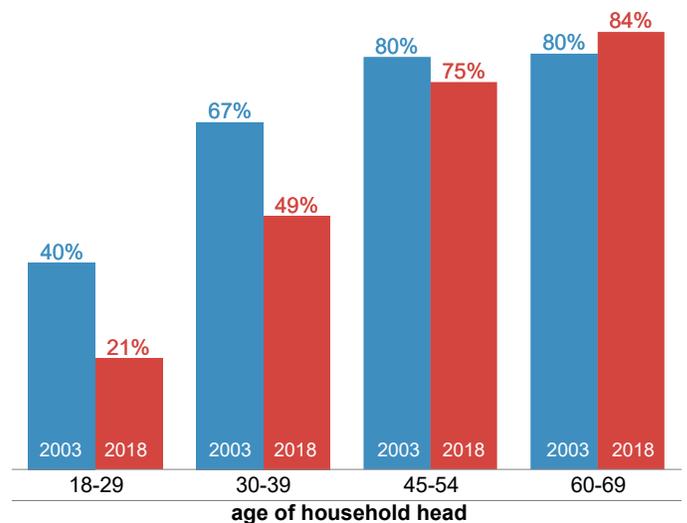
The housing expenditure category consists mainly of the value of the dwelling: actual rent if the household rents, and “imputed rent” of households who own the home they live in (owner-

¹⁶ Regarding apartment renters, the analysis only included those renting from a private landlord. A negligible minority of households included in the expenditure surveys live in rentals from a public company or under “key money” arrangements. Since they pay significantly lower rent than the market rate, they cannot be compared to those renting from private landlords and were therefore excluded from the analysis.

occupiers).¹⁷ About 77% of households participating in the expenditure surveys are owner-occupiers. The value of the homes, the disposable income, and the total consumption of owner-occupier households are higher than those of renter households. However, housing’s share in total consumption is quite similar in the two groups. Owner-occupier households are older, include more persons, and the dwellings they live in have more rooms. Housing density – persons per room – is similar for owner occupiers and renters.

Over time, there has been a pronounced decline in the home ownership rate among relatively young households, compared with a very slight decline among relatively older households (Figure 13). Given the continued decline in housing affordability – defined as the number of monthly salaries required for an average household to purchase a dwelling (Ben Shahar et al., 2019) – one may expect home ownership rates to fall in the future among older households as well. Historically, owning a dwelling was the main vehicle by which middle class households accumulated wealth; hence, the decline in the share of homeowners may reflect a substantial rise in wealth inequality (Choi and Zinn, 2024; Maclennan and Long, 2022).

Figure 13
Home ownership rate*
by age of household head in 2003 and 2018



* Households that live in rented accommodation but own another dwelling are not considered homeowners here.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

¹⁷ Rent is estimated by the Central Bureau of Statistics based on the average rent paid for similar apartments.

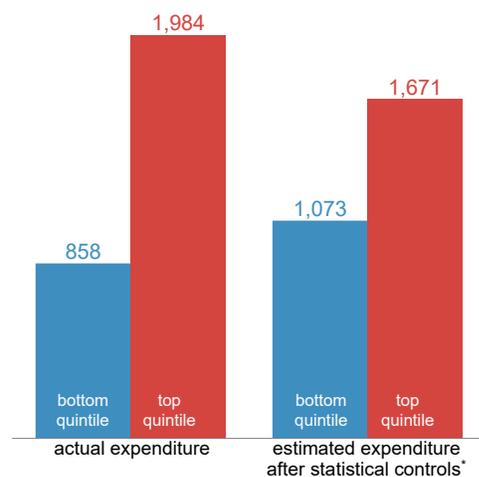
Gaps in Housing Characteristics Across Income Quintiles

There is a close relationship between housing characteristics and income levels. Per capita housing expenditure in the top income quintile is higher than in the bottom quintile. Among renter households, a household in the top income quintile spent on average more than twice as much per capita on rent as a household in the bottom quintile (Figure 14).

However, background characteristics differ across income quintiles, and these partially contribute to the gaps in housing expenditure. In particular, housing prices differ greatly across regions, affecting both the geographic distribution of households by income level and their rent expenditure. After controlling for background characteristics in a multivariate analysis,¹⁸ the gaps between income quintiles are smaller. Households in the top quintile spend per capita only a little more than 50% above households in the bottom quintile with similar characteristics (Figure 14). Similar findings are obtained when comparing households that live in owner-occupied dwellings.¹⁹

As noted above, a sufficiently large rise in renter household income may affect not only the household's rent expenditure; it may also lead it to move to owner-occupied housing, and vice versa, in the event of a sufficiently large decline in income. Indeed, the home ownership rate among households in the top income quintile is higher than in the bottom quintile: 76% versus 63%, respectively. When controlling for household characteristics, the ownership gap is even larger: 78% versus 60%.

Figure 14
Monthly rent per person in households renting a dwelling from a private landlord, 2003-2018
by disposable income quintiles, shekels in 2018 prices



* Expenditure calculated after controlling for other variables, as described in the appendix.

Source: Yoav Tuvia, Shoresh Institution

Data: Central Bureau of Statistics

¹⁸ The methodology of the multivariate analysis is detailed in the appendix.

¹⁹ Both among those who live in rented housing and among those who are owner-occupiers, the largest gap in housing consumption levels between income quintiles is between the top quintile and the one below it.

Gaps in housing density – the average number of persons per room – are substantial. Housing density among households in the bottom income quintile is double that of households in the top quintile (1.2 versus 0.6 persons per room). However, when comparing households with similar characteristics, the gap in housing density between the quintiles is considerably lower (1.0 versus 0.8).

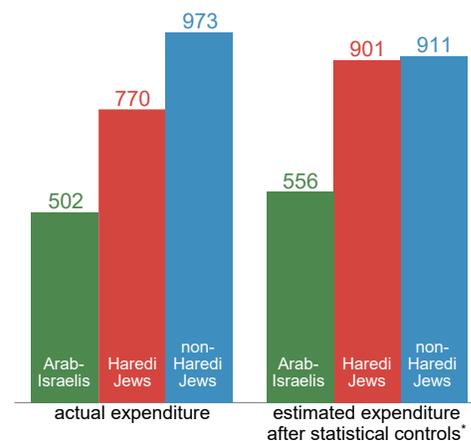
Gaps in Housing Characteristics Across Population Groups

Housing characteristics also differ across population groups, and these differences do not disappear even when comparing only households in the bottom income quintile (Figure 15). Per capita rent expenditure of Haredi households is lower than that of non-Haredi Jewish households. However, when comparing a Haredi household and a non-Haredi Jewish household with the same characteristics, their rent expenditure is almost identical. A similar finding holds when examining per capita imputed rent for owner-occupied dwellings among owner occupier households.

The housing characteristics of Arab-Israeli households differ from those of Jewish households. Housing expenditure among Arab-Israeli households – both rent and imputed owner-occupied housing expenditure – is substantially lower than among Jews. Even when comparing households with similar characteristics, the gap narrows only slightly. However, due to large differences in housing prices between Arab-Israeli and Jewish localities, it is difficult to determine whether these findings reflect a gap in the physical quality of housing between the two groups.

Figure 15
Monthly rent per person in households in bottom income quintile, 2003-2018

renting a dwelling from a private landlord, by population group, shekels in 2018 prices



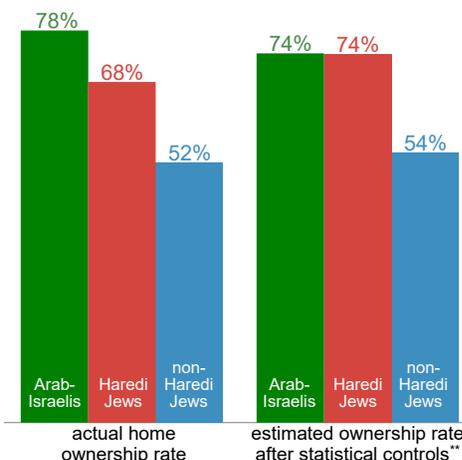
* Expenditure calculated after controlling for other variables, as described in the appendix.

Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Haredi households have a home ownership rate that is about 16 percentage points higher than that of non-Haredi Jews (Figure 16). The ownership gap rises to 20 percentage points when comparing households with the same characteristics. This gap may stem (at least partially) from greater availability of intra community financing for home purchases among Haredi households and their tendency to spread mortgage repayment over longer periods (Regev, 2014). In addition, many housing programs have tended – explicitly or implicitly – to benefit Haredi families more than non-Haredi families.²⁰ Government criteria for mortgage assistance also favor the Haredi population, since total assistance is higher the longer a couple has been married, and the more children and siblings they have.

Arab-Israeli households exhibit a home ownership rate that is higher than that of Jews – both Haredi and non-Haredi – but when comparing households with similar characteristics, their ownership rate appears similar to that of Haredi households (Figure 16). However, it is important to note that, due to shortcomings in urban planning in Arab-Israeli localities and the bureaucratic hurdles they face, many residents build homes without permits, and the legal status of owner occupation in Arab-Israeli localities is more tenuous than in Jewish localities (Banna-Jeries and Khalaily, 2022). Thus, while the share of owner occupiers among Arab-Israeli households is higher than among Jewish households, home ownership among Arab-Israelis does not necessarily indicate the same level of economic security that owning a home provides a Jewish household.

Figure 16
Home ownership rate in bottom income quintile*
by population group, 2003-2018



* Households that live in rented accommodation but own another dwelling are not considered homeowners here.

** Ownership calculated after controlling for other variables, as described in the appendix.

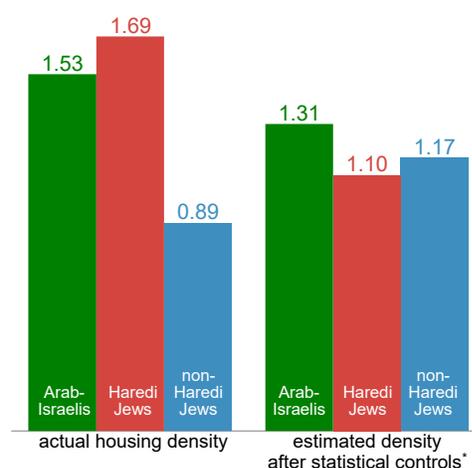
Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

²⁰ During the period examined in this research, various housing programs were advanced that benefited the Haredi population. Among them was the “Price for the Tenant” program promoted by the then Minister of Housing, Atias, in 2011, which both allocated most of the apartments to communities with a distinctly Haredi character and suspended the income eligibility criterion as a condition for qualification. This phenomenon has continued in recent years, and even more so (Nirenburg & Aharon-Shafran, 2024).

Among households in the bottom income quintile, the average number of rooms in the dwelling of a Haredi household is slightly higher than that of a non-Haredi Jewish household in the same quintile; however, since the number of persons in Haredi households is more than double that of non-Haredi households, the housing density of Haredi households is almost double – 1.69 persons per room versus 0.89 (Figure 17). This gap disappears when comparing households with similar characteristics. Arab-Israeli households also tend to live at a higher density than do non-Haredi Jewish households, and the density gap between the two groups narrows only partially when comparing households with similar characteristics.

Figure 17
Housing density among households in the bottom income quintile

number of persons per room, by population group, 2003-2018



* Housing density calculated after controlling for other variables, as described in the appendix.

Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

4. Inequality in Transportation Expenditure

Between 2003 and 2023 there was a mixed trend in transportation expenditure gaps (Figure 18).²¹ While the gap in the lower part of the expenditure distribution (the 50-10 percentile ratio) narrowed, the gap in the upper part of the distribution (the 90-50 ratio) widened. Overall, the gap between the 90th and 10th percentiles narrowed during the period, from a factor of 24 times greater expenditure to 20 times more spending. Nevertheless, inequality in transportation expenditure remains much higher than in the food and housing categories (Figures 7 and 12, respectively), and may be reflected in constraints on the mobility of low-income households – whether for access to better paying employment or for more cost-effective shopping.

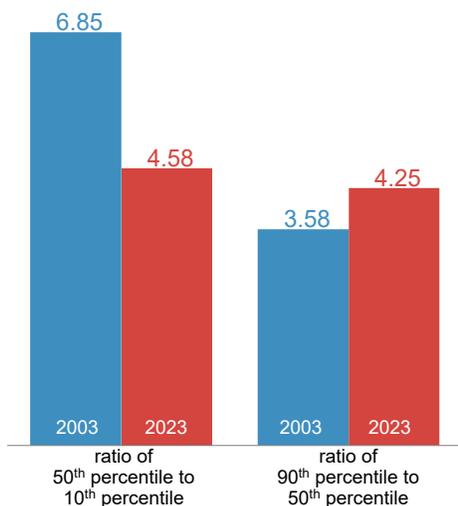
Figure 19 shows that average per capita transportation expenditure among Arab-Israeli households is much higher than among non-Haredi Jews. This may be a consequence of the

²¹ It should be noted that starting in 2013, the method of measuring vehicle expenses in the expenditure survey changed; therefore, this item is not included in the analysis of total transportation expenses. This refers to the item “in-kind car consumption,” which was replaced starting in 2013 by the item “car purchase.”

Figure 18

Inequality in per capita transportation expenditure*

percentile ratios in 2003 and 2023



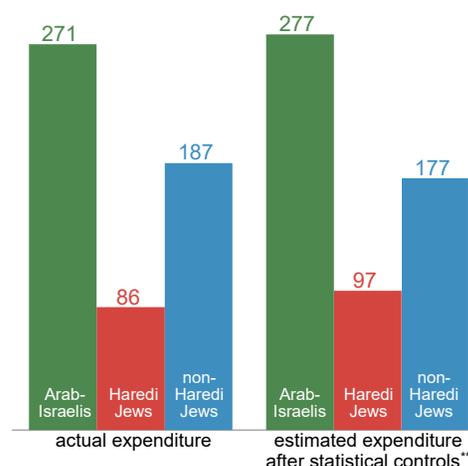
* Excludes imputed vehicle value and its purchase price, due to a change in the measurement method from 2013 onward.

Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Figure 19

Per capita monthly transportation expenditure in the bottom income quintile*, 2003-2018

by population group, shekels in 2018 prices



* Excludes imputed vehicle value and its purchase price, due to a change in the measurement method from 2013 onward.

** Expenditure calculated after controlling for other variables, as described in the appendix.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

concentration of the Arab-Israeli population in peripheral areas. By contrast, per capita transportation expenditure among Haredi households is much lower than among non-Haredi Jews, perhaps due to greater use of public transportation instead of private transportation in this population group.²² These findings change little when comparing households with similar background characteristics, implying that gaps in transportation expenditure reflect differences in structural consumption patterns rather than differences in characteristics.

Transportation expenditure consists of two main components: vehicle related spending and spending on travel abroad.

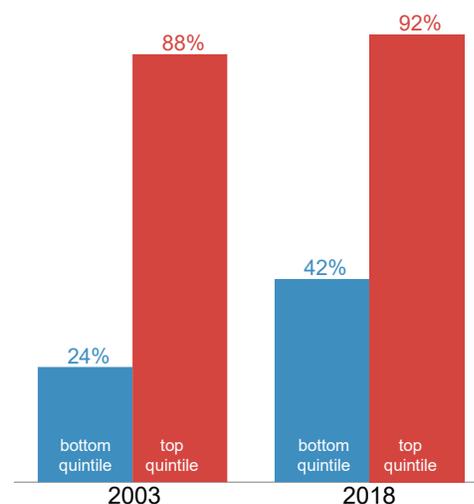
²² The expenditure survey did not record expenses for charging travel cards such as “Rav-Kav”, which does not allow for an accurate measurement of actual expenditures on public transportation.

Gaps in Vehicle Use Across Income Quintiles

Figure 20 compares changes in the share of vehicle usage in the bottom and top income quintiles.²³ The most notable change occurred in the bottom quintile: in 2003, only 24% of households in this quintile owned a vehicle, but this share grew to 42% by 2018. Vehicle usage also rose among households in the top income quintile, though far more moderately than in the bottom quintile; consequently, the gap in vehicle usage between high- and low-income households narrowed over time. Despite the narrowing, in 2018 the share of households in the top income quintile that used a vehicle was more than double that in the bottom quintile (92% versus 42%).²⁴ Similar analyses show that spending on fuel and vehicle maintenance and the value of vehicles increase with income, and that these findings do not change when comparing households with similar characteristics.

Figure 20
Share of households using at least one vehicle

by disposable income quintile in 2003 and in 2018



Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Gaps in Vehicle Use Across Population Groups

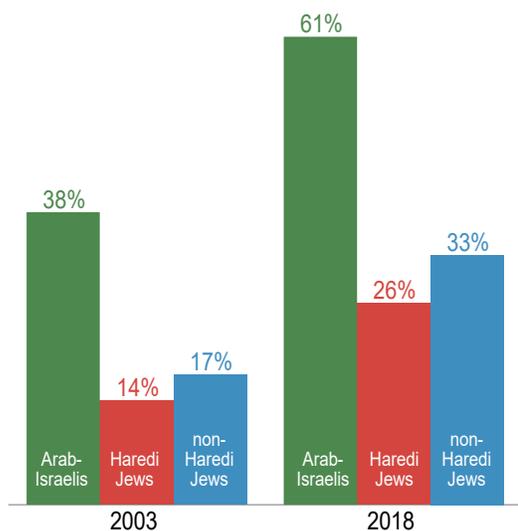
In the bottom income quintile, the share of Arab-Israeli households using a vehicle is much higher than the share among Jewish households, and this gap has persisted over the years (Figure 21). These findings do not change much when comparing households with similar characteristics. The likely reason is the relatively poor accessibility of public transportation in Arab-Israeli localities compared with Jewish localities (Branzburg, Mansour, and Abu-Ahmad, 2021).

²³ About 9% of households reporting car use do not own the vehicle and most likely use a car provided by their employer or rented for the long term. In this analysis, no distinction is made between car owners and car holders who are not owners.

²⁴ These findings do not change significantly when comparing households in different income quintiles that are similar in other characteristics.

Figure 21

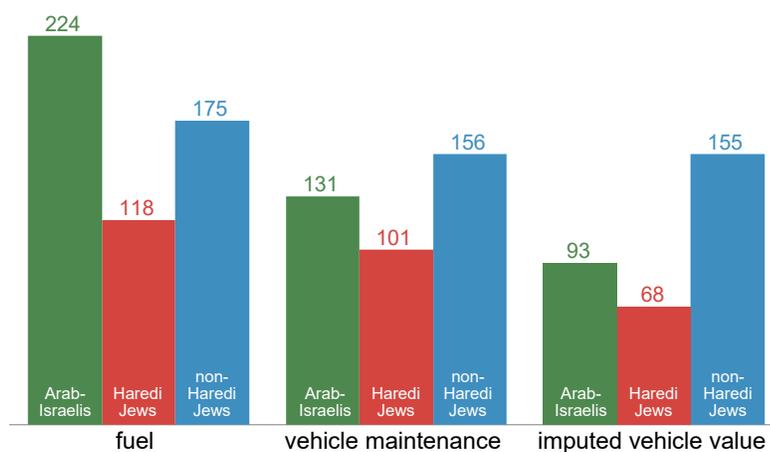
Share of households in bottom income quintile using at least one vehicle by population group in 2003 and in 2018



Source: Yoav Tuvia, Shoresh Institution
Data: Central Bureau of Statistics

Figure 22

Per capita transportation expenditure among households in the lowest quintile that use a car by type of expenditure and population group, shekels, 2012*



* 2012 is the last year in which the survey reported imputed value of a car used by the household.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

Figure 22 presents the gaps in vehicle related expenditure across the different population groups among households in the bottom income quintile in 2012. The value of vehicles used by non-Haredi Jewish households is higher than in the other two groups, as is their spending on maintenance. Per capita fuel spending among Arab-Israeli households is higher than among non-Haredi Jewish households, whereas that of Haredi households is significantly lower – perhaps because they do not use vehicles on the Sabbath or on holidays.

Gaps in Spending on Travel Abroad

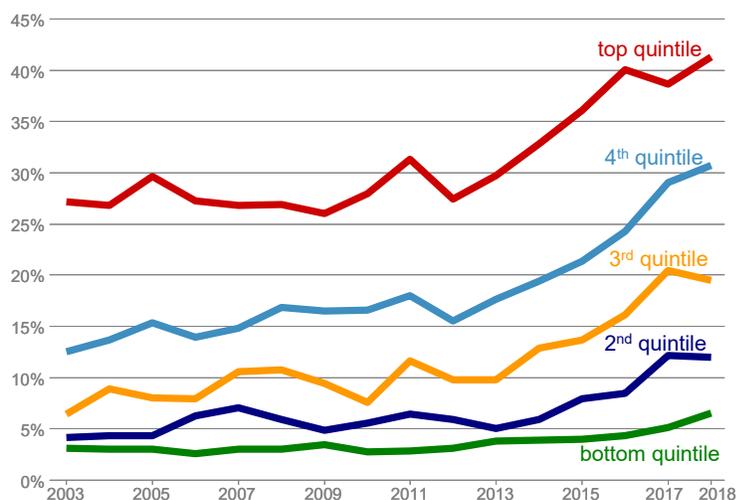
The share of households that reported spending on travel abroad in the three months prior to the survey date rises with income and is especially high among households in the top income quintile (Figure 23). The share of households reporting spending on travel abroad rose moderately in all income quintiles until 2013, and thereafter moved to an accelerated upward trend – stronger among higher income households. This increase may be attributable to the “Open Skies”

agreement, which led to a substantial decline in airfares (Sion-Tzidkiyahu and Oron, 2021). Specifically, the share of households in the top income quintile reporting spending on travel abroad rose from 28% in 2012 to 42% in 2018, whereas in the bottom quintile it was substantially lower, but nearly doubled from 6% to 11%.

While this indicates a rise in the standard of living of households throughout the income distribution, the gaps between income quintiles widened over the period, contributing to higher inequality in living standards. Examining the findings while controlling for background characteristics does not change the picture.

A similar result is obtained when comparing the three main population groups (Figure 24):²⁵ the share reporting spending on travel abroad has risen in all groups since 2013, but the strongest increase has been among non-Haredi Jews, whose rate of traveling abroad was higher to begin with compared with the two other groups.

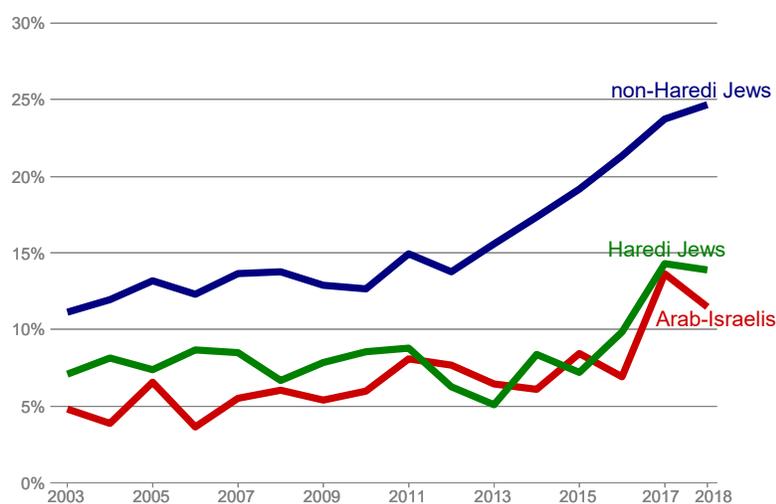
Figure 23
Share of households reporting expenditure on trips abroad*
by disposable income quintile, 2003-2018



* In the three months prior to the survey.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

Figure 24
Share of households reporting expenditure on trips abroad*
by population group, 2003-2018



* In the three months prior to the survey.

Source: Yoav Tuvia, Shoresh Institution for Socioeconomic Research
Data: Central Bureau of Statistics

²⁵ Unlike previous figures comparing different population groups, due to the low rate of travel abroad among the bottom quintile, this figure is based on all households in the sample.

5. Conclusion

Inequality in total consumption in Israel has declined in recent decades, similar to income inequality. Nevertheless, there are still significant differences in consumption patterns across households with different income levels and across different population groups.

While low-income households allocate a larger share of their total expenditure to food than do high-income households, their per-capita food expenditure is lower and their diet is less diversified. Similarly, they allocate a larger share of their expenditure to housing, yet tend to live in rented homes that are more crowded and of lower value. Their spending on transportation is relatively low, as are their rates of vehicle usage and of travel abroad.

These findings point to significant gaps in basic consumption levels between households at different income levels – even without taking into account “luxuries” such as meals outside the home and travel abroad. Furthermore, the gaps found in food expenditure and in housing density may in turn lead to health differences between individuals at different income levels, increase the burden of health care expenditure on low-income households, and even harm their earning capacity.

Gaps in vehicle usage may indicate mobility gaps across income groups, such that lower income households have greater difficulty reaching workplaces and other essential errands, or are forced to compromise on employment near the place of residence – particularly in peripheral areas where public transportation options are limited. Accordingly, investment is required in reliable and rapid public transportation and in expanding geographic coverage and hours of operation – including on weekends – with periphery focused pricing reforms (such as the “Transport Justice” program) remaining only complementary measures (Kosman, 2025).

In most of the expenditure categories examined, Haredi households spend less per capita than non-Haredi Jewish households – even when comparing households only in the bottom income quintile. However, when comparing households with similar background characteristics, most of the gaps between the two groups shrink, and in some cases disappear entirely. Specifically, in

comparisons between similar households, the gaps disappear in most food categories, in imputed value of owner-occupied housing, in rent expenditure, and in housing density.

It's possible that total consumption gaps between Haredim and non-Haredi Jews stem mainly from differences in household background characteristics. That said, both the lower income level and the larger household size among Haredim stem from a distinctive lifestyle choice rather than from necessity.

In other consumption categories, gaps between Haredi households and non-Haredi Jewish households persist even when comparing households with similar characteristics, suggesting unique consumption patterns in Haredi society. Specifically, Haredi households are characterized by lower spending on meals outside the home, a higher home ownership rate, and a lower rate of vehicle usage compared with non-Haredi Jewish households. The high share of home ownership among Haredim is most likely boosted by various housing programs with biased terms specifically tailored for the Haredi population, and to the availability of gemachim (interest-free loan fund) loans within the Haredi community.

While average income among Arab-Israeli households is lower than among non-Haredi Jews and similar to the Haredim, Arab-Israelis spend more on food and on transportation than Jewish households, and these gaps are even wider when comparing households with similar characteristics. Compared with non-Haredi Jewish households with similar incomes, Arab-Israelis are more likely to use a vehicle. A possible reason is that many Arab-Israeli localities are situated in peripheral areas where access to public transportation is relatively limited, increasing the need for vehicle usage. In 2021, a significant budget was allocated to expanding access to public transportation in Arab-Israeli localities; However, a follow-up is required to ensure its actual implementation (Adam, Teva, v'Din, 2023).

A greater share of Arab-Israeli households lives in owner-occupied dwellings. But due to deficient urban planning and weak supervision, the legal status of ownership in Arab-Israeli localities is more tenuous than in Jewish localities. Thus, home ownership in Arab-Israeli localities

does not necessarily indicate economic security, unlike the case of home ownership in most Jewish localities. It was also found that Arab-Israeli households live at higher density than Jewish households – even when comparing households with similar characteristics.

The substantial decline in the home ownership share among young households may indicate a decline in their wealth accumulation capacity, compared with older households. Consequently, this may reduce their ability to withstand future economic shocks. In addition, while the rise in vehicle usage indicates greater household mobility, this rise is likely a reflection of the poor state of public transportation in Israel – exacerbating other problems, such as road congestion and air pollution.

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Appendix: Multivariate Empirical Analysis

Throughout the paper, figures based on multivariate empirical analysis (linear regression) display two types of results: actual values and values calculated after controlling for household attributes. The latter is the predicted value for the average household in Israel – that is, a household whose background characteristics equal the averages in the entire population – based on the regression results. In all cases, the control variables were the number of persons in the household; the household's quintile of disposable income per capita; whether the household was Haredi, non-Haredi Jewish, or Arab-Israeli; age (grouped) and marital status of the household head; and the survey year. In the figures related to housing expenditure, district of residence was also included as a control variable.

In figures that present expenditure variables, the dependent variable in the regression was the natural logarithm of expenditure; after calculating the predicted value, it was transformed back into shekel values. Observations whose expenditure was below the 1st percentile or above the 99th percentile were omitted from the analysis.

Full regression results are available from the author.