

Shoresh Research Paper

Jerusalem and the increasingly Haredi towns: A parable for Israel

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Abstract

The continued existence of Israel's ultra-Orthodox (Haredi) society is dependent on a strong national economy able to provide economic security and a strong army able to provide physical security. In light of the Haredi society's exponential growth – doubling its share in Israel's population every generation (Haredim are 6 percent of the country's grandparents, but are already a quarter of today's infants) – the continued existence of the State of Israel is dependent on the Haredim. This interdependence requires an immediate internalization of the current direction that Israel is headed and the consequences of that direction for the country in general, and for Haredi society in particular. This process – involving very rapid changes in the population distribution within towns, alongside a steep and rapid decline in those towns's living standards – is already well underway in several Israeli municipalities, which allows a glimpse into the future that currently awaits the entire nation, unless dealt with while it's still possible to do so.

A solution that can return Israel to a sustainable long-term trajectory needs to be founded upon complete overhauls of Israel's education system and of the government's budgetary priorities. This proposed solution is not directed against the Haredim, but is based on a national goal of increasing equality in opportunities, rights and obligations among all citizens. The social, economic and political processes that Israel has undergone in recent decades – and since January 2023, in particular – have brought the country to its moment of truth. The importance of the need for a sharp and immediate policy pivot cannot be overstated. Haredi towns have Israel to ensure their existence – an insurance policy that the country as a whole will not have, if and when it will begin to look like the Haredi towns.

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Introduction

While the Haredi community is ostensibly willing to live in poverty to maintain its lifestyles and norms, their extraordinarily high fertility rates – compared to all other population groups in Israel – foreshadows that not only they will live in poverty but, eventually, so will all those surrounding them. Israel's municipalities show just how fast and how thorough this process is – and what it portends for the country as a whole when the national demographic distribution will increasingly resemble that of towns that have become Haredi, or are well on their way to becoming so.

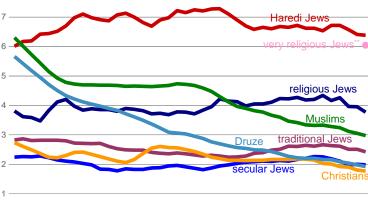
As reported by Israel's National Insurance Institute (similar in nature and purpose to the American Social Security Administration), the average poverty rate among individuals in 2022 was 20.9 percent (Ksir, Pines and Plum, 2022). This national poverty rate masks a huge gap between poverty rates among Haredi Jews (39.5 percent), Arab-Israelis (38.9 percent) and non-

Haredi Jews (11.3 percent). However, in contrast to Muslim Arab birth rates in Israel – which have been dropping quickly over the past two decades, nearing those secular and traditional Jews, Christian Arabs and the Druze – Haredi birth rates are roughly three times those of the latter groups (Figure 1).

Alongside the very high fertility rates is the determination by Haredi leaders that their community's children be prevented from receiving (a) an education that could provide them with opportunities to work in a global competitive economy and knowledge of the primary underpinnings of a

Figure 1 Fertility rates in Israel

average number of children per woman*



1981 1983 1986 1989 1992 1995 1998 2001 2004 2007 2010 2013 2016 2019 2022

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics, Ahmad Hleihel and Ayelet Zionov

^{*} three-year moving averages ending in year shown on horizontal axis ** very religious (non-haredi) Jews living in the West Bank(comprising 22% of all religious Jews living there). Data exists for 2022 only).



modern democracy. The result is a rapidly growing Haredi society that is intolerant of the liberal lifestyles that both enable (via modern health and welfare systems) and literally protect (via the IDF) their Haredi lifestyles.

The issue of exponential Haredi demographic growth extends far beyond what transpires within Haredi society. Their demands that those surrounding them conform to their lifestyles of gender separation and discrimination, dress, and other codes of conduct considerably restrict the liberal norms of the other inhabitants of their communities – increasingly driving them out in search of liberal environments elsewhere.

This is the story of a growing number of Israeli towns and neighborhoods – illustrating a process that is a parable for the entire country. This study provides a municipal perspective of the general direction that Israel is headed. Since this is an exponential process (that is, a process developing with increasing – rather than constant – speed), it is one that needs to be dealt with immediately, before it spirals past the country's demographic-democratic point of no-return, where laws that are already exceedingly difficult to pass in the Knesset will cease to be possible options.

The view from Jerusalem

One indication of the Haredim's share in a town's population is via the primary schools, which are mandatory for all Israeli children. Primary school children in Israel's Jewish population study in one of three main streams: secular, religious (non-Haredi) and the Haredi streams. The share of a town's primary school pupils studying in its Haredi schools provides a gauge of that town's Haredization process.

Israel's Central Bureau of Statistics ranks each municipality according to its socioeconomic classification, which is based on municipal indicators such as living standards, education levels, employment rates, dependency ratios, and more. The classifications range from 1 (the lowest level) to 10, (the highest level). In light of the high poverty rates among Haredi families, one

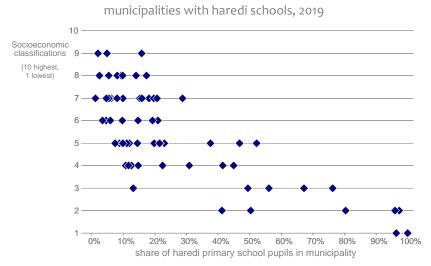


might expect that towns with a higher Haredi share in their population would tend to be among the lower socioeconomic classifications.

Figure 2 focuses on Israeli municipalities with Haredi schools and illustrates the clear link between the share of primary school pupils in Haredi schools and the town's socioeconomic classification. In general, the greater the share of Haredi pupils, the lower the socioeconomic classification of the town.

Israel's capital city, Jerusalem, encapsulates a transformation process that is informative for the direction that the country as a whole is headed.

Figure 2
Relationship between socioeconomic classification and share of haredi primary school pupils in municipality



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

Incorporating predominantly Arab East Jerusalem – a policy direction espoused by an increasing number of Israeli politicians with regard to Israel's control of the entire West Bank – already ensures a reduced share of non-Haredi Jews in the city's population. But the rapidness of the city's demographic evolution is exceptional.

The share of secular Jewish pupils in Jerusalem's primary schools has collapsed from 33 percent to 9 percent in just over three decades (Figure 3). Religious (non-Haredi) schools also exhibited a drop in their relative share to 11 percent, though that fall is not close to the reduction in the secular share. As of 2021, the Jerusalem Institute for Policy Research (2023) reports that nearly half of the city's primary school pupils are Haredim (46 percent) while a third are Arab pupils.



Vast differences in fertility rates are just a catalyst for a much broader process underway in Jerusalem. The combination of intolerance toward non-religious Jews living in the city and a municipal tax burden that is disproportionately placed on the city's declining share of non-religious Jews — who tend to be more educated, with resultant higher incomes — has led to an exodus of that group from Jerusalem.

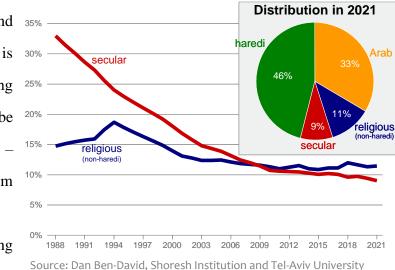
In the 1980s, the number of Jews leaving Jerusalem was just slightly higher than those moving to the city (Figure 4). By 2021, nearly two Jews left for each Jew who moved to Jerusalem. While these domestic migration figures published by the Jerusalem Institute for Policy Research (2023) do not distinguish between the types of Jews moving to and moving out of Jerusalem, the general migration trend is clear.

To offset Jerusalem's rapid demographic changes, and their attendant ramifications on the city's tax base, the Israeli government has had to pour into the city evergrowing sums of money to keep it financially viable. Figure 5 illustrates how much more

Figure 3

Share of pupils by education stream in Jerusalem's primary schools

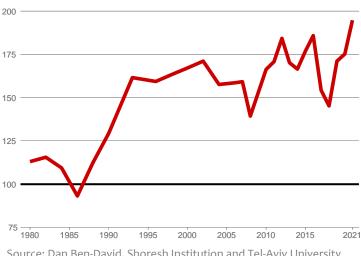
1988-2021



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Jerusalem Institute for Policy Research

Figure 4
Number of Jews leaving Jerusalem
per 100 Jews moving to Jerusalem

1980-2021



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Jerusalem Institute for Policy Research



quickly these injections have risen during the past decade alone in comparison to the increase in the city's tax income.

While this may be a solution for one city — albeit, Israel's largest — the hemorrhaging of Jerusalem's more educated population cannot be increasingly offset by the rest of the country forever, especially if Jerusalem becomes a parable for Israel in general.

A broader municipal perspective

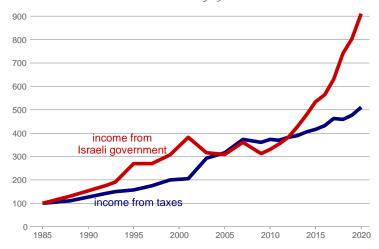
In 1995, the Central Bureau of Statistics placed Jerusalem in a middle socioeconomic classification. Within two and a half decades, it had fallen by three socioeconomic classifications, from classification 5 to classification 2 (Figure 6). The uniqueness of the Jerusalem experience is shown in a comparison with three other large Israeli cities.

Tel-Aviv-Jaffa was – and continues to be – a relatively prosperous city, maintaining its high classification 8 throughout the period. Just one classification below Tel-Aviv-Jaffa, at classification 7, is the port and industrial

Figure 5

Jerusalem municipal income from taxes and from Israeli government*

base = 1985

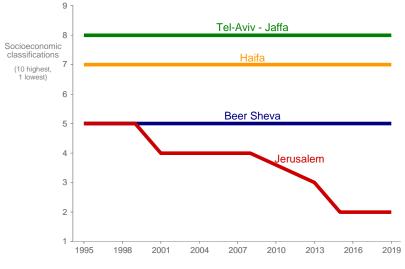


* Changes net of inflation

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University
Data: Jerusalem Institute for Policy Research, Central Bureau of Statistics

Figure 6
Socioeconomic classification of four large cities

1995-2019



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics



city of Haifa, which has remained at classification 7 since 1995. The primary city in the Negev, Beer Sheva, was classified at 5 in 1995, just like Jerusalem. But while Jerusalem fell by three classifications since then, Beer Sheva remained steady at classification 5.

In general, the Central Bureau of Statistics classified over 200 municipalities according to their socioeconomic situation. In some cases, municipal socioeconomic classifications have risen over the years. In other cases, such as those shown in Figure 6, municipal classifications have remained constant, or have declined. Jerusalem, together with three other towns, experienced the largest drop in socioeconomic classifications – with a fall of three classifications each.

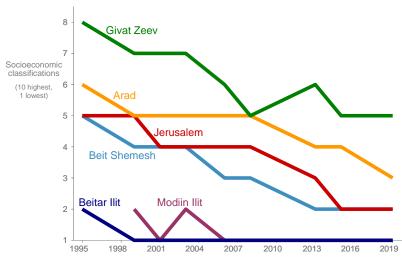
One of these other towns, Beit Shemesh, began at classification 5 and fell to classification 2 over the period 1995-2019, similar to Jerusalem (Figure 7). The Negev town of Arad fell from classification 6 to classification 3, while the Jerusalem suburb of Givat Zeev was ranked at classification 8 (like Haifa) in 1995, falling to classification 5 over the years.

The extraordinarily high Haredi fertility rates require that housing solutions be found for a society that is growing much faster than any other population group in Israel. In addition to the establishment of towns established solely for Haredim, there has been a huge spillover of Haredim into hitherto non-Haredi towns.

Two of the towns that have been Haredi since their inception – Beitar Ilit and Modiin Ilit – have been at the bottom of the socioeconomic classifications for

Figure 7
Four municipalities experiencing the greatest reduction (3 units) in socioeconomic classification

and two haredi municipalities, 1995-2019



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

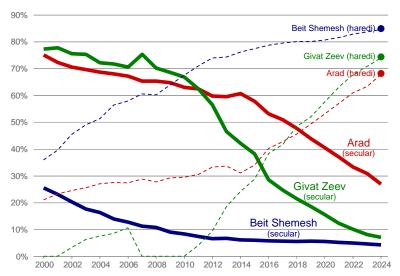


years. The question is to what extent have Beit Shemesh, Arad and Givat Zeev experienced rapid Haredization in their populations during their socioeconomic declines.

As shown in Figure 8, over a third (36 percent) of Beit Shemesh primary school pupils were in Haredi schools in 2000, just over a quarter (26 percent) were in the Jewish secular schools, while all of the remainder were in Jewish religious (non-Haredi) schools (not shown in the graph). By 2024, the Haredi share rose to 85 percent and the secular share fell to just 4 percent.

Figure 8
Primary school pupils by education stream as share of total pupils in municipality

selected municipalities, 2000-2024



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Education Ministry

In 2000, Arad was a relatively secular town, with three-quarters of its primary school pupils studying in secular schools and just 21 percent in haredi schools. Within just 24 years, those demographics flipped, as the haredi share rose to 68 percent and the secular share declined to 27 percent. In Givat Zeev, there were literally no children registered in Haredi schools at the turn of the millennium. Within just two and a half decades, the secular share of primary school pupils plummeted from 77 percent to 7 percent while the Haredi share rose from 0 percent to 74 percent.

These demographic transformations occurred extremely quickly, with very lopsided fertility rates buttressed by migration that only reinforced the trends. The result in each of these three towns was a free-fall in their socioeconomic classifications.

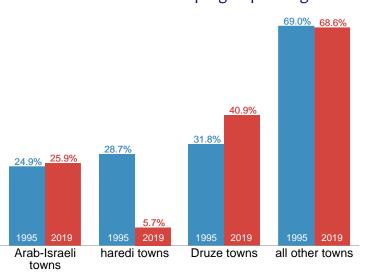
To what extent do individual cases of several specific towns reflect a general phenomenon? On the basis of each town's socioeconomic ranking, this study was extended to all 183 Israeli towns (excluding Jerusalem, Tel-Aviv, Haifa, Be'er Sheva, Beit Shemesh, Arad and Givat Ze'ev,



which have already been discussed above) that were ranked in both 1995 and 2019. These towns were divided into four groups on the basis of their predominant majority populations: Arab-Israeli towns, Druze towns, Haredi towns, and all other towns. The average rank of each grouping was calculated for 1995 and again for 2019.

In the case of the Arab-Israeli towns, their average rank in 1995 was above 25 percent of all municipalities (Figure 9). This average rank was almost identical in 2019, above 26 percent the municipalities. The average Druze town ranked above 32 percent

Figure 9
Percent of all towns with socioeconomic rank below each municipal group average*



* all 183 towns with socioeconomic rankings in 1995 and 2019 (excluding Jerusalem, Tel-Aviv, Haifa, Beer Sheva, Beit Shemesh, Arad and Givat Zeev, which were analyzed separately).

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

of all towns in 1995. The relative situation of the Druze towns improved over the years, raising their average to above 41 percent of the towns in 2019. The average rank of all other non-Haredi towns was relatively stable, exceeding 69 percent of the towns in 1995 as well as in 2019. In sharp contrast to the other municipal groupings, the average for predominantly Haredi towns was above 29 percent of the municipalities in 1995 – falling to above just 6 percent of the municipalities by 2019.

False narratives and the facts

There is a general tendency for interested parties to draw upon anecdotal information — which at best, is just partial information, and at worst, simply false — in an attempt to skew public perception and promote sectoral/personal agendas and biased narratives. This is particularly true

¹ In addition to classifying each town in one of the ten socioeconomic clusters, the CBS also determined an individual ranking for each of the 183 towns.



with regard to the Haredim. For years, Israel did not attempt to officially record data on Haredim, and even today the government does not insist on measuring scholastic knowledge of Haredi boys in core fields of education – which makes it possible for opinions that replace facts.

Myth 1: Haredim in higher education, so no need for core curriculum

Education is closely related to wages and employment. As such, it plays a vitally important role in determining whether a person's future will be spent above or below the poverty line. A high quality core curriculum in fields important for subsequent work in the global economy is critical in this context. However, there are those in Israel who insist on preventing such vital knowledge from reaching their children. According to a misleading narrative based on partial facts, Haredi leaders claim that the lack of a core education as children does not prevent Haredim from overcoming the gap in knowledge and skills as adults. Towards this end, they point to data showing a major increase in the number of Haredim in higher education – which is used to argue that the core education is unnecessary.

Haredi boys study only a very partial core curriculum (rudimentary math and no science or English), and even this is terminated entirely after eighth grade. Instead, Haredi males study religious texts from dawn to dusk for years, well into adulthood, giving them an unfounded sense of proficiency regarding their ability as adults to learn material relevant for working in a competitive global economy and for living in a modern liberal democracy. As Haaretz-TheMarker reporter Meirav Arlozorov (2016) quoted the prevailing view among Haredi leaders: "In just 6 months of pre-academic [mechina] studies, we are able to learn everything that you studied in 12 years of schooling".

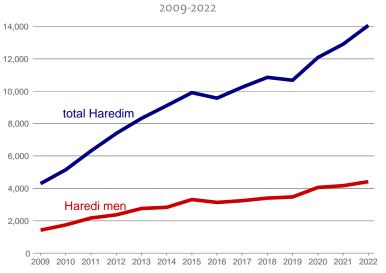
In fact, increasing numbers of Haredim are embarking on the academic track (Figure 10), under the assumption – based simply on their ability to study texts for hours on end – that they can skip a core education as children and somehow overcome this as adults. While Figure 10 does



indeed show a steep incline in the number of Haredim wishing to receive an academic education, several important caveats to this graph are in order.

In a population growing as fast as the Haredim, a simplistic look at absolute numbers rather than at population shares is misleading. In addition, the primary increase in students comes from women, who receive a better education in core fields than do the men. And even so, the State Comptroller (2019) reported that of those embarking on the pre-academic

Figure 10 Haredi students in higher education



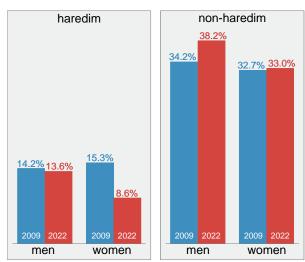
Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Israel Democracy Institute

and academic tracks, over half of the women (53 percent) drop out while over three-quarters of the men (76 percent) drop out. There are no short-cuts in life and having an ability to learn is generally

insufficient for overcoming years of not studying the necessary material as children.

Furthermore, those Haredim that attempt the academic track tend to do so at relatively low academic-level institutions. The share of Haredi men and women in the academic track studying at Israel's leading research universities was 14 percent and 15 percent, respectively, in 2009, less than half of the shares among non-Haredim (Figure 11). These shares tended to remain relatively unchanged by 2022, except for Haredi women, whose share studying in research universities fell by nearly half.

Figure 11
Share of higher education students in research universities



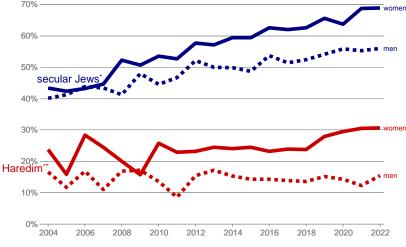
Source: Dan Ben-David, Shoresh Instit. and Tel-Aviv Univ. Data: Israel Democracy Institute



Despite the increase in the number of Haredim attempting academics studies, fact and the that they tend to overwhelmingly study in low-level institutions, the share of prime working age (35-54) haredim with an academic degree has remained relatively unchanged over the past two decades (Figure 12). There was a slight increase in the women's share a few years ago, but this too has appeared to plateau recently. Despite all of the hype on their abilities to study as adults, after skipping a core education, the share of Haredi men with academic degrees is very low, and has not risen at all.

Figure 12
Share of prime working age
Israelis with academic degrees





^{*} non-religious Jews

Source: Dan Ben-David and Yael Melzer, Shoresh Institution Data: Central Bureau of Statistics

Myth 2: Israeli Jews are becoming less religious

Israel's Central Bureau of Statistics conducts an annual survey in which it asks Jews who are 20 years old and up to identify themselves as Haredim, religious Jews, traditional Jews or secular Jews. They are also asked what they were at the age of 15, which makes it possible to determine the retention rates of each group, how many become less religious and how many become more religious.

The group with the highest retention rates in 2022 are the Haredim, with 87 percent of those who grew up as Haredim at the age of 15 remaining Haredim at the age of 20 and up (Figure 13). Of those who are no longer Haredim, 6 percent became religious, 5 percent became traditional

^{**} Haredim (ultra-Orthodox Jews)

^{***} from traditional-religious through Orthodox Jews



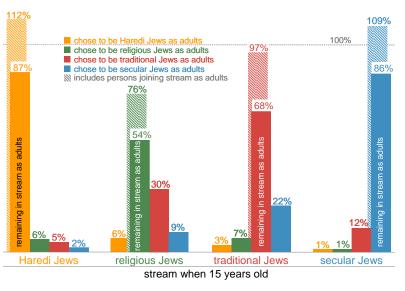
and 2 percent made the move all the way to secular. The group with the second highest retention rates are the secular Jews. 86 percent of those who grew up secular remained secular, 12 percent became traditional, while just 1 percent became religious and another 1 percent became Haredi.

The two groups with relatively low retention rates are the traditional Jews (68 percent) and the religious Jews (54 percent). In both cases, the majority of leavers became less religious. 22 percent of the traditional became secular versus 10 percent who became more religious. Of the religious Jews, 39 percent became less religious while just 6 percent became more religious.

Thus, on the face of it, Israeli Jews — with the exception of the Haredim — appear to be becoming less religious. And while retention rates among religious Jews have steadily risen over the years, from under 50 percent to just over 50 percent (Figure 14), there do not appear to be any major changes in the long-term trends of the other groups' retention rates.

Figure 13 Retention vs intergenerational mobility between Jewish-Israeli religious streams, 2022

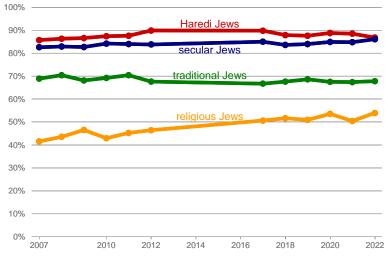
Share of those remaining in stream and shares of those moving to other streams when 20+ adults



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

Figure 14
Retention rates in Jewish-Israeli religious group

share of 15 year olds remaining in the group at age 20+



^{*} No data for years 2013-2016.

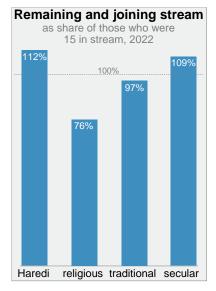
Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

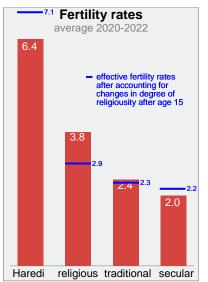


However, this is too simplistic a perspective of the movement between Jewish groups. If all those joining a stream are added to those who remain, it turns out that the Haredi stream grows by 12 percent while the secular stream grows by 9 percent (Figure 13). And while the traditional stream loses quite a few, it gains a nearly identical number from the other streams so that the share of joiners plus remainers is nearly identical (97 percent) of all those who grew up traditional. Jews joining the religious group offset many of the group's leavers, leaving the resultant number of religious Jews at 76 percent of those who grew up religious.

But this too does not provide a full perspective since it leaves out the primary determinant of Israel's demographic changes: fertility rates. With a Haredi average of 6.4 children per family – versus 3.8 for religious Jews, 2.4 for traditional Jews and 2.0 for secular Jews – the direction that Israel's fertility rates are taking Israel is clear (Figure 15). Haredi fertility rates are roughly three times those of traditional and secular Jews, and two-thirds greater than religious Jews' fertility

Figure 15
Retention vs fertility in Jewish-Israeli religious streams





Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics



rates. To the extent that each groups' retention and migration behavior remain unchanged in the future, the resultant effective fertility rates only exacerbate the fertility differences even more.²

An examination of the Haredi share, by generation, from the 2023 population provides the demographic bottom line (Figure 16). Roughly every 25 years – or, roughly every generation – the Haredi share in Israel's population doubles. In other words, while the share of Haredim amongst the most elderly is 1.4 percent, this share roughly doubles to 3.5 percent in the 75-79 year-old age group, roughly doubling again in the next generation (50-54 year-olds). Their exponentially increasing share in the population indicates that in 2023, just over a quarter (25.7 percent) of Israel's infants and toddlers aged 0-4 are Haredim.

Figure 16

Share of Haredim in each generation

Israel, 2023

25.7%

Source: Dan Ben-David, Shoresh Instit. and Tel-Aviv Univ. Data: Israel Democracy Institute

50-54

Birth years (one generation every 25 years)

25-29

0-4

1.4%

95+

75-79

Myth 3: Demographic concerns are overrated

Only in recent years has Israel's Central Bureau of Statistics (CBS) begun to ask Israeli Jews to self-identify as Haredim, religious, traditional or secular. Prior to that, the CBS relied on social, economic and education characteristics to estimate the annual number of Haredim in Israel. A new study by Regev and Miltski (2024) from the Haredi Institute for Public Affairs uses an innovative approach known as "machine learning" to gain what in fact may be a more accurate assessment than the traditional CBS method for estimating the number of Haredim in Israel over the years.³

² Effective fertility rates estimated under the assumption that current changes in the degree of religiosity among the various group will applicable when those born today will become adults.

³ The CBS is now studying the Regev and Miltski (2024) method and will determine whether its accuracy is indeed greater than the CBS method and whether it should be integrated into the CBS methodology for determining Haredim.



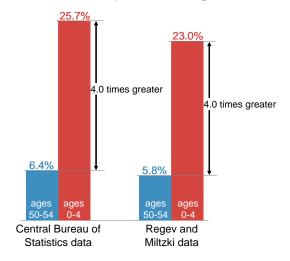
Regev and Miltski's methodology suggests that there are roughly 10 percent less Haredim in Israel than CBS estimates have indicated – an interesting finding that received considerable public attention after the study's publication. But the much more important and relevant finding (in the long term) is that Haredi birth rates according to Regev and Miltski are very similar to the CBS estimates.

Figure 1 is reproduced below as Appendix Figure 1, with the addition of Haredi fertility rates from the Regev and Miltski study (dotted line). As is evident from the figure, there is very little difference between CBS and Regev-Miltski fertility rates over the years, with the latter appearing as primarily a smoothing of the CBS rates.

The bottom line is provided in Figure 17. While the Regev and Miltski study shows that the Haredi share in Israel's population is slightly lower than the CBS shares, both datasets show that the share of Haredi grandchildren ages 0-4 is four times greater than their grandparents share in the population of 50-54 year-olds — i.e. both the Central Bureau of Statistics and the Regev and Miltski study show that the Haredi population is growing exponentially quickly. The very fact that the Haredi share in Israel's population is roughly doubling itself every generation should serve as a warning light for every policymaker in Israel about the direction that Israel is headed and the increasing speed that it is reaching the final — unsustainable — outcome.

Figure 17
Share of haredim in grandparents' generation and grandchildrens' generation, 2023

difference of 50 years between generations



Source: Dan Ben-David, Shoresh Instit. and Tel-Aviv Univ. Data: Central Bureau of Statistics, Eitan Regev and Yehudit Miltzki (2024)



Unequal opportunities, burdens and benefits

In a comparison of Israel to all 36 OECD countries that have participated in at least 17 of the 18 PISA exams (in math, science and reading) administered between 2006 and 2022, Israeli achievement levels are below nearly all of the developed world (Figure 18). It is important to note that this outcome is not due to Haredi boys in Israel. The vast majority of them do not study the material and do not participate in the exams – otherwise, the Israeli average would be even lower.⁴ In short, Israel's education system is one of the worst in the developed world. It is ill-prepared to

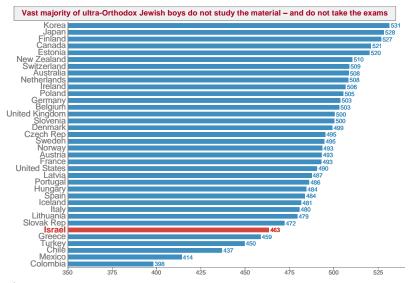
provide many of the country's children with opportunities to compete with the children of the other developed countries as future adults in the global marketplace.

The picture looks even more problematic when Israeli education is broken down into the three non-Haredi streams. The average multiyear score (between 2006 and 2022) in the PISA exams for the secular Jewish schools was 493, placing them below the majority of OECD countries. Israel's religious Jewish schools attained an average score of 480, which placed them below 80 percent of the OECD countries. The

Figure 18

Multiyear national average of PISA score in all exams

all 36 OECD countries participating in at least 17 of the 18 exams, 2006-2022*



^{*} Average scores in math, science and reading. Each country participated in all 18 exams given during 2006-2022, except the U.S. and Spain, who participated in 17 of the exams.

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: OECD

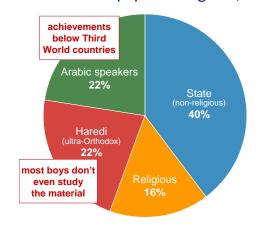
⁴ While most of the Haredi boys do not study the material and do not take the exams, Haredi girls have participated. In the 2022 exam, for example, the Haredi girls included in the sample did as well as the secular school girls, and far above the religious school girls. The Haredi girls tested may have indeed been a representative sample of the overall Haredi female population, as is claimed by the Education Ministry. As such, there may be other reasons why the vast majority of Haredi women who try the academic track study in low-quality colleges rather than in the research universities that they could purportedly be accepted to, why over half drop out from even this lower tier academic track, and why the share of Haredi women with academic degrees has been so low and relatively stable during the past two decades.



average score of Israel's Arabic speakers (383) placed them below all of the OECD countries and many third world ones as well. In the most recent exam, administered in 2022, Israel's Arabic speakers placed below three of the six Arab countries that participated in the exam.

The distribution of first graders in 2023 is shown in Figure 19. Twenty-two percent of the pupils are Arabic speakers, whose average achievement scores are below many third world countries. Another twenty-two percent are Haredi pupils, of whom the majority of boys do not study a full core curriculum. And then there are the Jewish children from Israel's geographic and social peripheries studying in the secular and religious school streams with very low achievement scores. This means that roughly half of Israel's children are

Figure 19
Distribution of pupils in 1st grade, 2023



Source: Dan Ben-David, Shoresh Institut. and Tel-Aviv Univ. Data: Central Bureau of Statistics

scoring at third world levels – and they belong to the country's fastest growing population groups.

When these children grow up, they will eventually become a majority in the population. The low level of education that they receive as children means that they will be able to maintain only a third world economy as adults – one that will not be able to support first world healthcare, welfare or defense. But Israel will not become a third world economy. Surrounded by enemies determined to destroy it, Israel will not survive if it will not be able to defend itself.

In April 2024, Iran shot roughly 300 drones, cruise missiles and ballistic missiles at Israel, all targeted to hit the country nearly simultaneously. Over the years prior to the attack, Israel's advanced hi-tech capabilities enabled the country to develop and build some of the most advanced anti-missile capabilities known to man. Aided by the United States and other allies, Israel was able to shoot down nearly all of the incoming weapons before they could wreak devastation. In the coming years and decades, as technology continues to leap forward across the world – and in

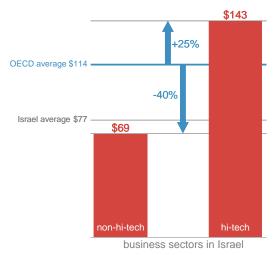


countries seeking to destroy Israel – a future inability to remain one step ahead and maintain Israel's qualitative advantage will have existential implications for the country.

Consequences of the lopsided education received by Israeli children are vividly exhibited in Figure 20. Israel's hi-tech sector employs just a fraction of the workforce. But its productivity is 25 percent higher than average business sector productivity in the OECD. The productivity of the entire remaining business sector workforce is 40 percent below the OECD average. Thus, despite the advanced hi-tech sector, Israel's remaining workforce is so large that the country's overall business sector

Figure 20 Business sector productivity per worker*

Value added per worker in thousands of PPP-adjusted US dollars, 2018



* agriculture, forestry, fishing, mining, quarrying, manufacturing, electricity, gas, water, waste, construction and market services.

Source: OECD

productivity (including hi-tech) is far below the OECD average.

Israel's education system is so dysfunctional that a huge share of its children grow into adults lacking the skills to seize opportunities for productive employment that would benefit them personally. Compared with countries whose pupils score well in core subjects, Savin, Kimhi and Ben-David (2023) show that Israel's education system is much less successful in reducing the positive relationship between the pupils' educational achievement and their parents' level of education. Had Israeli children received the kind of education that could have filtered down to the education system from the country's cutting-edge universities, then as adults they would have also become key catalysts for spurring faster growth for the entire economy while increasing the number of shoulders bearing the country's economic burden – rather than being a part of it.

These unequal opportunities among the children are later translated into unequal burdens and benefits among the adults. While the average Jewish non-Haredi household (headed by



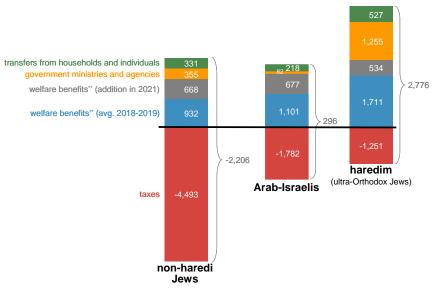
persons 25-44 years old) pays 2,206 shekels a month more than it receives from the government, Arab-Israelis barely break even, receiving 296 shekels more in benefits than they pay each month (Figure 21). Haredi Jews pay a bit less taxes than Arab-Israelis, but their political power ensures that they receive 2,776 more shekels per month than they pay in taxes.⁵

An example of the unequal burden is displayed in Figure 22.

Twenty percent of Israel's population is responsible for ninety percent of the country's entire

Figure 21
Contribution of net direct transfers and taxes to disposable income of young households*





^{*} Household heads ages 25-44. Not including East Jerusalem.

Source: Bank of Israel

Data: Central Bureau of Statistics

income tax revenue – a burden that has been slowly edging upward since 2000. On the other hand, half of Israel's population is so poor that they don't make it to the bottom rung of the income tax ladder and pay no income tax at all.

Just as unequal burdens and the imposition of norms that are inconsistent with liberal democratic values have driven educated secular Jews out of various municipalities, creating even greater burdens on those who remain, such is the danger that Israel is rapidly headed toward. As shown in Figure 23, just 10 percent of Israel's employed persons work in hi-tech – of them, just

^{**} Welfare benefits (from the National Insurance Institute) rose in 2021, therefore pre-Covid estimates are provided for 2018-2019.

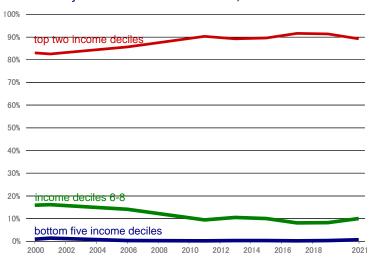
⁵ Karlinsky, Sadeh, Yogev and Sarel (2024) broaden the comparison to estimate the value of in-kind subsidies and benefits. They find that in 2018, non-Haredi Jewish households paid 6,115 shekels a month more in taxes than they received in subsidies and benefits, while Arab-Israeli households received 1,037 shekels per month more than they paid in taxes. An average Haredi household received subsidies and benefits that exceeded what they paid in taxes by 4,107 shekels each month.



two-thirds (or 6.2 percent of the all employed persons) work in hi-tech professions. These individuals alone account for roughly half of Israel's exports. The physicians determining the quality of Israeli healthcare comprise just 0.6 percent of the adult 25+ population. The senior faculty in Israel's research universities, who teach the physicians, engineers and computer scientists, are only 0.1 percent of the 25+ year old population.

Although Israel has a population approaching 10 million, there is no need for 1-

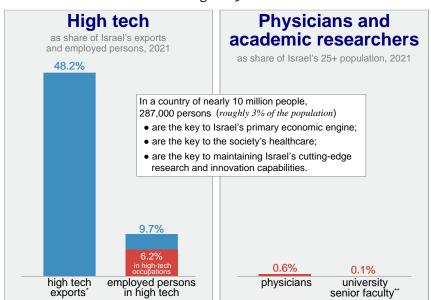
Figure 22
Share of total income tax revenue paid by income deciles in Israel, 2000-2021



Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Finance Ministry

2 million to decide to leave for the country to be in major trouble. The 287,000 persons (under three percent of the population) in the above three occupations are the keys to Israel's primary

Figure 23



^{*} High tech's share of total goods and services exports.

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics

^{**} Senior faculty in research universities.



economic engine; to the society's healthcare; to maintaining Israel's cutting-edge research and innovation capabilities.

In May 2024, 130 of Israel's leading economists signed a very strongly worded public letter of alarm on the severity of the direction that the combination of demography and government policies is taking the country (Economists' Forum, 2024):⁶ They wrote: "Without a change in the current trajectory, these processes endanger the country's very existence. Many of those who bear the burden will prefer to emigrate from Israel. The first to leave will be those with opportunities abroad: physicians, engineers, high-tech workers, and scientists. Israel's remaining population will be less educated and less productive, thus increasing the burden on the remaining productive population. This, in turn, will encourage further emigration from Israel. This process of a "spiral of collapse" in which increasingly larger groups decide to emigrate, will further deteriorate the conditions of those who remain, while severely impacting populations with fewer emigration options, including the Haredi population itself."

As of the writing of this paper, it is still too early to gauge the consequences of how the government's attempted judicial coup launched in January 2023, and the still ongoing war initiated by Hamas on October 7, 2023, may exacerbate the long-term processes described above. That said, a rough glimpse of net emigration from Israel is available and revealing.

As Ben-David (2019) shows, while the number of Israeli emigrants with academic degrees has not been great, it has nonetheless exceeded the number of those returning to Israel. It is a trend that has been rising for years. These numbers, updated in the graph gallery of the Shoresh Institution website, indicate that almost three persons with academic degrees left for each such returnee in 2014, a number that rose to over four leavers per returnee by 2018. The number of Israeli physicians in OECD countries relative to all physicians in Israel rose nearly three-fold

⁶ Among the letter signers were 119 university professors, including six current and former deans, one past university president and the current and past presidents of the Israel Economic Association. Signers also included economists who served in leadership positions at the Finance Ministry, Bank of Israel and the Prime Minister's Office. Full disclosure: The author of this study was one of the letter signers and a contributor to its contents.



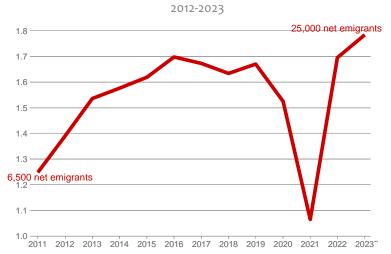
between 2000 and 2020.⁷ While the total number of leavers is small, the increasingly rising trend is steady and concerning.

Recently, the Central Bureau of Statistics revised its method of determining the number of Israelis who are leaving and returning. While far from an accurate assessment of the actual number of permanent leavers and returners, the primary takeaway is from the trend over time (Figure 24).

With the exception of the Covid pandemic period, there appears to be a steady increase in the ratio of leavers to returners, from 1.25 in 2011 to an estimated 1.78 in 2023.

Underlying the potential national spiral of collapse described above is a lethal combination of (a) very low quality core education provided to huge part of the population and (b) extraordinarily high birth rates by that very same part of the population. Unless something very impactful is done immediately that will significantly alter the current reality in both realms, the process already under way will be irreversible and impossible to stop.

Figure 24
Ratio of Israeli emigrants to returnees*



^{*} Ratio of persons not included in dataset of Israelis abroad on date of departure and who remained abroad at least 275 days total out of the 365 since their departure (with first 90 days abroad continuous) relative to persons included in dataset of Israelis abroad on date of return who remained in Israel at least 275 days total out of the 365 since their departure (with first 90 days in Israel continuous).

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics, Eilat Cohen-Kastro (2023) and Ahmad Hleihel (2024)

^{**} provisional estimate.

⁷ The data on Israeli physicians in OECD countries cited here does not include the United States because of the difficulty in distinguishing between Israeli physicians in the US and American physicians who received their medical degrees in Israel and returned to the States.



Two parallel goals that Israel must adopt to ensure its future

1. Moving Israel to a sustainable long run trajectory

Two policy overhauls that will enable high living standards in a growing economy, low poverty, and the ability for Israel to defend itself:

Overhauling the education system

Basic tenets of such an overhaul need to include:

- A significant upgrade of the entire system's core curriculum to provide (a) the tools to work in a competitive global economy and (b) an understanding of liberal democracies' underlying fundamentals;
- The core curriculum must be uniform and compulsory in all schools, including each religious and haredi school;
- Complete ban on the involvement of individual political parties in the school system's educational content;
- With basic numeracy and literacy skills of Israeli teachers ranking at the bottom of their counterparts in the developed world (Hanushek, Piopiunik and Wiederhold, 2019) there is an urgent need to fundamentally change the way that teachers are chosen, taught and compensated;
- Systemic reform of the education ministry and its methods of operation.

Overhauling governmental budgetary priorities

including:

- Total cessation of funding for schools not teaching the complete core curriculum;
- Discontinuation of benefits that incentivize non-work lifestyles;
- Full budgetary transparency so that the public will know what are Israel's actual national priorities and among them, who the government supports and how much they receive.

2. Safeguarding the changes to ensure that Israel remains on its new, sustainable, long-run trajectory

Electoral reform

- cabinet ministers with expertise in their ministry's realm within an executive branch able to implement its decisions and enforce the law;
- creation of effective checks and balances between the three branches of government.



• Drafting and ratifying a constitution

Setting in stone national foundations that will protect the country and the rights of its citizens, and make it difficult for anyone in the future to set it back.

A universal top-tier education – something that a country with cutting-edge universities like Israel's should be able to provide – will be the game changer. Children with a firm grasp of the basic skills will have opportunities for economic and social mobility that they might not otherwise have, while contributing to economic growth at the national level and reducing their personal dependency on others. A universal top-tier education will provide a clear understanding of the dos and don'ts of a liberal society – regardless of choices along the religious-secular spectrum – teaching the type of critical thinking that will diminish the appeal of populist and charlatan leaders proposing dangerous and simplistic solutions to complex existential problems. Better educated adults will also understand the incumbent requirements of parenthood and will be more judicious in their fertility decisions.

Getting people to accept an education overhaul of the type described above – especially one that involves the extraction of political parties from the schools that they run and/or influence – requires an overhaul in budgetary priorities. Money, or lack thereof, helps focus attention and spur compliance. The massive change that is needed in budgetary priorities should be based on a national agenda rather than on sectoral ones – an agenda that eliminates Israel's very biased and unequal system of benefits, subsidies, discounts and exemptions.

It is important to emphasize that the essential overhaul of the education system and of government budgetary priorities is not directed against Haredim. It is based on a national perspective that enhances equality in rights and obligations among all citizens while laying down the foundations for the State of Israel's continued existence.

To be able to pass and implement overhauls of the magnitude described above requires a government with the ability to understand and internalize the gravity of the situation and the uniqueness of the hour at hand. It requires a government that comprises cabinet ministers who



understand what their ministries do, an executive branch capable of implementing its decisions and enforcing laws, alongside the implementation of effective checks and balances between the three branches of government to ensure that no lines are crossed.

To make it more difficult for subsequent governments to overturn the systemic overhauls in education and budgetary priorities, there is a need to pass a constitution setting in stone the national foundations that protect fundamental rights and the new system of government. Given the rapidness of Israel's demographic changes, this constitution needs to hold for at least the next two or three decades – until the overhauls in education and benefits begin to have an effect on future generations so that there will not be a majority in Israel interested in weakening the foundations of Israel's democracy.

Conclusions

The social, economic and political processes that Israel has been undergoing for decades have brought the nation to its moment of truth. While many Israelis may recognize the symptoms, most do not grasp the full picture depicted above, nor the fact that this picture is changing at an exponential pace – with existential implications for Israel's future. Jerusalem and the other towns described here have Israel to safeguard their economic and defense needs. But Israel has only itself.

The warning stated in the letter of alarm signed by 130 of Israel's leading economists in May 2024 speaks for itself (the bold parts were in bold in the original letter):

"We, Israeli economists, warn in the strongest and clearest way possible of the dangers emanating from willful ignorance of processes that are steadily leading Israel towards an economic, security, and social abyss. This is a clear and present danger to the country, one that we assess has a very high probability of realization. However, even if we are overestimating this probability, the enormous potential damage to the national security, basic risk management warrants the immediate adoption of a strategy that will return Israel to a sustainable trajectory. We call







on the general public, the senior public servants, and the political echelons to place the challenges we have raised here at the top of Israel's national priorities."

"We are sounding the loudest possible alarm. History will not forgive Israel's current and future leaders – over the entire political spectrum – if they stand idly by."



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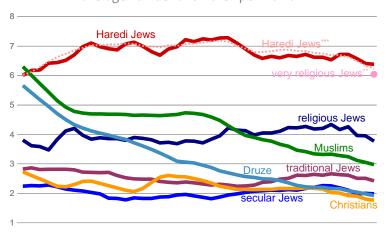
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Appendix Figure 1 Fertility rates in Israel

average number of children per woman*



1981 1983 1986 1989 1992 1995 1998 2001 2004 2007 2010 2013 2016 2019 2022

Source: Dan Ben-David, Shoresh Institution and Tel-Aviv University Data: Central Bureau of Statistics, Ahmad Hleihel and Ayelet Zionov

The Shoresh Institution is an independent, non-partisan policy research center. The institution conducts impartial, evidence-based analyses of Israel's economy and civil society. Its objective is to assist in moving the country towards a sustainable long-term trajectory that raises Israel's living standards while reducing disparity among its citizens. To further this goal, the Shoresh Institution informs Israel's leading policymakers and the general public, both inside and outside the country, through briefings and accessible publications on the source, nature and scope of core issues facing the country, providing policy options that ensure and improve the well-being of all segments of Israeli society and create more equitable opportunities for its citizens.

Findings and points of view expressed in Shoresh publications are the authors' alone.

^{*} three-year moving averages ending in year shown on horizontal axis

^{**} very religious (non-haredi) Jews living in the West Bank(comprising 22% of all religious Jews living there) Data exists for 2022 only).

^{***} Eitan Regev and Yehudit Miltski (2024