Reichman University

Aaron Institute for Economic Policy

In the name of Aaron Dovrat z"l

Policy for Promoting High-Quality Employment among Young Adults in Israel's Arab Society

Marian Tehawkho, Tali Larom and Sabaa Jabali-Serhan*

Policy Paper 2023.02 / January 2023

This is a short summary, for the full paper (in Hebrew) see

https://www.runi.ac.il/research-institutes/economics/aiep/policy-papers

* Dr. Marian Tehawkho is a senior researcher and Head of the Center for Economic Policy of The Israeli Arab Society at the Aaron Institute for Economic Policy, Reichman University. Dr. Tali Larom is a senior researcher at the Aaron Institute for Economic Policy in charge of employment policy issues. Sabaa Jabali-Serhan is a researcher at the Aaron Institute. Some of the data analysis in this paper was conducted as part of a previous research commissioned and funded by the Population Employment Administration at the Directorate General of Labor. This study was conducted in the Israel Central Bureau of Statistics (CBS) research room, using anonymized individual records prepared for this purpose by the CBS, and we thank the professional staff there for their fruitful cooperation and willingness to help. This research was conducted with the support of The Lester Crown Center for Jewish and Israel studies at Northwestern University.

Aaron Institute for Economic Policy

In the name of Aaron Dovrat z"l

The vision of the Aaron Institute for Economic Policy in the Tiomkin School of Economics is to support sustainable economic growth and social resilience, along with poverty reduction, by designing a strategy based on measurable targets which can be subjected to international comparison, and proposing detailed plans for economic policies which are based on the most current international knowledge. We focus primarily on reforms towards economic growth which would stem from increasing employment and raising the GDP per hour worked (labor productivity) in Israel.

The key measure of sustainable economic growth – GDP per capita – is still low in Israel in relation to leading countries in the developed world, and this is also the case with labor productivity. Through its economic studies, the Aaron Institute presents targets, innovative policy tools, and reforms to promote growth, high-quality employment, and labor productivity.

The Institute's mission is to help shaping the socioeconomic policy in Israel, through the development of long-term plans which would address the full range of economic and social issues facing the Israeli economy, particularly among families below the median of the income distribution, who comprise significant parts of the Arab and Haredi (ultra-Orthodox) populations, where increasing employment and productivity would greatly contribute to achieving the goals of growth, social resilience, and poverty reduction. In addition, our studies aim to influence the professional discourse, and to stimulate discussion based on reliable information and on socioeconomic research which offers practical tools to achieve these goals.

Board Members:

Mr. Shlomo Dovrat (Chairman), Mr. Jaron Lotan (Vice Chairman), Ms. Yael Andorn, Mr. Yarom Ariav, Mr. Gabi Ashkenazi, Ms. Dita Bronizki, Prof. Zvi Eckstein, Prof. Martin Eichenbaum, Prof. Itay Goldstein, Mr. Koby Haber, Prof. Niron Hashai, Mr. Rony Hizkiyahu, Ms. Anat Levin, Mr. Zvi Limon, Prof. Rafi Melnick, Mr. Roni Naftali, Mr. Ronen Nir, Dr. Tali Regev, Mr. Haim Shani, Ms. Ofra Strauss.

Head:

Prof. Zvi Eckstein.

Scientific Committee:

Prof. Zvi Eckstein (Chairman), Prof. Martin Eichenbaum, Dr. Assaf Eilat, Prof. Zvi Hercowitz, Dr. Osnat Lifshitz, Prof. Rafi Melnick, Prof. Omer Moav, Dr. Tali Regev, Dr. Yaniv Yedid-Levi.

Contact details:

Reichman University, P.O. Box 167, Herzliya, ISRAEL 4610101

Phone: 972-9-9602431

Email: aaron.economics@idc.ac.il

Website: https://www.runi.ac.il/en/research-institutes/economics/aiep

The Center for Economic Policy of the Israeli Arab Population

The Aaron Institute has established The Center for Economic Policy of the Israeli Arab Population with a vision of advancing the manufacturing and business economy in Israeli-Arab population, and enhancing its integration in the Israeli economy. The center's advisory committee is headed by former Supreme Court Justice Salim Joubran, and comprises several key figures from various fields in the Arab population. Every year, the advisory committee assembles to decide on the center's research plan, based on outcomes and accumulated knowledge.

The activity of this center is part of Aaron Institute's comprehensive economic strategy for the Israeli economy, which aims to achieve sustained growth in GDP and labor productivity, along with reduced poverty and inequality. The center's activity focuses on presenting government decision-makers with recommendations for implementation of long-term economic policies for Israel's Arab population, and promoting their enactment in practice. In accordance with the center's vision, activity revolves around designing strategies and devising policies in the fields of education, employment, and infrastructure, through collaboration with various government offices, and particularly the Ministry of Finance. Policy recommendations include proposals for detailed programs which are based on up-to-date data regarding the Arab population in Israel, as well as economic knowledge acquired nationally and internationally, while taking into consideration existing customs and cultural norms in Israel, including political limitations. Research findings and recommendations are presented at public roundtable discussions held in Arab localities, with participants including Arab and Jewish professionals such as researchers, decision-makers, and senior figures from the business and public sectors.

Our collaboration with government offices, especially the Ministry of Finance, enables us to enhance the center's impact and to translate its proposals into government decisions with allocated funds, which engender the implementation of long-term policies in various fields.

Policy for Promoting High-Quality Employment among Young Adults in Israel's Arab Society

The employment rate of Israeli Arab men aged 18 to 24 has been declining since 2017. This decrease in the employment of young Arab men has been almost fully reflected in a dramatic increase in the share of young men who are not engaged in any formal framework of study or employment, which reached 32% and 26% of Arab men aged 18-20 and 21-24, respectively, at the first quarter of 2022.

Examination of the relation between the characteristics of young Arab adults and their likelihood to be disengaged from any formal framework reveals that: (1) residents of mixed Arab-Jewish cities are less likely to be disengaged, and the gap between this group and residents of other regions has expanded, a finding which may reflect macroeconomic differences in employment and education opportunities and access to employment areas, as well as disparities between young people in different regions regarding Hebrew language proficiency, considering that the situation in both respects is likely to be better in mixed cities; (2) the "strength" of the matriculation certificate in enhancing integration into further frameworks has diminished, and the share of disengaged young adults has increased among those with matriculation as well; (3) the estimate of the constant has risen, an increase which represents macroeconomic shifts in the labor market along with changes in characteristics not observed in this study, such as decreasing skill levels and Hebrew language proficiency, as well as changing preferences, all of which reduce the likelihood that young Arab adults would integrate into employment.

The phenomenon of disengaged young adults in Arab society is closely related to the lack of skills among young Arab adults and the large disparities in human capital outcomes between them and young Jewish adults at the age of 18: lower quality of high school completion certificate, lower proficiency levels in mathematics, language and digital literacy, and lower Hebrew language proficiency. These barriers are compounded by a lack of information, guidance, and transition programs for young Arab adults.

In order to increase high-quality employment among young adults in the Arab society, and reduce the share of disengaged young adults, there is a need to devise a strategy and carry out significant interventions on two levels: (1) increasing the potential of young Arab adults who are capable of integrating in education and employment by reducing the gaps in the education system; (2) increasing the utilization of the potential which young Arab adults have upon completing high school, through the creation of a framework comprising three components: diagnosis, information, counselling and guidance; further education and filling in skill gaps; and placement in employment. Ensuring the success of the entire process requires setting measurable outcome targets, accompanying the young adults throughout the process while addressing the needs of the entire range of populations, designating an umbrella organization which would integrate the whole process, and establishing cooperation among all the relevant government and civic organizations.

Table of Contents

1. Summary and Conclusions

The employment rate of Arab men aged 18 to 24 has been declining since 2017, reaching 47% at the second quarter of 2022. This decrease in the employment of young Arab men has been almost fully reflected in a dramatic increase in the share of young men who are not engaged in any formal framework of study or employment; the common term for this group in the literature is NEET (Not in Education, Employment, or Training), meaning young adults who are not involved in any formal framework of employment or human capital acquisition, sometimes also referred to as "idle". As of the first quarter of 2022, this group represented 32% and 26% of Israeli Arabs aged 18-20 and 21-24, respectively, much higher than the equivalent figure at the same ages in the non-Haredi Jewish population (10% and 14%, respectively). The share of young Arab women not engaged in any framework is even higher, and stands at around 40%.

Over 90% of young men and women in Arab society who are not engaged in any framework report that they do not seek employment, and nearly all of them are unwilling to work even if offered a job which suits their skills. Furthermore, most disengaged young men and women have not been employed for at least a year, meaning that this is an ongoing situation indicating prolonged inability to integrate in employment and low affiliation to the labor market.

Examination of the relation between the characteristics of young Arab adults and their likelihood to be disengaged, using both a descriptive analysis and an econometric model, reveals significant differences between different geographic regions. Residents of mixed cities (and, to a lesser extent, Eastern Jerusalem) are less likely to be disengaged compared to residents of other regions, in particular Southern Israel and the concentration of Arab communities known as The Triangle. The strength of the relation between place of residence and the likelihood of disengagement has steadily increased over the years, hence the gap in the rate of disengaged young adults between mixed cities and the other regions has expanded. The contribution of residing in a mixed city to the reduced likelihood of disengagement may reflect macroeconomic differences in employment and education opportunities and access to employment areas, as well as disparities between young people in different regions in Hebrew language fluency, since the situation in both respects is likely to be better in mixed cities.

The phenomenon of disengagement from any formal framework is not limited to young adults with poor education who are not eligible for matriculation. Although having a matriculation certificate reduces the likelihood that a young adult would be disengaged, compared to those without matriculation, the strength of the relation between these parameters has been declining over the years, as the rate of disengaged young adults has been on the rise even among those with matriculation. In other words, it seems that the "strength" of the matriculation certificate to enhance integration into formal frameworks has been diminishing.

Another key finding of the econometric model is a significant increase over the years in the estimate of the constant (the intersect), which comprises all the exogenous factors which are not accounted for by the explanatory variables (age, region, religion, and education) and shared by all individuals. In the context of this model, it is likely that the increase in the constant represents macroeconomic shifts in the labor market along with changes in characteristics not observed in this study, such as decreasing skill levels and Hebrew language proficiency, as well as changing preferences, all of which reduce the likelihood that young Arab adults would integrate into employment.

The phenomenon of disengaged young adults in Arab society is closely related to the lack of skills among young Arab adults and the large disparities in human capital outcomes between them and young Jewish adults at the age of 18: lower quality of high school completion certificate, where 56% of Arab boys and 32% of Arab girls are not eligible for any certificate allowing further post-secondary (tertiary) studies, and the gap between them and young Jewish adults keeps expanding; lower proficiency levels in mathematics and language, and especially digital literacy, where the rate of Jewish youths aged 16 to 18 with digital skills at an intermediate or higher level is over four times higher than that of Arab youths at this age group; and lower Hebrew language proficiency, as manifested in a significant decrease in the rate of high school graduates taking expanded Hebrew matriculation (4 or 5 study units), as well as a decrease in the reported proficiency of young Arab adults in Hebrew speaking, reading and writing. These barriers are compounded by a lack of information, guidance, and transition programs for young Arab adults. All of this hampers their ability to integrate in post-secondary study tracks – academic education, technological education, and vocational training – and to successfully complete them, as well as their ability to integrate into high-quality employment.

In order to increase high-quality employment among young adults in Arab society, and reduce the share of disengaged young adults, there is a need to devise a strategy and carry out significant interventions on two levels:

(1) Increasing the potential of young Arab adults who are capable of integrating in education and employment by reducing the gaps in the education system – raising student performance in the Arab education system, reducing manifest and latent dropout rates, and investment in imparting skills. Specifically, we recommend setting targets (differentiated between boys and girls) in regard to the rates of matriculation examinees in Hebrew language and the rates of matriculation eligibility and high-quality matriculation eligibility, as well as adapting the pedagogic content of Hebrew studies, improving the level of digital literacy, improving the quality of teaching and management, and investment in weaker pupils.

(2) Increasing the utilization of the potential which young Arab adults have upon completing high school, and particularly retaining those who integrate into post-secondary educations tracks (academic, technological, and vocational), through the creation of a framework comprising three components: (a) diagnosis, information, counselling and guidance, starting during school years and throughout the way, while addressing the needs of all young people across all achievement and proficiency levels; (b) further education and filling in skill gaps: post-secondary studies in academic, technological, or vocational tracks, as well as – for those not proceeding directly to such studies – pre-academic courses, transition year programs, or civic service; and (c) placement in employment.

Ensuring the success of the entire process requires setting measurable outcome targets for academic performance by the age of 18, for integration into the various frameworks, and for the rate and quality of employment; accompanying the young adults throughout the process while addressing the needs of the entire range of populations; designating an umbrella organization which would integrate the whole process; and establishing cooperation among all the relevant government and civic organizations.

2. Background

The phenomenon whereby a high share of young adults in Arab society are not engaged in any formal framework in not new. Thus, for example, Eckstein and Dahan (2011) found that the rate of NEET among young Arab adults aged 18-22 (males and females) was around 40% in 2009, more than twice in comparison to the same age group in the Jewish population. This rate remained stable throughout the first decade of the 21st century, and this is particularly remarkable considering the dramatic increase in the education rates of Arab youth over the same period. Eckstein and Dahan present several hypotheses which may explain the gap between Jewish and Arab young adults in the rates of disengaged individuals: cultural differences regarding preferences, differences in opportunities, and policy.

Miaari and Haddad Haj-Yahya (2017) highlight the unique attributes and barriers of young Arab adults, which explain the prevalence of idleness among them. Arab youth face transition from high school to the labor market, or to higher education, at a younger age than the majority of Jewish youth, skipping the stage of military or national-civic service. For a large share of Jewish youth, this service constitutes a preparatory phase for independent living, provides skills conducive to occupational choice and job searching along with relevant skills for the labor market, and fosters networking.

The prevalence of disengaged young adults has considerable negative consequences on the economic and social levels. The longer the young man or woman is NEET, the lower their chances of subsequently integrating into any formal framework of education or training, as well as their chances of integrating in the labor market (Haddad Haj-Yahya, 2019). Furthermore, studies on such population groups in various places around the world reveal negative consequences including isolation and social estrangement, loss of trust in society and its institutions, and involvement in crime. Young Arab men who are NEET are at increased risk of succumbing to the temptation of getting involved in the criminal world, particularly if they cannot see any feasible opportunity in the employment market, while the criminal world offers them “easy money” and a sense of belonging.

The connection between disengagement from formal frameworks and the prevalence of crime and violence in Arab society was also featured in the Report of the Director-Generals' Committee (2020). This report points out that the rate of Arab citizens' involvement in severe crime, as well as other types of crime, is notably higher than their proportion in the population. Furthermore, the disparity in the rate of criminal offenses between Arab and Jewish citizens is higher among the younger population, and the share of young Arabs in criminal involvement is considerably higher than the corresponding share among their Jewish counterparts. The authors of that report list the downturn in the employment rates of Arab men as one of the causes for the prevalence of violence and crime, pointing out an employment policy "which have neglected young Arab men", and stressing in particular the association between idleness and involvement in crime. Consequently, a key recommendation made by The Director-Generals' Committee is to reduce the phenomenon of NEET young Arab men.

The phenomenon of NEET young Arabs is closely related to the lack of skills and the low level of human capital in the Arab society. Several studies conducted by the Center for Economic Policy of the Israeli Arab Population at the Aaron Institute, as well as the Chief Economist Division at the Israeli Ministry of Finance, point to the human capital disparities between Israel's Arab and non-Haredi Jewish populations as the main cause of the employment and wage gaps between these two groups (Tehawkho, 2019). The decrease in the employment of Arab men has been particularly pronounced among young adults with low educational level. The direct economic consequences of the inability of young adults to integrate into post-secondary academic and non-academic education, along with their dearth of opportunities and poor chances to obtain high-quality employment, are manifested in the Arab population's low rates of employment, low labor productivity, and low income. If the current trend persists, it may result in widening economic disparities between the Arab population and the general population in the long term as well, particularly against the backdrop of the ongoing increase in the demand for skilled and educated workers, along with the decrease in employment opportunities and wages in low-skilled occupations and sectors. Beyond these economic implications, as previously stated it is impossible to overlook the association between the prevalence of NEET and the substantial increase in the criminal involvement of young Arabs in recent years.

3. Employment Trends and the Extent of NEET among Young Adults

The analysis in this section, as well as the next two sections, is based on detailed Labor Force Surveys conducted by the Israel Central Bureau of Statistics (CBS) which can only be accessed in the CBS Research Room, excluding permanent samples. Employment rate is calculated conventionally, according to the characteristics of the weekly labor force. Soldiers in mandatory service are considered employed.

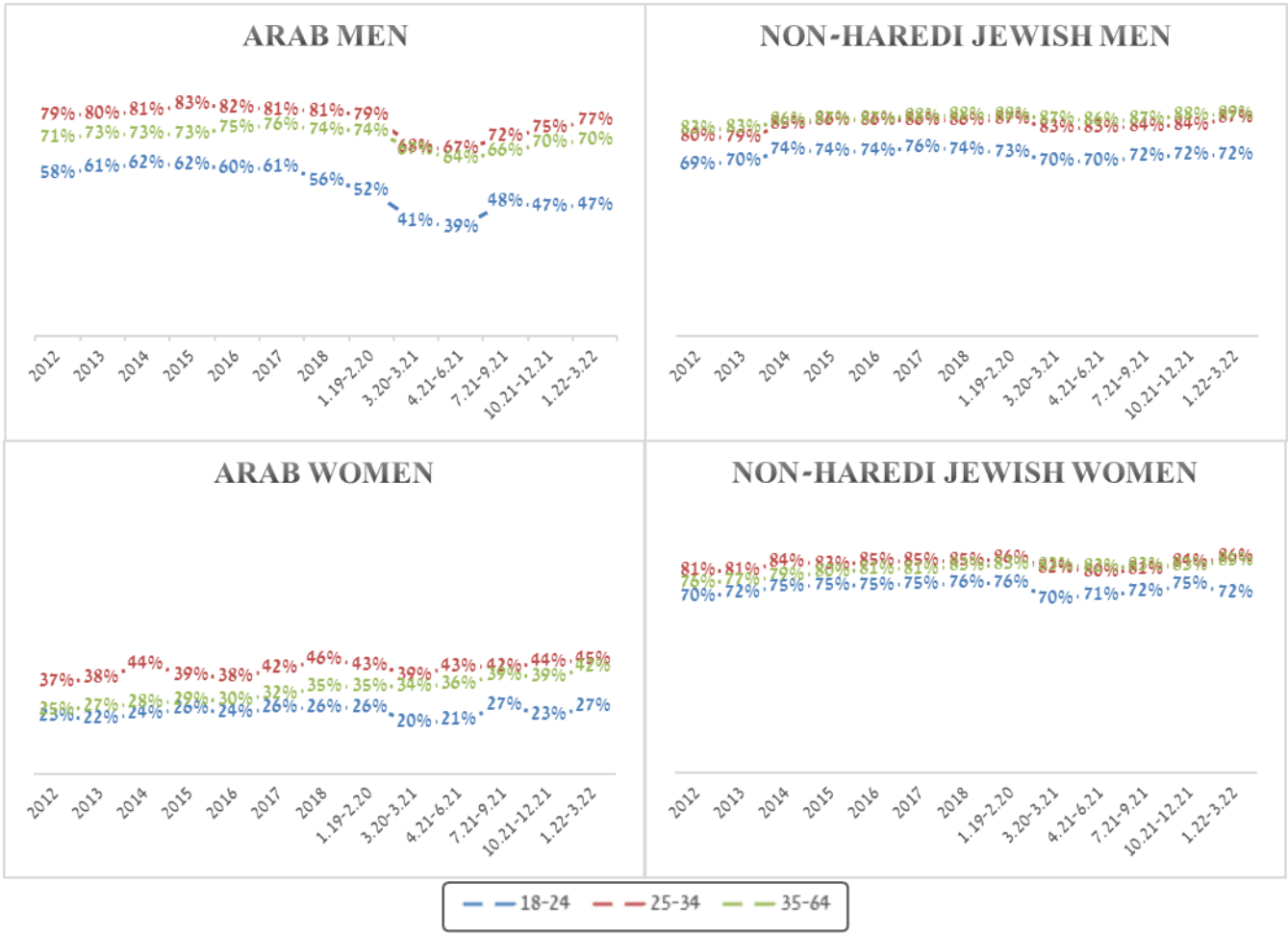
Figure 1 presents the employment rates of men and women in the Arab and non-Haredi Jewish populations, segmented into three age groups: 18-24, 25-34, and 35-64. The data refer to the period between the year 2012 and March 2022 (the most recent data available at the time this paper was written), according to the following distribution:

- From 2012 to 2018 – annual data;
- From January 2019 to February 2020 – summarizing the period just prior to the outbreak of the COVID-19 crisis;
- From March 2020 to March 2021 – referring to the period of the COVID-19 pandemic in Israel, during which three lockdowns were imposed;
- Since April 2021 and the exit from the crisis – quarterly data.

It can be seen that since 2017 there has been **a decrease in the employment rates of Arab men, which is most pronounced among young men aged 18 to 24;** the employment rate of this group had dropped from 61% to 52% between 2017 and 2019. Employment rates of Arab women have not changed significantly, but we can see that in 2019 there was a halt in the increase in employment that characterized the preceding years. Beyond that, the biggest impact of the COVID-19 crisis was felt among Arab men at all age groups, who experienced the largest drop in employment rates, and whose employment rates remained low even after the lockdowns were lifted.[1]

[1] When excluding furloughed workers (those who were absent from their workplace due to reasons related to the COVID-19 crisis), the employment rates are even lower than depicted in Figure 1.

Figure 1: Employment rate by gender, population group, and age



The employment rate is calculated conventionally according to the characteristics of the weekly labor force, and includes furloughed workers.

The life course of young Arabs aged 18 to 24 is different from that of non-Haredi Jews of the same age. In order to explore the characteristics of the decline in employment among Arab men in this age group, and the phenomenon of NEET, we divide them into two groups:

- Ages 18-20 – at the age of 18, all young adults are in their first year following high school completion (some are still in 12th grade) and non-Haredi Jews are about to begin their military service, and at the age of 19-20 most non-Haredi Jews serve in the army while Arabs pursue employment or further education;
- Ages 21-24 – young Jewish adults are making their first steps following their discharge from the army; some of them go abroad for their "post-army trip", while some pursue further education and others seek employment, whereas in Arab society, young adults at this age are supposed to be employed or nearing the completion of their studies.

The decrease in employment among Arab men in both age groups started in 2017, while in the Jewish population and among Arab women there had been no significant change in employment rates prior to the outbreak of the COVID-19 crisis. Differentiating employment by economic sectors shows that the decrease in the employment of young Arab men prior to the crisis was across the board and within all sectors,[2] whereas during COVID-19 the biggest blow was felt in the construction sector, where the share of employed persons dropped by 5 percentage points between 2019 and 2021. It should be noted that employment rates of both men and women in the Arab population increase with age, while among men and women in the non-Haredi Jewish population the employment rates at military service ages 19-20 are higher than they are following the completion of the military service at ages 21-24 (soldiers in mandatory service are considered employed).

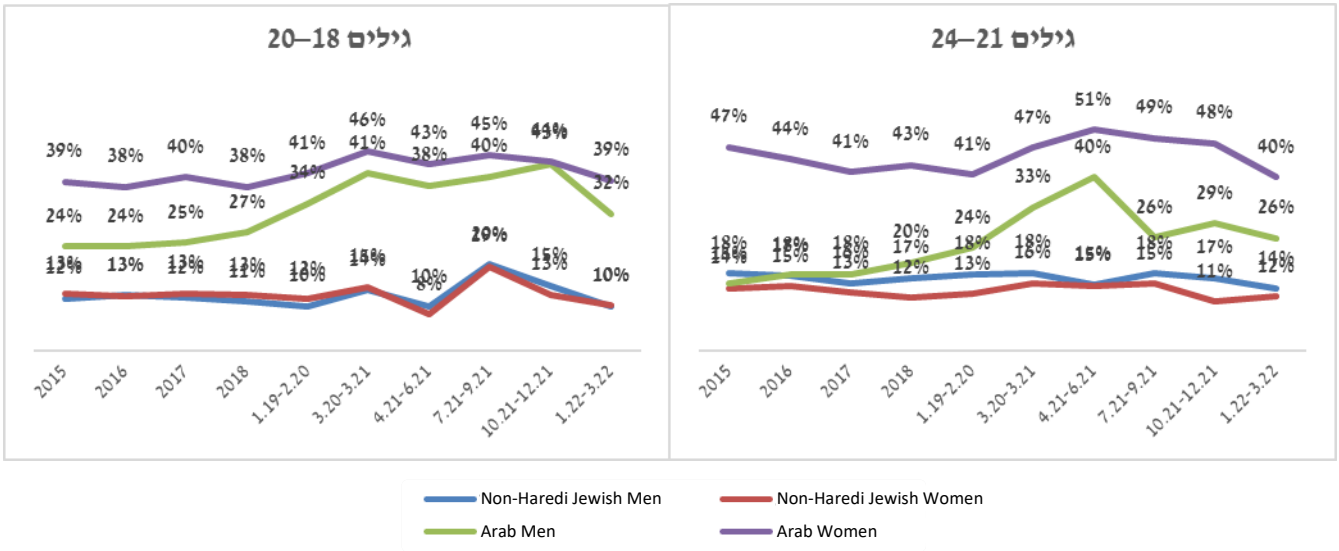
If the decrease in the employment of young Arab men had been translated to an increase in the rate of those pursuing post-secondary education (academic or non-academic), it would have been a positive trend, but that is not the case. Classifying young adults into four categories – studying, studying and working, working, and NEET – shows that **the decrease in employment of young Arab men has been almost fully reflected in a dramatic increase in the share of NEET young adults,** an increase which continued and intensified during the crisis.[3]

Figure 2 presents the share of NEET young adults. **The rate of NEET among young Arab women is the highest throughout the whole period, standing at 38% or more** among both age groups, 18-20 and 21-24. The rate of NEET young Arab men was lower compared to the women, and in the 21-24 group it had even been close, up until 2017, to the rate of NEET among Jewish men and women. As stated above, the rate of NEET among young Arab men began increasing significantly among both age groups since 2017, and particularly since 2020, hence the gaps between them and Arab women have decreased and the gaps compared to young Jewish adults have vastly increased.

[2] An analysis of all Arab men aged 15 and over presents a different picture, where the decline in employment is concentrated mainly in the construction and manufacturing sectors (Ministry of Finance, 2021).

[3] The classification into categories is based on the response to the question: "do you, or did you, study in any educational institution?". In some years, the phrasing of the question was more detailed: "including studies in a university, a yeshiva, a course spanning at least one year, and so forth." It should be noted that the Labor Force Survey does not specifically refer to vocational training courses, thus it is possible that some young adults who participate in short training courses are classified as NEET. This topic is examined as part of a follow-up study which also incorporates individual administrative data.

Figure 2: The share of NEET young adults by population group, gender, and age



Just before the onset of the crisis, the share of NEET young Arab men aged 18-20 was 34%, nearly thrice compared to their Jewish counterparts (men and women). It is important to remember that the majority of young Jewish adults at these ages are engaged in military or national-civic service. At the onset of the crisis, the share of NEET young adults increased across all groups, yet the increase among young Arab adults was higher, and even more so among Arab men than among Arab women.

4. Characterizing NEET Young Adults

This section focuses on the young men and women in the Arab society who are NEET, and classifies them according to the attributes of their employment and job search as well as their personal characteristics.

Classification of NEET young adults in terms of their belonging to the monthly labor force – whether or not they sought employment in the four weeks preceding the survey – shows that **over 90% of young Arab men and around 95% of young Arab women who are NEET report that they have not sought employment in the last month.**

An even more dismal and concerning picture emerges when classifying NEET young adults who are not seeking employment according to their response to the question: "are you interested in taking up employment right now in a position which suits you?" **Nearly all NEET young adults who are not seeking employment report that they would not be interested in taking up employment, even if offered work which matches their skills.**

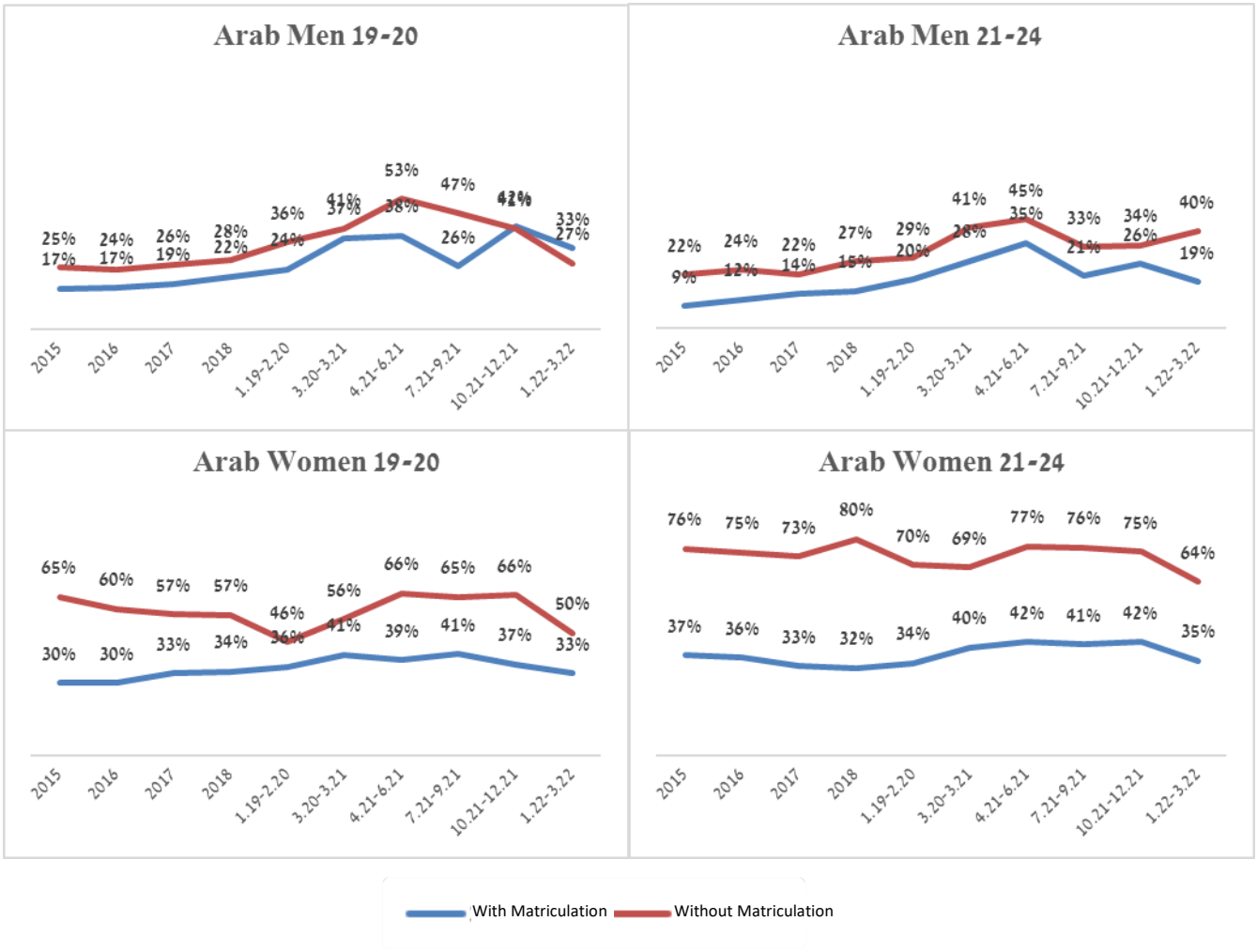
A situation where young adults are disengaged from any formal framework of education, training or employment may last for a short period of time, from one month to a few months, while they are transitioning between jobs or between education and employment, in which case it is less of a concern. However, when such disengagement lasts a year or more, this phenomenon becomes more concerning and requires intervention, as it indicates a chronic condition which may have long-term social and economic effects. Classifying NEET young adults according to the number of months in which they worked during the last year (annual labor force characteristics) shows that **the majority of NEET young men and women report that they have not worked for at least a year.**[4] Among males, the share of NEET individuals who have not worked for at least a year has kept increasing over the years; in 2015, 13% of Arab men aged 19-20 were NEET and had not been employed for at least a year, and this rate increased to 21% in 2019 and reached 32% in the second and third quarters of 2021. A similar trend can also be seen in the 21-24 age group, of whom 8% were NEET and non-employed for a year in 2015, and this figure increased to 16% in 2019 and 22% in 2021. Therefore, the dramatic increase in the share of NEET individuals cannot be attributed to young adults who are employed intermittently (frequently moving in and out of the labor market), but to an ongoing situation which indicates an inability to integrate in long-term employment and low attachment to the labor market.

[4] In this analysis, the younger age group consists of those aged 19-20 and does not include 18-year-olds, as most of them are still in high school the previous year. Annual employment rates are calculated out of all young adults of the relevant ages.

Ostensibly, it could be assumed that the ability of young adults to integrate in education, training or employment is correlated with the quality of their high school completion certificate; if indeed that was the case, the rise in matriculation eligibility witnessed in the Arab school system over the last decade should have contributed to reducing the phenomenon of young adults who refrain from integrating into any formal framework upon high school completion. However, as previously noted, actually the opposite is true.[5] Figure 3 shows the rate of NEET among young adults according to their matriculation eligibility status. In this classification as well, the younger age group comprises those aged 19 to 20 and excludes 18-year-olds, since some youths at this age are still in high school and have not yet had the chance to take all matriculation exams. As we can see, the likelihood of young Arab men and women to be NEET is lower among individuals with a matriculation certificate. Nevertheless, **among males there has been an increase in the rate of NEET among those who earned matriculation as well as those without it, and correspondingly the increase in the rate of NEET among males has occurred in parallel with the increase in matriculation eligibility.**

[5] For matriculation eligibility data see Tehawkho et al. (2022), Figure 4.

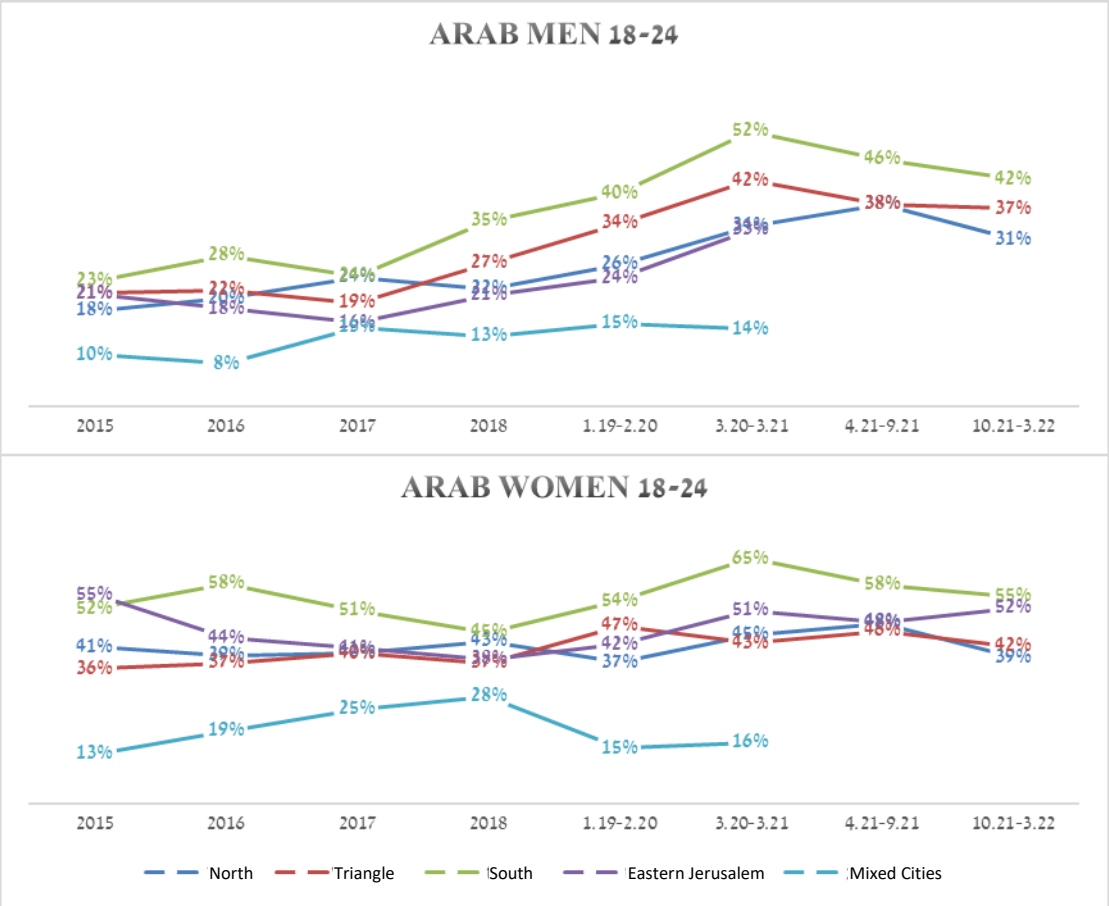
Figure 3: The share of NEET Arabs by matriculation eligibility, gender, and age



The Arab population is not homogenous, and the ability of young adults to integrate into education, employment or training may also be influenced by their region of residence and religion. Thus, for example, the demand for workers varies across different regions, and it is plausible that mixed cities offer more employment opportunities than the geographical periphery, and also that the level of Hebrew language proficiency is higher among the Arab residents of mixed cities. The fact that Druze serve in the Israeli army increases their employment rates in the years following high school completion (as previously mentioned, soldiers in mandatory service are considered employed), and may also enhance their chances of integrating into education and employment afterwards.

Figure 4 presents the share of NEET young adults according to their region of residence. In this analysis we include all young adults aged 18 to 24, without dividing them into age subgroups, due to the small numbers of observations in some of the groups. It can be seen that throughout the years, the share of NEET young adults has been highest in the south and lowest in mixed cities, among males and females alike. The increase in the rate of NEET among males has been larger in the south and the "Triangle" area than in the north and Jerusalem, while in mixed cities the change has been substantially smaller, hence the gaps between the different regions have steadily increased.

Figure 4: The share of NEET Arabs by region of residence and gender



Data for mixed cities is not displayed for latest two periods due to the small number of observations. Data for the southern region does not include the Bedouin diaspora, hence the actual situation is probably even worse.

Analysis by religion reveals that the rate of NEET among Muslim males and females has been higher than that of Christian males and females throughout the years. While Muslim and Christian males have exhibited a similar upward trend, among Druze males it has been more fluctuating and mixed, whereas females in all three groups have exhibited a more moderate increase in the rate of NEET. Unlike Muslims and Christians, Druze are obliged to mandatory military service, and IDF data indicate that their conscription rate is among the highest of any population group in Israel, reaching 80%.[6] One can expect that military service would have a negative effect on the share of NEET young adults, both during service and afterwards; the data we analyzed does not suggest such an effect, however the small number of observations of Christians and Druze in our sample does not allow for more in-depth analyses of these two groups.

[6] Source: https://www.idf.il; we would reiterate that those serving in the IDF, either in mandatory or career service, are considered in employment rather than NEET.

5. An Econometric Model for Estimating the Correlation between Background Characteristics and NEET among Young Arabs

The descriptive analysis in the previous section depicts the correlation between each characteristic of young Arab adults and the rate of NEET among them. In order to examine the effect of all characteristics, and isolate the correlation between each individual characteristic and the likelihood of a young adult to be NEET, we estimate an econometric Linear Probability Model (LPM), where the explanatory variables are age, region of residence, religion, and educational level. The model is estimated using Labor Force Surveys data for 2015 to 2019 for young Arab men and women and young Jewish men and women (including others, excluding Haredi Jews), at the ages of 18 to 24, for each year separately. Using a linear probability model and estimating the model for each year separately allow us to compare the coefficients over time and to assess whether there have been changes in the correlation between the various characteristics and the probability of NEET, changes which may reflect macroeconomic trends in the labor market.

The dependent variable receives the value D=1 if the individual is NEET (neither working nor studying) and zero otherwise. The reduced form of the LPM equation is:

$$D_t^j = \alpha_{0j} + \sum_{a \in age-group} \alpha_{1aj} age_t + \sum_{r \in residence} \alpha_{2rj} residence_t + \sum_{R \in Religion} \alpha_{3Rj} religion_t + \sum_{e \in education} \alpha_{4ej} education_t + \varepsilon_{jt}^D$$

where age comprises two dummy variables, one for ages 18-20 and the other for ages 21-24; $residence$ comprises five dummy variables: northern region, the Triangle, southern region, Jerusalem, and mixed cities; $religion$ comprises three dummy variables: Muslim, Christian, and Druze; and $education$ comprises three dummy variables: no matriculation, matriculation, and post-secondary education (technicians, practical engineers, or Bachelor's degree).[7] The estimation results for young Arab men between the years 2015-2019 are presented in Table 1.

[7] For Arab females, the model also includes another dummy variable which receives the value 1 for a married woman and 0 otherwise. For non-Haredi Jewish men and women, the model does not include dummy variables for religion and *residence* comprises six dummy variables: Judea & Samaria, Jerusalem, Haifa, Central district, Tel Aviv, and Southern District.

Table 1: Coefficients of the LPM for young Arab men, ages 18-24, between 2015 and 2019

	2015	2016	2017	2018	2019
Ages 18-20	0.089	0.055	0.069	0.048	0.103
The Triangle	0.028	0.024	-0.057	0.050	0.062
South	0.046	0.080	-0.018	0.104	0.110
Jerusalem	0.022	-0.014	-0.093	-0.016	-0.024
Mixed Cities	-0.054	-0.082	-0.053	-0.066	-0.076
Christian	-0.013	-0.043	-0.103	-0.040	-0.075
Druze	0.029	0.094	0.011	0.004	-0.074
Has Matriculation	-0.086	-0.070	-0.053	-0.065	-0.030
Post-secondary Education	-0.026	-0.082	-0.055	-0.146	-0.090
Constant	0.177	0.204	0.250	0.241	0.246
Number of Observations	3,974	4,247	4,228	4,406	4,197

Omitted group: Muslim men aged 21 to 24 who reside in the northern region and do not have matriculation. The estimate in the shaded cell is not statistically significant.

The results indicate that young Arabs aged 18 to 20 are more likely to be NEET, compared to those aged 21 to 24, and the gap between these two age groups have increased over time, as opposed to non-Haredi Jews where those aged 18 to 20 are less likely to be NEET.

The correlation between the region of residence and the likelihood of being NEET fluctuates, but **it is clear that the likelihood of being NEET is lower among residents of mixed cities** (and also, to a lesser extent, among residents of Eastern Jerusalem) in comparison to all other regions, particularly the Triangle and the south. Furthermore, **the strength of the correlation between the region of residence and the probability of NEET has been increasing over the years,** as is also evident in the growing gap in the rate of NEET between mixed cities and other regions, which was described in the previous section. The contribution of residence in a mixed city to the reduced likelihood of being NEET may reflect macroeconomic differences in employment and education opportunities and in access to employment hubs, as well as differences between the young adults residing in different regions in characteristics which are unobservable within the scope of this study, such as the level of Hebrew language proficiency; in all likelihood, both employment opportunities and Hebrew language proficiency are better in mixed cities.

The probability that young Christian adults would be NEET is lower in comparison to young Muslim adults, while the probability of NEET among young Druze adults is higher in the earlier years and only lower in the last year, a surprising finding given the fact that most Druze men serve in the IDF, as mentioned in the previous section.

The probability of NEET among those with a post-secondary certificate is lower in comparison to those who only have matriculation (except in the first year), and obviously also in comparison to those without matriculation. **Having matriculation reduces the likelihood of young adults to be NEET in comparison to those without matriculation, however the strength of the correlation between those variables has been diminishing over the years;** in other words, it appears that the "strength" of matriculation to enhance integration in education and employment has diminished. This finding is consistent with the increase in the rate of NEET even among those with matriculation, as described in the previous section.

The estimate of the constant (the intercept) has increased significantly over the years, particularly between 2016 and 2017. In a Linear Probability Model, the constant contains all the exogenous factors that are not included in the explanatory variables (age, region, religion, and education) and are shared by all individuals, especially macroeconomic shifts in the economy and policy changes. In the context of the current model, **it is likely that the increase in the constant represents structural changes in the labor market**, particularly a possible increase in the demand for skilled workers, as well as changes in characteristics which are not observed in this study, including average levels of skills and of Hebrew language proficiency, which have declined in recent years. **These changes reduce the ability of young Arabs to integrate in high-quality employment**, as described in the next section. It may also be a matter of changing preferences among young Arabs and a decline in their willingness to integrate in low-quality employment, for example in the construction and manufacturing sectors.

6. Possible Causes for the Decrease in Employment and the Increase in the Prevalence of NEET among Young Arabs

As previously stated, the phenomenon of young Arabs who are not engaged in any education, training or employment framework is not new, and their rate was higher in comparison to young Jewish adults in the past as well, however the findings in this study indicate that among Arab males this phenomenon has expanded and reached alarming proportions in recent years. In this section we present some data which may provide a possible explanation for both the high share of young Arab men and women who fail to integrate into any formal framework after finishing high school, as well as for the sharp increase in this trend among young Arab men in particular, which parallels the decrease in their employment.[8]

6.1 Disparities in Human Capital Levels at the Age of 18

The ability of young people, upon finishing high school, to integrate into post-secondary studies – either academic, technological or vocational – and subsequently move on to high-quality employment, hinges on the level of human capital they have acquired by the time they finish high school. Human capital is manifested both in school achievement, particularly the quality of certificate earned at the end of 12th grade, and in skill levels. Israel's Arab population is poorer, less educated, residing in the periphery, and characterized by weaker local authorities. The ability of parents, communities and authorities to invest in children's education is lower, and the education system – which is expected to equip young people with a set of tools for high-quality integration in further education and employment, along with opportunities for social and economic mobility – is weak in and of itself and incapable of providing its graduates with the necessary skills for the modern labor market, hence the performance gaps in comparison to the Hebrew education system have been and still are large. In addition, Arab youth participates less in informal education programs and activities, such as youth movements and after-school courses, which impart to their participants abilities and skills not provided by formal education. As a result, there are substantial disparities between young people by the time they reach the age of 18, in their skills and abilities as well as their academic performance (for further discussion, see Tehawkho et al.,

[8] More precise explanations require further study, which would include analysis of individual data from administrative sources as well as a qualitative component to examine the changes which have occurred among young Arabs.

2022). This is true for both boys and girls in Arab society, but boys are more severely affected by those barriers, as can be seen in the data presented below in this section.

Quality of High School Completion Certificate

We classify the cohort of 18-year-olds according to their achievement level at the end of 12th grade, divided into three groups which are defined according to their ability to proceed to post-secondary studies: eligible for matriculation which meets the threshold requirements for academic studies; eligible for a certificate which meets the threshold requirements for non-academic post-secondary studies (technician/practical engineer qualifications, which yield a higher return in the labor market compared to high school graduates with no further education, comparable even to the return on academic studies in some fields); and not eligible for any certificate which meets the threshold requirements for post-secondary education (including students who completed 12 years of study in the school system and those who dropped out of the school system, moved to an alternative framework, or remained disengaged from any formal framework).

Out of the age cohort, the rate of eligibility for matriculation allowing post-secondary studies has been lower throughout the years among boys and girls from the Arab society, in comparison to their Jewish counterparts, and is particularly low, with a substantial gap from all other groups, among Arab boys. Furthermore, this rate increased for nearly all groups between 2015 and 2019 (except for Arab girls, for whom it remained unchanged), yet the increase among Jews was slightly higher, hence the gaps only grew larger. As of 2019, 81% of Jewish males aged 18 were eligible for a certificate allowing post-secondary studies, nearly double compared to Arab males for whom this rate was only 44%. In other words, 56% of Arab boys are not eligible for any certificate which would enable them to pursue further studies, as opposed to only 19% of Jewish boys. A gap exists among girls as well, but it is smaller (89% of Jewish girls are eligible for a certificate allowing post-secondary studies, compared to 68% of Arab girls).

A similar picture emerges when considering the eligibility rate for a certificate allowing academic studies. While this rate has increased across all groups, its increase among Jewish males and females was higher, resulting in a wider gap between them and their Arab counterparts (an increase of 10 and 8 percentage points among boys and girls in Jewish society, respectively, compared to an increase of 7 and 6 percentage points among Arab boys and girls, respectively). By this metric, as well, the situation of Arab boys is the worst; in 2019, only 33% of them were eligible for matriculation allowing academic studies, around half of the corresponding rate among Jewish boys, which was 67%. Among girls there is also a significant gap, albeit smaller in comparison to the boys; the rate of eligibility for matriculation allowing academic studies among Jewish girls is 1.4 times their rate among Arab girls (78% compared to 56%, respectively).

Skills

The level of human capital at the age of 18 is also measured by additional competencies which are not directly based on the materials taught in the school system, and not necessarily tested in matriculation exams. Evaluating the performance of young Arab and Jewish adults in international assessments such as PISA and PIAAC reveals very large disparities, some of which have even increased further in recent years. Arab boys were the worst performers in the math section of the PISA test in 2015 and 2018, and their performance even declined between those years, while in all other groups (Jewish boys, Arab girls and Jewish girls) performance improved slightly or remained unchanged, meaning the gaps between Arab boys and the rest of the population only grew wider.[9]

PIAAC scores also reveal very large gaps between Arabs and Jews, with the most pronounced disparity found in digital literacy, measured through a test called Problem Solving in Technology-Rich Environments; the share of Jews aged 16 to 18 whose digital proficiency levels are intermediate or higher is over four times higher than that of Arabs at the same ages (42% versus 10%).[10] Disparities in digital literacy levels have a crucial impact on the ability of young Arabs to integrate in the labor market, in academic or technological post-secondary education, and in vocational training, due to the ongoing rise in the use of

[9] PISA (Programme for International Student Assessment) is an international assessment conducted by the OECD among high school students at the age of 15, examining their proficiency levels in three domains: reading, math, and sciences.

[10] PIAAC (The Programme for the International Assessment of Adult Competencies) is an international assessment conducted by the OECD among adults aged 16 to 65, examining the competencies and abilities of the adult population in three domains of basic literacy: language literacy (native language), math, and problem solving in technology-rich environments.

digital tools in all these spheres (for further reading on disparities in digital literacy and particularly within the education system, and their consequences, see Tehawkho, Axelrad, and Matar, 2021; Kalisher et al., 2022).

Hebrew Language Proficiency

The substantial gaps between Arabs and Jews by the age of 18 are compounded by an additional barrier, unique to Arab society, which is the low level of Hebrew language proficiency. This proficiency is crucially important for the ability of young adults to integrate in, and graduate from, post-secondary education, as well as their ability to integrate in high-quality employment. A previous study by the Aaron Institute (Tehawkho, Kalisher, and Moskalev, 2020) found a significant correlation between the level of proficiency in spoken Hebrew and the likelihood of young Arabs to be employed. Thus, for example, the chances of males and females aged 18-24 with a high proficiency level in spoken Hebrew to enter employment are higher by 24.6 and 21.8 percentage points, respectively, in comparison to young males and females with low Hebrew proficiency who are similar in all other characteristics.

Nevertheless, it appears that the importance attached by the Arab school system and its students to Hebrew language studies has been steadily declining over the years. Through the years, there has been a marked decrease in the share of Arab students taking an expanded matriculation exam in Hebrew (4-5 study units), out of all students who have taken matriculation exams in at least one subject – from 35% in 2015 to 15% in 2019 among boys, and from 58% to 32% among girls. In addition, there is a substantial gap in favor of girls in the share of those taking Hebrew matriculation, particularly in regard to expanded matriculation. There has also been a downward trend in recent years in the mastery level of the Hebrew language among young adults in Arab society, with regard to speaking as well as reading and writing, as measured by the rate of those reporting at least a “good” mastery level in the Social Survey conducted by the CBS.

6.2 Lack of Information, Guidance and Transition Programs for Young Arabs

The decision regarding the choice of life and career course upon the completion of schooling is one of the most important decisions in the life of every young person, and it is influenced by the information and guidance they receive from their environment, family, school or any other institution they attend, and community. Therefore, the socioeconomic background of young people and the quality of the institutions they attend have a crucial effect on their course of life. For most Jewish young adults, military service acts as a transitional phase in this important stage in their life between the completion of schooling and the beginning of their adult life, and usually they go through diagnosis, counselling and the deliberation regarding "what would I do when I grow up" before and during their military service (and some also undergo this process as part of programs such as pre-army gap year, pre-military leadership academy, academic training programs for prospective officers such as Talpiot and Atuda, mandatory police service [SHAHAM] or national-civic service). There are many programs that target youth at the ages of 16-17 in order to prepare them for military service, while addressing the specific needs of each target population.

On the other hand, Arab young adults who finish high school and embark on their adult life are faced with a "vacuum," where the vast majority of them do not have any formal framework into which they could be integrated.[11] They are forced to make up their minds immediately regarding their next steps, mostly without any information or guidance from their parents or the system, while also lacking the necessary maturity for such decisions. Consequently, even young people with high achievements may not always make the right choices regarding their academic track, as demonstrated by the excess of graduates in the fields of teaching and education, and by the large proportion of young adults who choose to study abroad and are unable to integrate into employment upon graduation (Krill and Amaria, 2019). The situation is even worse among lower performers, particularly those not eligible for matriculation (who represent over 55% of boys), and their chances of integrating in post-secondary education or high-quality employment are small to nonexistent.

[11] Currently there are hardly any transition year programs for young Arabs, and most of those available are targeting two population groups: the weakest strata or the highest performers.

6.3 Gaps in Integration into Academia

The low academic achievements upon finishing high school, particularly among Arab boys, are translated to very low rates of integration into academic studies. As of 2019, only 12% of Arab males completed an academic degree, a rate which is 3.5 times lower than that of Jewish males, for whom it stands at 43%. The situation among Arab females is better, but they also lag far behind Jewish females, as the share of academic degree holders among Arab women is 30%, while among Jewish women it is twice as high at 62%.[12]

[12] Data do not include young Arabs studying abroad or in the Palestinian Authority, who are roughly estimated to represent around 25% of Arab students.

7. Policy Measures for High-Quality Integration of Young Arabs in Society and the Economy

The data presented in the previous section points to substantial disparities in human capital – educational and skill levels, as well as quality of education – between Arab and Jewish young adults. These disparities, alongside the ongoing trend in the labor market of increasing demand for educated, highly skilled workers, create a reality in which the Arab young adult is becoming increasingly less attractive for the labor market, and unable to integrate into it.

7.1 Potential versus Utilization of Potential

In order to change this reality, and work towards reducing the gaps in human capital and enhancing the ability to integrate in high-quality employment, there are three junctures for intervention: (1) improving academic achievements by the age of 18; (2) improving the integration into programs and institutions where human capital is acquired – academic education, technological education, and vocational training; and (3) successful completion of these programs. The first juncture focuses on increasing **potential**, i.e., the population capable of integrating into education and training frameworks, while the two other junctures are concerned with **utilization of this potential**. A preliminary analysis of young Arabs and Jews in those three junctures (achievements upon finishing high school in 2015, rate of integration into education and training institutions in 2017, and the completion rate of these institutions in 2019) enables a rough estimate of the scope of potential and its utilization in each population group.

An analysis which groups together individuals who integrate into academic and technological education suggests that the **disparities in potential are more substantial than the disparities in the utilization of potential.** Among men, there is almost full utilization of the potential in terms of entering post-secondary academic and non-academic education: 39% of Arab males integrate into academic studies and technological education, and this rate is close to the rate of high school graduates whose achievements qualify them for integration into these frameworks, which stands at 42%. Considering the fact that some young Arabs pursue academic studies abroad, the rate of integration in post-secondary studies is actually even higher, and may even exceed the potential. Among Jewish males, the rate of integration into these frameworks in 81%, slightly higher than the rate of high school graduates whose achievements qualify them for integration into these frameworks, which

stands at 76%.[13] A similar picture emerges among Arab and Jewish females, with nearly full utilization of the potential for entering post-secondary education, allowing for the assumption that around one third of female Arab students study abroad, and adding them to the 35% who integrate into academic studies in Israel (which brings the total rate of integration in academia close to 53%).

The most significant difference between males and females is in the ratio between academic and technological education, as more women favor academic studies compared to men. As for the rate of integration into vocational training, it appears that it could be increased significantly, in particular among Arab males; only 10% of them embark on training courses, whereas the potential is at least 58%. Our analysis further reveals that the dropout rate from educational institutions is higher in the Arab population, among both genders – the ratio between graduation rate and enrolment rate is smaller among Arab males and females, in comparison to their Jewish counterparts. The conclusion emerging from this preliminary analysis is that **the most significant junctures for intervention are at the school system phase, in order to help reducing the gaps in potential, followed by interventions during the post-secondary education phase aiming to retain those enrolled in institutions and help them graduate successfully.**

7.2 Strategy for High-Quality Integration of Young Arabs in Society and the Economy

Increasing the rate of high-quality employment among young Arab adults while reducing the rate of NEET among them require devising strategies and making significant interventions from an early age, starting as early as the schooling phase. **The vision of all stakeholders should be increasing the ability of young Arabs to optimally integrate in society and the economy, by removing the barriers which hinder the enhancement and the utilization of their potential.** Realizing this vision requires investment in human capital from an early age, and equipping young people with the tools for successful integration into high-quality frameworks for human capital acquisition, followed by integration in the labor market. As previously stated, achieving this goal necessitates action on two levels: the first is **increasing the potential pool** of young Arabs who are capable of integrating in education and employment, by reducing the gaps in the education system – improving student performance in the Arab school system, reducing manifest and latent dropout, and investing

[13] Young Arabs and Jews who complete their matriculation requirements after finishing high school are not represented in the aggregate data, and therefore not included in the potential.

in the acquisition of skills. Detailed recommendations for improving Hebrew language proficiency levels and reducing gaps in the education system are listed in previous policy papers published by The Center for Economic Policy of the Israeli Arab Population at Aaron Institute (Tehawkho, Kalisher, and Moskalev, 2020; Tehawkho et al., 2022). With regard to Hebrew proficiency, we recommend adapting the pedagogical content of Hebrew tuition in the Arab school system to the requirements of academia and the labor market; dividing Hebrew classes into two levels, mandatory (3 study units – the level required for entering the labor market and making everyday conversation) and expanded (5 study units – the level required for entering academia and participating in professional discourse); changing the manner of testing for Hebrew language matriculation, including spoken language, so that test scores would reflect the students' level of knowledge and inform academic institutions and employers regarding their abilities; setting targets for the share of graduates at every level of study – at least 90% of graduates of the Arab school system will take matriculation exams at a level of 3 study units, and half of them will take expanded 5-unit matriculation; developing digital contents and tools; and increasing exposure to Hebrew speakers. In order to reduce the gaps in the education system, we recommend setting targets for the rates of matriculation eligibility, as well as eligibility for high-quality matriculation, out of the entire cohort of 18 year-olds, separately for boys and girls; improving the level of digital literacy; improving the quality of teaching and management; and investing in low-performing students.

The second level is **increasing the utilization of the potential** which young Arabs have upon finishing high school, through the establishment of a framework that would equip them with the necessary tools for integration into programs for human capital acquisition (academic education, technological education, and vocational training), and subsequently into high-quality employment. This system should include three essential components, some of which should begin as early as the schooling phase.

1. **Diagnosis, information, counselling and guidance.** This phase should begin during school years, and be done in collaboration with the Ministry of Education. It includes: diagnosis – identifying and mapping the skills, competencies, and preferences of young people, preferably as early as the end of junior high school, before moving on to senior high school; information – providing details regarding the various tracks and options available to students; counselling and guidance – counselling students in choosing their course of study in high school (upon finishing junior high school), and afterwards guiding them towards programs providing further education and filling in skill gaps (transition/gap year, pre-academic courses, academic education, technological education, or vocational training), and/or employment. Guidance and counselling should be tailored to each individual's integration potential and suitability for the different options, and should also match the existing demands in the market. The diagnosis and guidance process should include individual meetings with young people and their parents (given the significant import of parents in Arab society with regard to the considerations and decisions made by young people throughout their lives), as well as group sessions and workshops with young people and their parents.
2. **Acquiring education and filling in skill gaps.** Following the diagnosis and guidance phase, some young people will opt to proceed directly into post-secondary academic and non-academic studies, vocational training courses, or the labor market. The rest should be offered avenues for acquiring and catching up on skills which would assist their preparation for optimal integration later on in education, training, and employment. Such avenues may include pre-academic courses, transition/gap year programs or civic service schemes, which would provide young people with workshops and courses for filling in and developing skills (Hebrew language, digital literacy, soft skills, matriculation completion, preparation for psychometric and YAEL [Hebrew proficiency] tests, preparation for admission interviews, provision of tools for finding information online, and so forth), getting acquainted with the labor market and the post-secondary education system, short-term vocational courses in line with the principles of the reform in vocational training and the recommendations of the Employment 2030 Committee, and developing personal and communal identity. Pre-academic studies and transition/gap year schemes may take between several months and several years, and should include different tracks and various programs adapted to the needs, the abilities, and the potential of each individual. More specifically, three main tracks should be designed: academy oriented, technological education oriented,

and vocational training oriented for rapid integration into the labor market. It should be ensured that all young adults, from the weakest to the strongest, are catered for and able to transition between the various tracks.

3. **Placement.** The end goal of the whole process is integration in high-quality employment, and its success will be measured by placement in high-quality employment according to each individual's potential. To achieve this goal, the two previous components – diagnosis and guidance, and filling in on skill gaps – should be adapted to the existing labor market demand (e.g., as compiled and made accessible on the government-operated platform "AVODATA"). In addition, there is a need for an employer relations network, which would map their needs according to geographic distribution, match skill gap programs to actual regional demand, and involve employers in the development of education and training schemes.

To ensure that this process achieves its objective – equipping young adults with tools for high-quality integration in human capital acquisition programs and in the labor market – and since this is a complex process requiring planning, strategizing and cooperation between various government offices, there are five features which are essential for its success:

1. **Setting measurable outcome targets:** we recommend defining targets for achievements by the age of 18 (increasing potential), for integration in academic education, technological education and vocational training between the ages of 18 and 24 (utilizing potential in human capital acquisition), and for the quantity and quality of employment from the age of 25 onwards (utilizing potential in the labor market), in line with the targets outlined by the Employment 2030 Committee. It should be noted that the rate of NEET among young adults is not a target in itself, but derived as the "remainder" of the other targets and projections.
2. **Monitoring the achievement of targets and examining programs' effectiveness:** achievement of targets should be monitored both on the macro level and on the level of individual programs. There is also a need to conduct cost-benefit analysis, set priorities, and condition the funding of the various programs on them proving to be effective in meeting targets.

3. **Accompanying throughout the process and addressing the needs of all young adults:** as previously stated, and contrary to the current situation, it is important to accompany every young person taking part in this process throughout the way, from the diagnosis and guidance phase up to high-quality integration in the labor market. It should also be ensured that the proposed framework caters for the needs of all young adults, from the weakest to the strongest. This requires compiling data on all young people on the municipal level, in order to locate NEET young adults and provide them with information on available solutions.
4. **An umbrella organisation integrating the process:** the framework we propose is a complex process, which comprises several phases and various programs operated by different government and civic organizations, meant to cater for a large and diverse population. Therefore, there should be one unified body which would compile all information on the national and municipal levels, monitor participants' progress throughout the process, consolidate and coordinate new and existing activities and programs, and oversee the achievement of targets. It is important that this body remains stable, unaffected by elections and government changes.
5. **Collaboration between all government and civic agencies and various program operators:** when defining targets, it is necessary to utilize, and induce cooperation among, all government agencies involved – The Ministry of Education (including informal education), The Council for Higher Education, The Ministry for Social Equality, The Directorate General of Labor, The Israeli Employment Service, The Ministry of Finance, and so on. During the implementation phase, collaboration should also involve the relevant officials in local authorities as well as civic organizations operating on the ground. Collaboration should manifest, among other things, in utilization of existing budgets and in the use of existing infrastructures such as schools, community centers, youth centers, Rayan Centers, Employment Service offices, and so forth.

References

1. Director-Generals' Committee (2020), *Recommendations of the Director-Generals' Committee for Tackling Crime and Violence in Arab Society: Concluding Policy Paper* [in Hebrew].
2. Eckstein, Z. & Dahan, M. (2011), *Young Arab Adults in Israel*, paper presented at the Caesaria Forum [in Hebrew].
3. Haddad Haj-Yahya, N. (2019), *The Impact of Contemporary Social Sphere Barriers on the Idleness and on the Structuring of Future Orientation Among Young Arabs Aged 18–22,* PhD Dissertation, Tel Aviv University [in Hebrew].
4. Kalisher, I., Tehawkho, M., Moskalev, K., & Matar, H. (2022), *The Digital Challenge in Arab Education: Lessons from COVID-19 Crisis,* Aaron Institute for Economic Policy, https://www.runi.ac.il/en/research-institutes/economics/aiep/policy-papers/coronavirus-crisis/digital-challenges-arab-education/.
5. Krill, Z. & Amaria, N. (2019), *Barriers to the Integration of the Arab Population in the Higher Education System,* Ministry of Finance, Chief Economist Division [in Hebrew].
6. Miaari, S. & Haddad Haj-Yahya, N. (2017), *NEET Among Young Arabs in Israel,* Israel Democracy Institute.
7. Ministry of Finance (2021), *On the Decine in Employment Rates of Arab Men Before and During the Coronavirus Crisis,* Chief Economist Division [in Hebrew].
8. Tehawkho, M. (2019), *Arab Society as an Engine of Growth in the Israeli Economy*, Aaron Institute for Economic Policy [in Hebrew].
9. Tehawkho, M., Axelrad, H., & Matar, H. (2021), *The Digital Challenge Facing Israeli Arab Society,* Aaron Institute for Economic Policy, https://www.runi.ac.il/en/research-institutes/economics/aiep/policy-papers/productivity-and-growth/the-digital-challenge-in-arab-society/.
10. Tehawkho, M., Kalisher, I., Matar, H., & Moskalev, K. (2022), *Policy to Reduce Gaps Between Arab And Hebrew Education,* Aaron Institute for Economic Policy, https://www.runi.ac.il/en/research-institutes/economics/aiep/policy-papers/labor-market-and-social-mobility/reducing-gaps-between-arab-and-hebrew-education/.
11. Tehawkho, M., Kalisher, I., & Moskalev, K. (2020), *Return on Knowledge of Hebrew in Arab Society: Barriers to Language Learning and How to Remove Them,* Aaron Institute for Economic Policy, https://www.runi.ac.il/en/research-institutes/economics/aiep/policy-papers/labor-market-and-social-mobility/hebrew-in-arab-society/.