



Households' Labor Income: Challenges, Scenarios, and Policy

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Households' Labor Income: Challenges, Scenarios, and Policy

This paper discusses the changes in households' labor income over the last twenty years, as well as possible scenarios for the coming years, and outlines the required policy to support the continuing growth of the Israeli economy and the closing of gaps between population groups.

Over the last twenty years:

- Household's labor Income has increased across all population groups and **disparity between the various groups has decreased, yet it is still significant**; as of 2021, the income of Haredi (ultra-Orthodox) households (in which the head of the household is aged 25-44) is around half of that of non-Haredi Jewish households, while the income of Arab households stands at around 60 percent.
- This gap stems from the low employment rates of Arab women and Haredi men, as well as the low employment quality (wages) of Arab and Haredi men and Arab women. These outcomes are all strongly affected by educational attainment level.
- The share of dual-income couples has more than doubled among Arab and Haredi households, however it is still around a half of their share among non-Haredi Jewish couples.
- There has been an increase in the share of post-secondary education graduates (either academic or non-academic), however the gaps are still large – their share among Arab men is less than half of that of non-Haredi Jewish men, among Haredi men it is around a third, and among Arab women it is around 60% of that of non-Haredi Jewish women.
- The increase in households income, in employment and in the wages of employees is a **result of a comprehensive, consistent, and continuous government policy** which started in 2003, working to boost incentives for work and to encourage education, while focusing on low-income earners and large families.

Possible scenarios for future changes in employment and education, and their impact on labor income (which approximates their impact on GDP and growth):

- A demographic shift in population distribution -> a **5% decrease** in households' labor income, a major challenge for the growth of the economy.
- Closing the employment rate gaps within each educational attainment level -> a 1% increase in households' labor income, closing one quarter to one third of income gaps.

- Closing educational attainment gaps -> a 3% increase in overall labor income, closing one third to one half of the gaps.
- Closing education gaps and employment gaps within each educational attainment level - > **an 8% increase** in overall labor income, **closing over a half of the gap between Arabs and non-Haredi Jews, and 80% of the gap between Haredi and non-Haredi Jews**; this is probably an underestimation, as the actual impact is likely to increase households' income even further.
- For Arab households the contribution of men and women toward the increase in labor income is similar, whereas For Haredi households the increase in labor income stems almost exclusively from men.
- For Arab households the gaps compared to non-Haredi Jewish households are explained, to a similar extent, by employment rate within each educational attainment level and by educational attainment level, whereas for Haredi households, the differences in educational attainment level account for a larger proportion of the gap.

The required policy:

- It is more crucial than ever to **cut budgets which do not promote growth and to take steps to encourage employment and education** – a primary tool for addressing the economic and national-security crisis and the expected increase in government expenditure.
- If an appropriate policy is enacted, current positive trends can continue; its absence – and particularly the implementation of negative incentives for employment and education – may halt the current trends and even reverse them.
- In order to reduce gaps and enhance growth, it is important to also enact policy measures which would raise the population's educational attainment level, rather than focusing solely on measures which impact employment.
- **In Arab society there is a need for policy measures which would target both men and women, while in Haredi society the policy should focus on men.**

- Investment in employment and human capital through imparting employable skills and providing incentives, specifically:
 - **Improving education quality** – preparing all students for integration in post-secondary education and employment; incentives and funding for the tuition of Hebrew, English, mathematics, and digital skills.
 - **Bridging gaps in basic skills and imparting soft skills** in the school system, as well as in post-secondary frameworks for populations who emerge from the school system without these skills, including Haredi educational institutions.
 - **Improving the quality of tertiary vocational and technological training programs**, and expanding the scope and variety of vocational and technological training programs available for Arab and Haredi societies, including Practical Engineering studies within Yeshivas.
 - **Cutting down allowances** which are not conditioned on employment and on full utilization of earning capacity.
 - Integrating Haredi men in **consensual military service**, and establishing avenues for **national-civic service** for Haredi and Arab societies.
- Comprehensive implementation of the aforementioned measures will boost education and employment, thereby also raising households' labor income and improving employment quality (wages and productivity), which in turn will contribute to inclusive growth, social mobility, and poverty reduction.

1. Summary and Conclusions

This paper discusses the changes in Israeli households' labor income over the last twenty years, as well as possible scenarios for the coming years. Our analysis focuses on households' labor income since this is the relevant outcome variable for changes in the GDP and to growth, as well as being the variable which is impacted by labor market policy and by the choices of individuals responding to this policy, particularly to economic and other incentives.

Over the last twenty years, the real monthly households' labor income has risen across all population groups, and this increase has been more pronounced among Arab and Haredi households than among non-Haredi Jewish households, thus **the gap between those groups has been reduced, yet it is still significant** and stands as of 2021 at 41% for Arab households and 49% for Haredi ones (household head aged 25-44), meaning the income of Haredi households is around half that of non-Haredi Jewish households, while the income of Arab households stands at around 60 percent.¹ The gap that still exists is a result of the lower employment rates of Arab women and Haredi men, as well as of the employment quality as reflected in wages, which is particularly low among Arab and Haredi men and Arab women. All these outcomes are strongly affected by educational attainment level.

The increase in households' income is a result of a comprehensive, consistent, and continuous government policy that started in 2003, working to boost incentives for work and to encourage education, while focusing on low-income earners and large families. This policy has led to a dramatic increase in employment rates of individuals as well as households – an increase which has been more pronounced among groups with lower earning capacity – alongside an increase in the wages of those employed. **For Arab households, the share of women in the increase in households' labor income is higher than that of men, in part due to an increase in their wages, and to a larger extent due to a rise in their employment rate, while the contribution of men is mainly due to an increase in their wages, as their employment rate has remained largely unchanged**, with younger Arab men even showing a slight decline. **For Haredi households, the contribution of men and women to the increase in households' labor income has been similar, stemming mostly from a rise in employment rates of both men and women, rather than from an increase in wages.** It is important to note that the increase in employment rates of Haredi men and women has been positively

¹ We focus on the younger age group (25–44 rather than 25–64) because these are the relevant ages for drawing scenarios for the labor market twenty years from now. It is important to note that the employment and education among the younger group is considerably different from that of the older group, and in Haredi society in particular the younger group is characterized by higher employment rates.

correlated on the household level, meaning the entry of Haredi men into the labor market has not pushed their spouses out, nor has the entry of Haredi women pushed the men out.

The increase in the employment of individuals is also reflected, of course, in an increase in employment on the household level, in particular **a dramatic increase in the rate of dual-income couples, as opposed to single-income couples**; the rate of dual-income couples has more than doubled among Arab and Haredi households. However, the employment potential of Arab and Haredi households is clearly far from being fully realized, as **the share of Arab and Haredi couples with dual income is still around half of their share among non-Haredi Jewish couples**. The share of single-income couples is similar among Arab and Haredi households, however while in Arab couples the sole provider is almost always the man, in Haredi couples the sole provider is usually the woman. The differences in households' employment composition between the different population groups explain some of the gap in their labor income, however this is only a partial explanation; labor income of Arab and Haredi couples is lower than that of non-Haredi Jewish couples in the case of dual-income couples, as well as when only the man is employed or when only the woman is employed. This gap reflects differences in the employment quality of men and women – hours worked, occupations and economic sectors distribution, and hourly wages – some of which are obviously associated with education. Specifically, **for Arab men the gap mostly stems from lower hourly wages, for Haredi women the gap mostly stems from fewer hours worked, while for Arab women and Haredi men the gap stems from both fewer hours worked and lower hourly wages**.

The last two decades have been characterized by a dramatic increase in the educational attainment level of the Israeli population, particularly in the rate of tertiary and academic education. This increase in educational attainment is an additional, significant cause for the rise in households' labor income and in employment. Especially notable is the high share of Haredi women with non-academic post-secondary education, which is the result of the introduction of high-level technological studies into Haredi institutions and the qualification of these women as MAHAT-certified² practical engineers within the seminars. At the same time, **there are still considerable educational gaps between population groups**; the rate of post-secondary education (academic or otherwise) among Arab men is less than half that of non-Haredi Jewish men, this rate among Arab women is around 60% of non-Haredi Jewish women, and among Haredi men it is only around a third of that of their non-Haredi counterparts. **In addition, there are gaps between the groups in both employment rate**

² MAHAT – The Government Institute for Technological Training (Hebrew acronym).

within each educational attainment level as well as wages within each educational attainment level.

In view of these trends, we outline possible scenarios for future changes in employment and education, and examine their impact on households' labor income and on the gaps between population groups. Since households' labor income is strongly correlated with GDP-per-household, it is also possible to approximate the impact of each scenario on GDP and growth. The first scenario assumes no changes whatsoever in employment and education distribution of the various population groups, apart from a **demographic shift** in population distribution due to the differences in birth rates among these groups. In this case, the gaps between groups remain unchanged, and the rise in the relative shares of the Arab and Haredi populations, who are characterized by lower employment and income, **reduces the overall employment rate** and leads to a **5% drop** in households' labor income, which, as previously mentioned, approximates the decline in GDP per household. This result highlights the serious challenge for economic growth stemming from the expected shift in the composition of the Israeli population and the rising proportion of low-income households, and therefore the importance of effective, targeted policy aiming to boost educational attainment, employment, and labor income.

The second scenario explores the impact of **closing gaps in employment rates within each educational attainment level** – bringing the employment rates of Arab and Haredi men within each educational attainment level on par with that of non-Haredi Jewish men of the same educational attainment level as of 2022, and the employment rates of Arab and Haredi women on par with that of non-Haredi Jewish women of the same educational attainment level. This results in a large increase in the employment of Arab women (from 49% to 84%) and of Haredi men (from 51% to 85%), an increase in overall employment and **substantial narrowing of employment gaps** between population groups. Nevertheless, since this scenario does not assume improvement in the level of human capital, **its impact on households' labor income is rather minor** – an increase of 22% for Arab households and 26% for Haredi households, closing one quarter to one third of the income gap between them and non-Haredi Jewish households. Overall households' labor income **increases by 1%** in this scenario, meaning the dramatic rise in the employment of Arab women and Haredi men is barely sufficient to counterbalance the negative impact of the demographic shift (first scenario).

The third scenario explores the impact of **closing educational gaps** – bringing the education distribution of Arab and Haredi men on par with that of non-Haredi Jewish men as of 2022, and the education distribution of Arab and Haredi women on par with that of non-Haredi Jewish women. The result is **a smaller impact on employment** compared to the second scenario – employment of Arab women rises by 11 percentage points, and that of Haredi men by 15 percentage points – and a smaller reduction of the employment gaps between the groups. This finding suggests that employment rates within each educational attainment level account for a larger share of the employment gaps between groups, while differences in educational attainment level account for a smaller share of those gaps. However, thanks to the improvement in human capital, the impact of this scenario on households' labor income is similar to, and even larger than, that of the second scenario – an increase of 24% for Arab households, bridging one third of the gap between them and non-Haredi Jews; an increase of 39% for Haredi households, bridging half of the gap; and **a 3% increase in overall labor income**. In other words, the gaps between Arab and non-Haredi Jewish households are explained to a similar extent by employment rate within each educational attainment level and by the educational attainment level itself, while in Haredi society differences in educational attainment level account for a greater part of the gaps. These results highlight **the importance of education for enhancing growth and closing gaps between population groups, particularly with regard to the Haredi population. In order to reduce gaps and enhance growth, it is important to also implement policy measures that would increase the population's educational attainment level, rather than focusing solely on measures that affect employment.**

The fourth scenario combines the previous two scenarios and explores the impact of **closing gaps in education as well as in employment within each educational attainment level**. This results in a sharp rise of 38 percentage points in the employment of Arab women and Haredi men, **fully closing the employment gaps between groups, and a dramatic increase in households' labor income** – 44% for Arab households and 58% for Haredi ones, an increase which closes more than half of the gap between Arabs and non-Haredi Jews and 80% of the gap between Haredi and non-Haredi Jews, along with **an 8% increase in the overall households' labor income**. This result highlights **the need for a policy that incentivizes and supports both education and employment, and the large potential contribution of such a policy to the growth of the economy as a whole**. In addition, these results indicate that **the differences in educational attainment level and in employment within each educational attainment level account for over half of the overall income gap between non-Haredi Jewish**

and Arab households, and an even larger share of the gap between Haredi and non-Haredi Jewish households. The remaining gaps are associated, for the most part, with employment quality within each educational attainment level - hours worked, occupations and economic sectors distribution, and hourly wages. Since an increase in the educational attainment and employment levels of Arab and Haredi individuals will also lead to improvement in their employment quality within each educational attainment level, through experience gained as well as a higher wage premium for experience of more educated workers, this scenario may be seen as an underestimation, and the actual impact of closing gaps in employment and education may increase households' income even further. We would also note that a policy aiming directly to improve employment quality within each educational attainment level – which, as previously mentioned, remains constant in our scenarios – might also contribute to an increase in employment rates, since an increase in potential wages boosts the positive incentive to integrate in the labor market.

In order to further explore the avenues of impact in each scenario, we break them down according to gender, that is, we examine the impact of closing employment and education gaps for men only, against the impact of closing these gaps for women only. For Arab households the contribution of women and men to the increase in labor income is similar, whereas for Haredi households the increase in labor income stems almost exclusively from men.³ These results highlight **the importance of gender-specific policy measures. In Arab society there is a need for policy measures that would target both men and women, while in Haredi society the policy should focus on men, since even if the gaps between Haredi and non-Haredi Jewish women are fully closed, the overall impact on Haredi households will be small.**

³ For Haredi men, we also examined the impact of bringing their employment and education levels on par with those of Haredi women. The impact on Haredi households' income in this scenario is still large – a 35% increase (compared to a 49% increase in a scenario of bringing their employment and education levels on par with those of non-Haredi Jewish men, with no change in these parameters for Haredi women).

The clear conclusion emerging from the above scenarios is that generating an increase in the labor income of Arab and Haredi households, alongside economic growth, requires a policy which incentivize and support both employment and education. Policy measures that only affect employment rates are insufficient to reduce gaps and to support the further growth of the Israeli economy, and emphasis should also be placed on policies that would boost educational attainment levels. Realization of these scenarios would manifest in dramatic changes in employment and education, and the trends over the last two decades prove that such changes are feasible, since the rates of increase in education and employment levels depicted in the fourth scenario are similar to, or even lower than, those that had actually taken place between 2002 and 2022. Furthermore, education and employment levels of Haredi men today are similar to those of Haredi women twenty years ago, hence we believe it is possible to raise them over the next years in a similar manner to their increase among women during that period if appropriate policy is implemented, starting as early as the school system. Closing the gaps between Haredi men and women in this manner will bridge around half of the income gap between Haredi and non-Haredi Jewish households.

Economic research shows that labor supply is elastic, and that individuals and households respond strongly to policy changes and economic incentives. **If an appropriate policy is enacted, it is possible that the rise in educational attainment, in employment and in labor income will continue, leading to further narrowing of the gaps between households and to economic growth. On the other hand, the absence of an appropriate policy – and particularly the implementation of negative incentives for employment and education – may halt the current trends and even reverse them. It is now more crucial than ever to cut budgets that do not promote growth and to take steps to encourage employment and higher education, as a primary tool for addressing the economic and national-security crisis and the expected increase in government expenditure.**

Therefore, government policy should focus on investment in employment and human capital, through imparting employable skills as well as providing incentives, and should include the following components: (1) improving education quality – preparing all students for integration in post-secondary education and in employment; incentives and funding for the tuition of Hebrew, English, mathematics, and digital skills;⁴ (2) setting education and qualification targets – with emphasis on high-quality post-secondary studies in Israel, in subjects which yield high returns and in line with the actual demands in the labor market, through vocational training courses, technological education, and academic studies; (3) bridging gaps in basic skills and imparting soft skills in the school system, as well as in post-secondary frameworks for populations who emerge from the school system without these skills, including Haredi educational institutions, with an emphasis on Hebrew and English languages for Arab society, English and mathematics for Haredi society, and digital skills; (4) improving the quality of tertiary vocational and technological training programs, and expanding the scope and variety of vocational and technological training programs available for Arab and Haredi societies, including the introduction of qualification as a MAHAT-certified Practical Engineer within Yeshiva studies for Haredi men; (5) employment-boosting programs which include vocational diagnosis and guidance, skills adjustment and support through training, job searching and placement in high-quality employment, leading to improvement in human capital through the acquisition of work experience, as well as gap-year programs; (6) elimination of negative incentives – cutting down allowances which are not conditioned on employment and on full utilization of earning capacity; (7) removal of economic barriers to entering employment; (8) integrating Haredi men in consensual military service, and establishing avenues for national-civic service for Haredi and Arab societies. Comprehensive implementation of these measures will boost education and employment, thereby also raising households' labor income and improving employment quality (wages and productivity), which in turn will contribute to inclusive growth, social mobility, and poverty reduction.

⁴ It should be stressed that investment in skill acquisition is most efficient at younger ages, while bridging the gaps created in the school system at older ages is more expensive and less effective.