

The Israeli Labor Market in the Wake of Covid-19: An Overview

Michael Debowy, Gil Epstein, and Avi Weiss

Introduction

As happened the world over, the Covid-19 pandemic that erupted in Israel in March 2020 caused, and continues to cause, disruption in all areas of life, and in the labor market in particular. The lockdowns, furloughs, demand shocks, and macroeconomic downturn generated by the crisis (see Bental & Shami, 2021), made the labor market seem like a roller coaster ride in terms of employment and unemployment levels, the definition of which was expanded in the pandemic's wake. The worst blow was sustained in early 2020, when over a million Israelis stopped working. Although the general trend at present is one of improvement, rising employment and declining unemployment, full employment has yet to be regained, and most projections indicate that it will not be in the coming years (see also Bental & Shami, 2021).

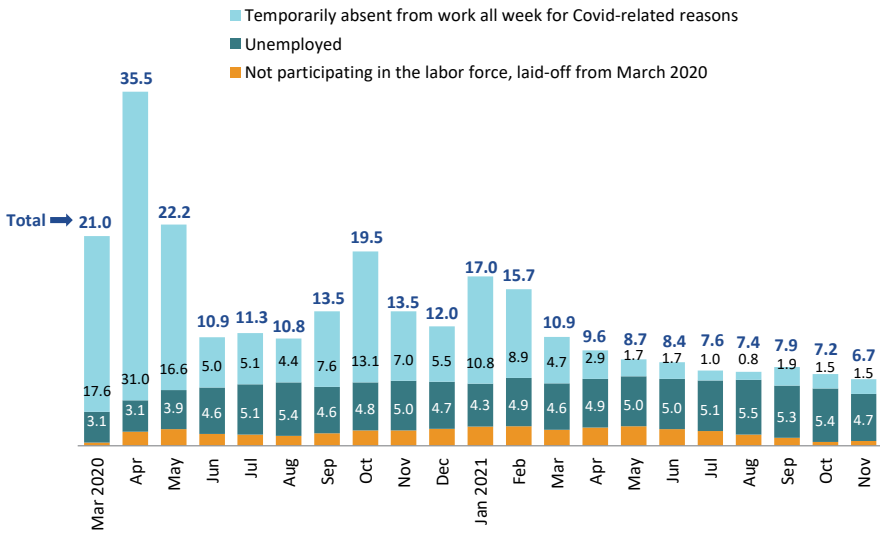
In this chapter, we will review what happened in the labor market and try to determine what may be expected going forward. We will look at employment levels and work hours in different economic sectors, and show the differences by gender, population sector, and district. We will analyze the ability to work from home, both by occupation and by economic sector, in an attempt to determine where investment in vocational training is needed. Subsequently, we will present the changes that occurred during the pandemic with regard to investment in higher education and in training programs, ending with a summary and conclusions.

* Michael Debowy, Research Assistant, Taub Center for Social Policy Studies in Israel; doctoral student, Department of Economics, Ben-Gurion University of the Negev. Prof. Gil Epstein, Principal Researcher, Taub Center; Department of Economics, Bar-Ilan University. Prof. Avi Weiss, President, Taub Center; Department of Economics, Bar-Ilan University.

Unemployment, employment, and wages in the Israeli economy

During the first lockdown, imposed early in the pandemic, uncertainty about the disease and its ramifications was at its height. Usually, unemployment rates are measured as the percentage of non-employed job seekers out of the total civilian labor force (employed persons and non-employed job seekers). This was expanded during the pandemic to include two additional groups: workers placed on furlough, and non-employed persons who left the labor force due to Covid-19. The expanded unemployment share (encompassing all three groups) out of the civilian labor force plus non-employed persons who left the labor force due to the pandemic, jumped from 3.8% to 35% (Figure 1).

Figure 1. Unemployment, absence, and non-participation in the labor force due to Covid-19

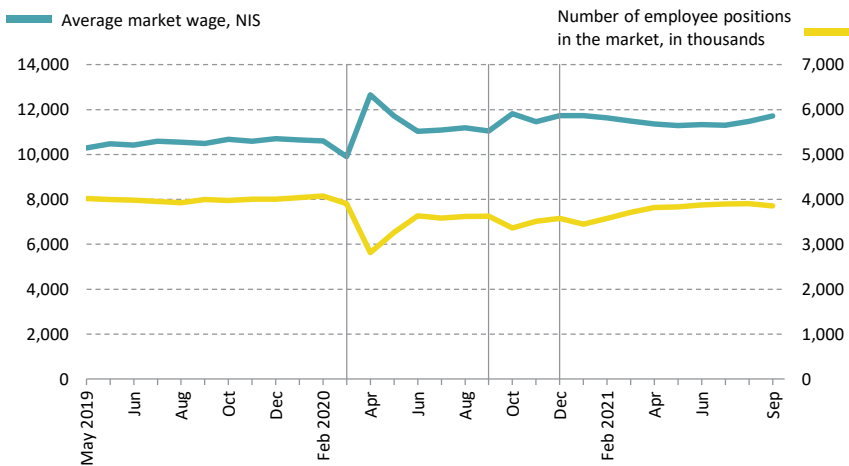


Note: The data were computed as a percentage of the civilian labor force plus non-employed persons who left the labor force due to the Covid-19 pandemic.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

The damage caused by the pandemic to the employment market was not evenly spread over labor force participants; rather, specific kinds of workers were disproportionately affected — generally those with less education and lower incomes (Zontag et al., 2020). This had far-reaching effects on the loss of work and long-term unemployment, on inequalities after the period of government support for workers on unpaid leave lapsed, on the types of training programs that are required, and more. Figure 2 shows the number of salaried positions and the average wage in the Israeli economy since the beginning of 2020. We can discern the opposite trends in these two measures since the pandemic's outbreak: since the average wage is computed solely on the basis of persons who are actually employed, and since it was largely (on average) those with low wages who were placed on furlough, the average wage of employed persons rose when employment dropped, and dropped when employment rose. Recall that as a result of this phenomenon, the Israeli government froze the average wage index for National Insurance purposes in December 2020.¹

Figure 2. Average monthly wage and salaried positions in the economy



Note: The three vertical lines in the graph represent the start of the lockdowns in March, September, and December 2020.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

1 See: [Average Wage Law \(Temporary Order — the Novel Coronavirus\), 5781-2020, December 29, 2020](#). [Hebrew]

SPOTLIGHT

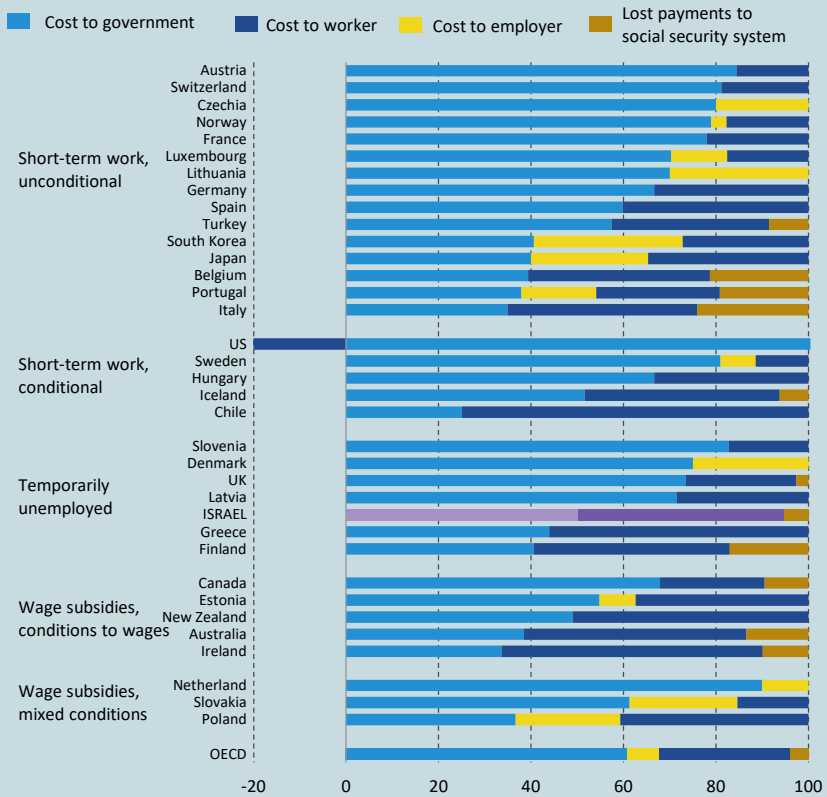
The Furlough Model

Countries around the world adopted different mechanisms for addressing the collapse of employment during the pandemic, aiming to ease the shock to employed persons and employers while stabilizing the labor market in anticipation of a post-crisis recovery. Israel and other countries adopted the furlough model, which allowed workers placed on unpaid leave (i.e., those whose work hours were reduced by 100%) to receive unemployment insurance, with no assistance given for partial work hour reductions. This effectively created an incentive for workers whose hours were cut beyond a certain threshold to leave work completely. Other countries, including Germany, adopted an STW (short-term work) model, which allows for a “partial subsidy” of work hours — i.e., compensation for workers whose hours were reduced, with some workers actually choosing partial wage subsidies. This model was designed to maintain the employer-employee relationship and the work routine, making it easier for the labor market to recover once the crisis passed. There were also countries such as Canada and the Netherlands that chose direct subsidies of wages for some workers, sometimes dependent on the decline in business activity.

Each model has advantages and disadvantages, which are partially reflected in how the “cost burden” of the employment downturn is distributed between the worker, the employer, and the government.² Figure 3, taken from the OECD website, presents a calculation of this distribution in various OECD countries, based on the status in May–June 2020. Based on these calculations, Israeli workers bore 45% of the cost burden of the work hour reductions versus a 28% burden, on average, in the OECD and other countries, and a 24% burden in countries that adopted the “German model,” i.e., the unconditional STW model. By contrast, Israeli employers did not have to pay anything to employees on leave, while their counterparts in the OECD bore 7% of the cost (9% in the German model countries) — payments whose primary objective was to avoid moral hazard (exploitation of the situation by the employers). The fact that employers in these countries could have fired their employees and thereby avoid this cost, but instead chose to bear it, testifies to the value employers received from retaining their workers, even if in a reduced-work-hour capacity. Moreover, in Israel, the state bore 55% of the cost (unemployment insurance for those on leave without pay along with the loss of National Insurance Institute contributions), versus 65% in the OECD countries. Ultimately, compared with other developed countries, Israel placed a larger share of the burden of reduced business activity on the shoulders of workers, thereby easing the burden on employers (who could not allow their employees to work part-time) and on the public coffers.

2 Compensation for a worker whose hours have been reduced, when paid by the employer or by the National Insurance Institute, means that the employer and the government are those bearing the cost burden, while non-compensation means that the workers are the ones bearing the burden.

Figure 3. Distribution of the cost burden of maximum work hour cutbacks, May-June 2020

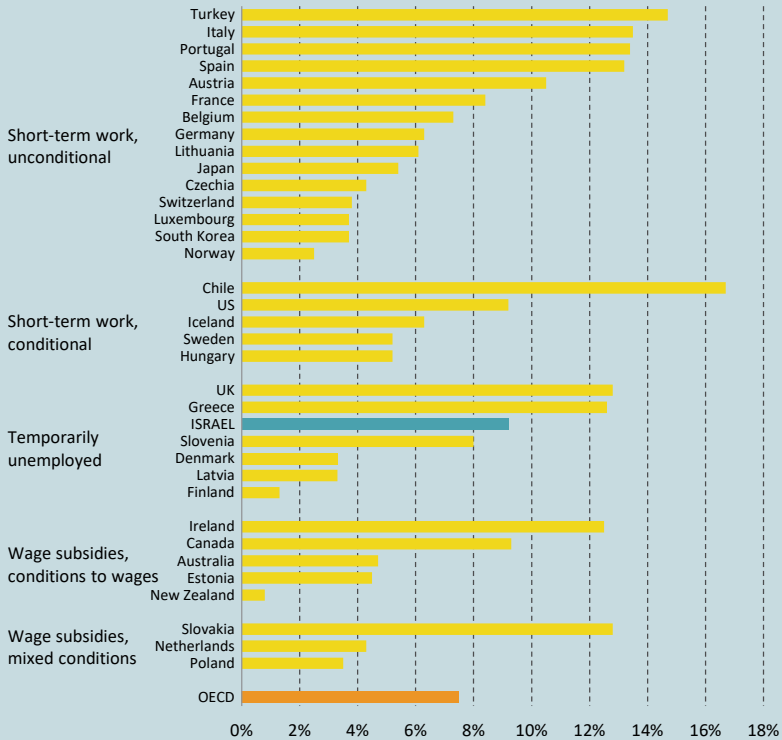


Note: The graph shows the distribution of the burden of work hour reductions among different agents in the OECD countries. The countries are grouped according to the job retention schemes they adopted.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: OECD Employment Outlook 2021

Economists have tried to estimate the impact of the various models in terms of coping with, and exiting, the crisis (Autor et al., 2020; Bartik et al., 2020; Chetty et al., 2020; Faulkender et al., 2021; Hubbard & Strain, 2020). Clearly, the choice of employment model had a major effect in terms of the differences observed between countries, though it is hard to distinguish between the effect of the employment model chosen and those of other factors, such as labor market differences, the differing ways in which healthcare systems dealt with the pandemic, and more. Figure 4 shows the percentage of work hours that countries lost due to the pandemic, as calculated by the International Labor Organization (ILO). While the average loss in the OECD countries was 7.5%, and most of the German model countries lost 6.3% or less, Israel recorded a 9.2% work-hour loss relative to the end of 2019. Since Israel dealt quite effectively with the pandemic from a medical and economic perspective, it is reasonable to assume that this relatively large work-hour loss stemmed in part from the structure of the leave without pay policy, which, as noted, did not allow for part-time employment. It appears that, should there be additional lockdowns due to new outbreaks of Covid-19 or another disease, abandonment of the furlough policy in favor of the German model (or another wage subsidy model) would likely benefit the labor market and ensure that the crisis is more effectively addressed.

Figure 4. Loss of work hours in 2020 due to the Covid-19 crisis



Source: Michael Debowy, Gil Epstein and Avi Weiss, Taub Center | Data: ILO

Employment by economic sector

The unique features of the Covid-19 crisis translated into differential impacts on various sectors of the economy (see, for example, Bental & Shami, 2021). The demand shocks merged with background technological and economic processes (automation, online work, the exporting of jobs) in a way that strongly influenced developments and recovery trends in each sector. Table 1 shows the change in the number of jobs in each quarter compared with the same quarter in 2019 in different sectors (the data include workers on furlough). In most economic sectors, worker numbers declined during the crisis; the tourism and restaurant sectors (“accommodation and food services”) were the hardest hit. Also, although the big retailers thrived, the retail sector suffered greatly and showed an 8% job loss between late 2019 and late 2020, followed by a continued stagnation throughout 2021.

However, not every economic sector was hurt by the pandemic. Sectors that almost exclusively employ white-collar workers — such as administrative and support services, professional services, real estate, and information and communication — showed almost no reduction in employment. Given the health and social aspects of the crisis, there was an increase in the number of jobs in the healthcare, social and welfare service fields. There was also a rise in the number of those employed in predominantly “public” sectors, such as local and public administration and infrastructure supply.

Table 1. The rate of change in the number of jobs (including workers on furlough) since the same quarter in 2019, by economic sector

Quarter	2020				2021				Percent of all positions in the labor market in January 2020
	1	2	3	4	1	2	3	4	
Overall	1%	-1%	-2%	-3%	-3%	-1%	1%	1%	100%
Agriculture, forestry, fishing	8%	2%	-10%	-7%	-8%	-5%	-20%	-27%	1%
Manufacturing, mining, quarrying	-7%	-7%	-8%	-3%	-7%	-8%	-1%	3%	10%
Construction	1%	-10%	-3%	-4%	-3%	-13%	-6%	-2%	5%
Wholesale/retail trade, motor vehicle repairs	1%	1%	-3%	-8%	-5%	-1%	-2%	-7%	15%

Table 1 (continued). The rate of change in the number of jobs (including workers on furlough) since the same quarter in 2019, by economic sector

Quarter	2020				2021				Percent of all positions in the labor market in January 2020
	1	2	3	4	1	2	3	4	
Local, public, defense administration; water supply, sewage, waste management; electricity supply, gas, steam, air conditioning	5%	1%	3%	6%	9%	7%	7%	7%	11%
Accommodation, food services	-6%	-18%	-20%	-36%	-38%	-22%	-14%	-16%	4%
Administrative, support services; professional, scientific, technical activities; real estate; information, communication	3%	2%	-1%	0%	0%	0%	5%	5%	22%
Education	0%	-2%	-1%	0%	-1%	3%	1%	3%	13%
Human health, social work activities	2%	5%	4%	7%	3%	-1%	-1%	6%	11%
Other services	7%	0%	-1%	-5%	-2%	5%	2%	-4%	7%

Note: Data for the fourth quarter 2021 are until the end of October.

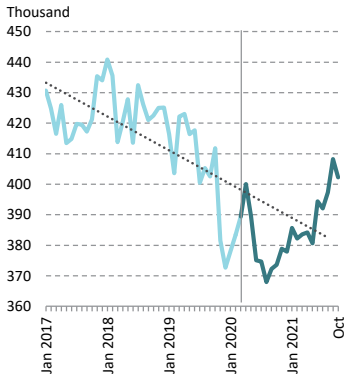
Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Nevertheless, it is likely that some of the changes in the number of job positions in specific economic sectors reflect deep-seated processes taking place in the economy alongside the effects of the pandemic. In other words, a portion of the employment downturn in certain sectors may well have occurred even without the crisis. In order to try and identify the pandemic's major negative effects, we can compare developments during the crisis with the monthly employment trend that preceded it. Figures 5a–5j show actual employment and the trend in each sector based on 2017–2019 data, before the crisis, and projects these trends forward. It is clear that employment in the accommodation and food services sector (5e) collapsed immediately in

March 2020. The construction sector (5c) also saw a substantial decline in employment during 2021, which may have been partially driven by a decline in demand for commercial construction as parts of the economy adapt to online retail and remote work (see Figure 10). The damage to this particular economic sector disproportionately affects Arab men — who are over-represented among construction workers — and may have played a part in the long-term decline in employment in this particular population (see Figure 7). In the trade and transport sectors (5d), by contrast, it is hard to discern a significant change until the fall of 2020, when the seasonal increases anticipated on the basis of recent data did not occur. Moreover, changes in the employment rates in the healthcare and social work sector (5h, especially from late 2020) and local and public administration, and infrastructure sectors (5i) lie well within the confidence interval (95%), making it difficult to identify a significant effect of the crisis on these sectors over time.

Figure 5. Actual employment versus the pre-crisis trend, by economic sector

a. Manufacturing, mining, quarrying



b. Agriculture, forestry, fishing

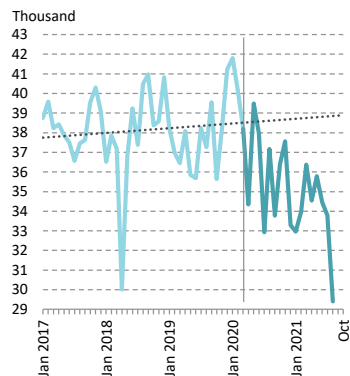
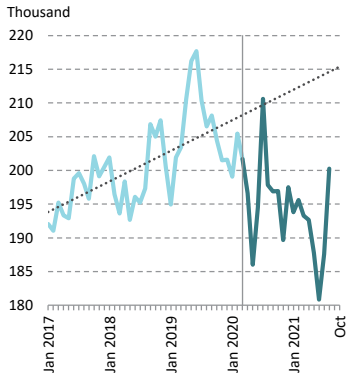
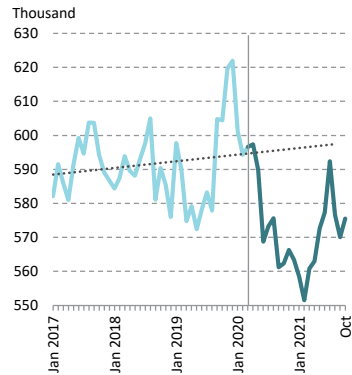


Figure 5 (continued). Actual employment versus the pre-crisis trend, by economic sector

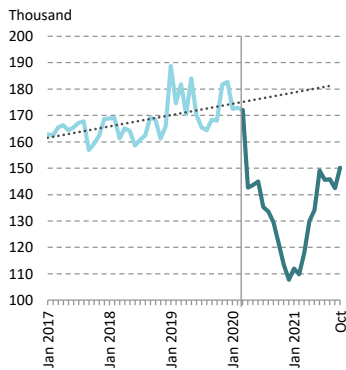
c. Construction



d. Wholesale/retail trade, motor vehicle repairs; transport, storage, postal, courier activities



e. Accommodation, food services



f. Information, communication; financial, insurance activities; real estate; professional, scientific, technical activities; administrative, support services

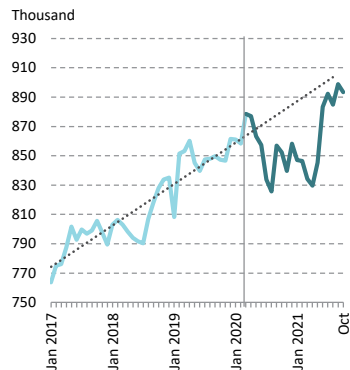
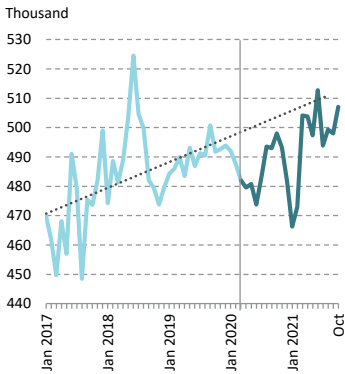
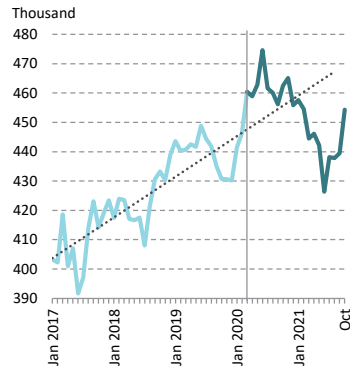


Figure 5 (continued). Actual employment versus the pre-crisis trend, by economic sector

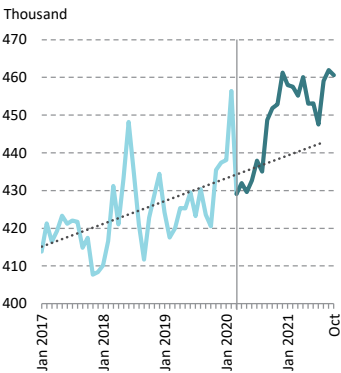
g. Education



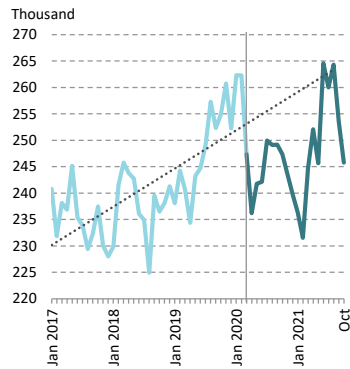
h. Human health, social work activities



i. Local, public, defense administration; infrastructure, waste management



j. Other economic sectors



Note: The vertical line marks the beginning of the pandemic.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

The number of jobs is only one measure of the scope of employment. When we add the average number of work hours per worker to the analysis, a more complex picture is obtained. Table 2 presents the change in work hours per worker in the various sectors from the beginning of 2020 to October 2021 relative to the same quarter in 2019. It is clear that, until the summer of 2021,

the average number of weekly work hours per worker increased in nearly all economic sectors (meaning, apparently, that the negative impact on production in these sectors was smaller than the negative impact on positions). We also see that the agricultural, manufacturing, and mining sectors, which experienced only limited employment reductions, showed an increase in work hours for those workers who remained as early as the second half of 2020, meaning that the output of these sectors was almost unaffected by the crisis. The distinctly “public” sectors (local and public administration, infrastructure supply) also experienced increases in hours per worker alongside employment increases — evidence of growing activity. The trade and the accommodation and food services sectors, which lost the highest percentage of jobs, also suffered the greatest drop in work hours per employee, indicating an even more substantial decline in their activity. It is interesting to see the impressive rebound in hours per worker in accommodation and food services in the second quarter of 2021, although we should bear in mind that the number of jobs in this sector remained dramatically lower than it was two years earlier (a fact that, in and of itself, constitutes an underestimation of economic damage, as it does not take natural population growth during those two years into account).

Table 2. Change in average weekly work hours per worker relative to the same quarter in 2019, by economic sector

Quarter	2020				2021			
	1	2	3	4	1	2	3	4
Agriculture, forestry, fishing	-3%	3%	8%	7%	1%	0%	0%	4%
Manufacturing, mining, quarrying	-6%	-10%	3%	2%	-5%	3%	-2%	-1%
Electricity supply, gas, steam, air conditioning; water supply, sewage, waste management; local, public, defense administration	-3%	-4%	3%	2%	0%	3%	0%	3%
Construction	-9%	-14%	1%	-3%	-8%	5%	1%	0%
Wholesale/retail trade, motor vehicle repairs; transportation, storage, postal, courier services	-9%	-23%	-7%	-9%	-13%	-1%	0%	3%
Accommodation, food services	-17%	-47%	-19%	-42%	-42%	-3%	-3%	-2%
Information, communication; financial, insurance activities; professional, scientific, technical activities; real estate; administrative, support services	-8%	-15%	0%	-2%	-8%	3%	1%	1%

Table 2 (continued). Change in average weekly work hours per worker relative to the same quarter in 2019, by economic sector

Quarter	2020				2021			
	1	2	3	4	1	2	3	4
Education	-13%	-20%	6%	0%	-11%	5%	8%	3%
Human health, social work activities	-9%	-12%	1%	0%	-7%	6%	3%	4%
Other economic sectors	-12%	-26%	-6%	-11%	-15%	2%	6%	7%

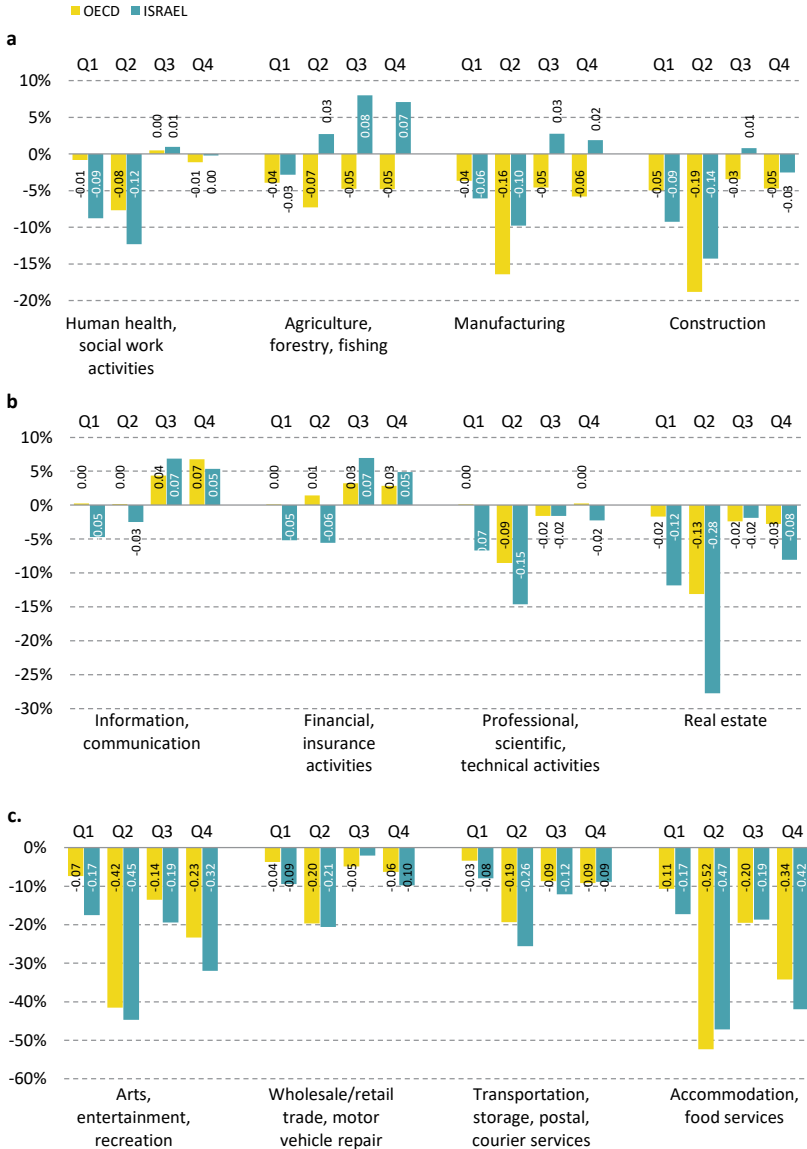
Note: Data for the fourth quarter 2021 are until the end of October.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

The general picture obtained from an examination by sector indicates that the polarization in the Israeli labor market worsened during the crisis and the subsequent recovery period. Sectors already characterized by high wages and a highly educated labor force, such as high tech and public services, experienced minimal declines in employment and recovered rapidly. By contrast, sectors characterized by low wages and low human capital, such as agriculture and accommodation and food services, showed larger declines in employment, and their recovery has lagged behind the rest of the economy. The labor market's "middle layer" (in both human capital and wage terms), encompassing sectors such as manufacturing, construction, trade and transport, also sustained a harsh blow from which it is struggling to recover — that is, even when the sector itself rebounds, it does so with fewer workers. These differences require differential public policy thinking with regard to varied sectors and workers.

In an international comparison, work hour trend changes in the various economic sectors in Israel and other developed countries were largely similar. Figures 6a–6c show the annual change in work hours over the course of 2020 in different economic sectors, in Israel and the OECD countries. Israel's agricultural, manufacturing, and construction sectors recovered very rapidly, while its information, communication, financial, and insurance service sectors were hit harder than these sectors in other countries during the first half of 2020, but recovered quickly. The trade, transport, recreation, restaurant, and tourism sectors, both in Israel and abroad, suffered the greatest damage in 2020 in terms of work hours, and have had trouble recovering.

Figure 6. Annual percent change in work hours between 2019 and 2020, by quarter and economic sector, Israel and the OECD

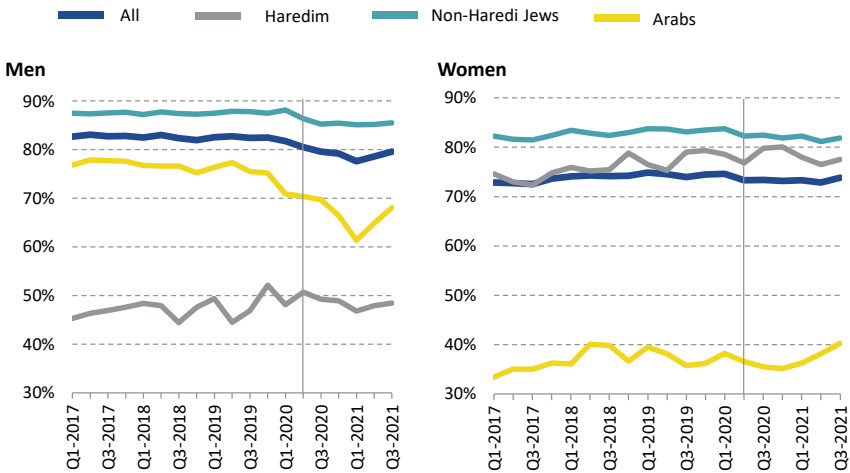


Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS, OECD

Employment by population sector, gender and geographic district

Figure 7 shows the employment rates of men and women ages 25–64 in different Israeli population groups over the past several years (including workers on furlough). The graph shows that, for women, employment rates have remained stable since their initial drop in the spring of 2020, though these aggregate data conceal a continued slight decline in Arab Israeli women’s employment until recently, alongside rapid recovery and a rise in the employment of Haredi women. Men’s employment rates show continuous erosion throughout the pandemic among Haredim, and even more so in the Arab sector. Note, however, that the decline in Arab men’s labor market participation rates started before the Covid-19 crisis. This decline appears to stem from a variety of causes, including skill and human capital disparities, the replacement of Israeli construction workers with foreign workers, rising employment among Arab women (Geva et al., 2021), and demographic growth among Arab males under the age of 35 (Weinreb, 2020; 2021). However, the third quarter of 2021 broke this trend, with rising employment rates among Arab men and women.

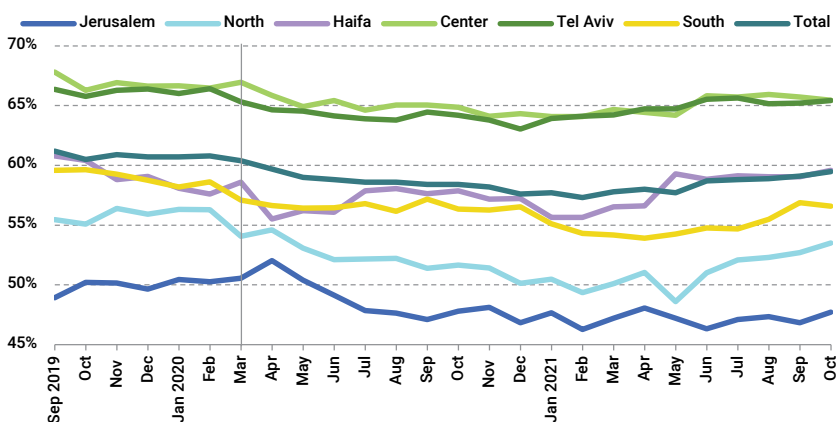
Figure 7. Employment rates for ages 25–64, by sector and gender



Note: Including workers on furlough. The vertical line marks the beginning of the pandemic.
 Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 8 shows the employment rate for ages 15 and over by geographic district. In the Tel Aviv and Central Districts, where half of Israeli employment is concentrated, a modest decline was discerned, reaching a low at the end of 2020 of 4%–5% below 2019 levels,³ but by the summer of 2021 this had moderated to 1%–2% below the 2019 levels, remaining at that level until October. In the Haifa District, a similar trend was seen. The Jerusalem and Southern Districts registered declines of 7% and 9% respectively, which narrowed to 4% (for both districts) by October 2021. The Northern District sustained the greatest damage: between December 2019 and May 2021, there was a 13% drop in the employment rate, although by October 2021 the decline had moderated to 4%.

Figure 8. Employment rates for ages 15 and over, by geographic district



Note: Including workers on furlough. The vertical line marks the beginning of the pandemic.

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

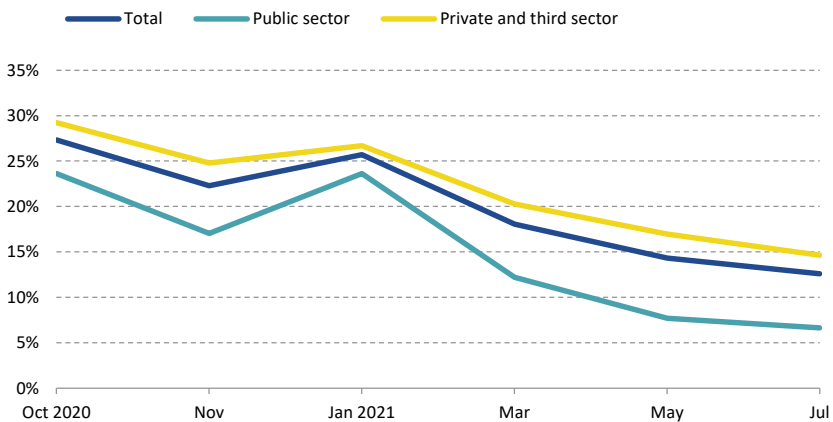
Working from home

The crisis led to a dramatic rise in the amount of work conducted from home throughout the economy, especially at times of peak morbidity and during the ensuing lockdowns. The ups and downs of the extent of work from home

3 This refers to the average of the last four months of 2019, the reference point for all data in the paragraph.

during 2020 are well documented, and the phenomenon persisted through 2021. Figure 9 presents the share of those working from home by economic sector. The year started with a lockdown (working from home was then at a peak of 26% of the labor force), and continued with a moderate decline in working-from-home percentages over time. The decline in the public sector (where the share of those working from home dropped below 10% in March) was steeper than that in the private and third sectors (where the share of those working from home remained over 10% until the autumn).

Figure 9. Share of those working from home, by economic sector



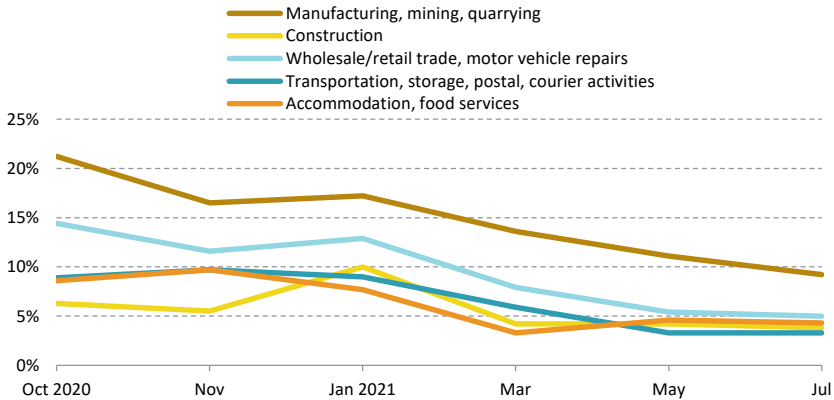
Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Breaking it down by economic sector, we find a more complex picture. Figures 10a, 10b, and 10c display the share of those working from home in different sectors. Figure 10a indicates that in all of the “tangible” manufacturing and service sectors, the share of those working from home was much lower than in the economy as a whole, throughout the period. Moreover, volatility in these sectors was low compared with the economy as a whole (except for the construction sector, where working from home doubled in volume during the third lockdown). Figure 10b shows that the situation in the “intangible” production and service sectors was diametrically opposed: except for administrative and support services, all of these sectors were characterized by work-from-home-rates that exceeded the overall average, and over half of those in the information and communication sector worked from home until

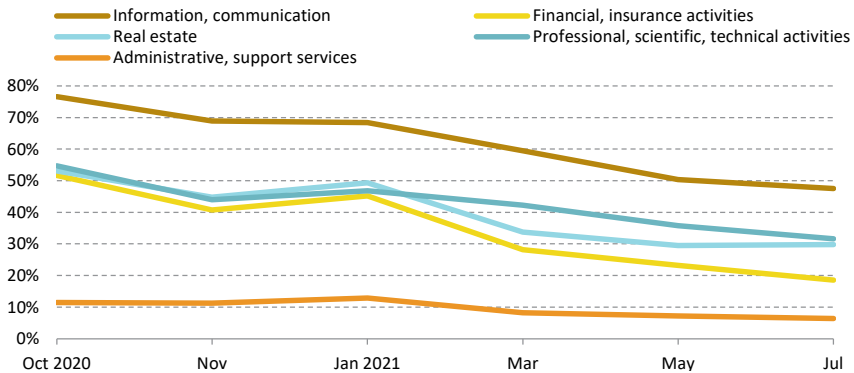
the summer of 2021. Not only that, but the decline in work-from-home rates that these sectors displayed over the course of the year was exceedingly slow. This would seem to reflect adjustment to a new reality in which working from home is a central feature of employment regardless of the pandemic.

Figure 10. Share of those working from home in by employment sector

a. “Tangible” employment sector



b. “Intangible” employment sector

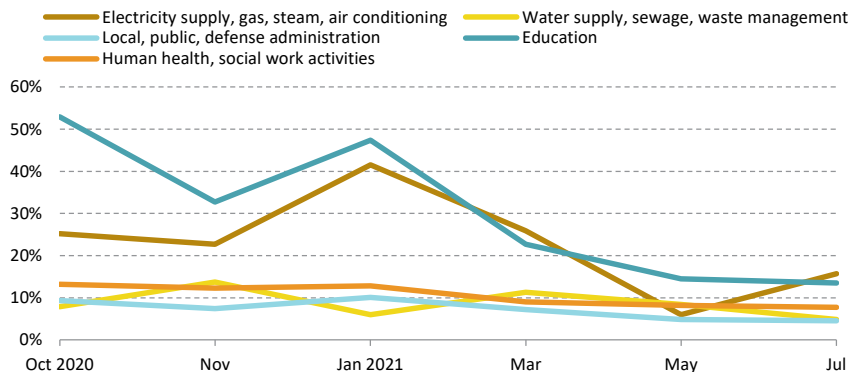


Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 10c shows the share of those working from home in the “distinctly public” economic sectors. The graph indicates tremendous and quite noticeable volatility in work-from-home volumes in the education sector, and, more surprisingly, volatility in the energy supply and air conditioning sector.

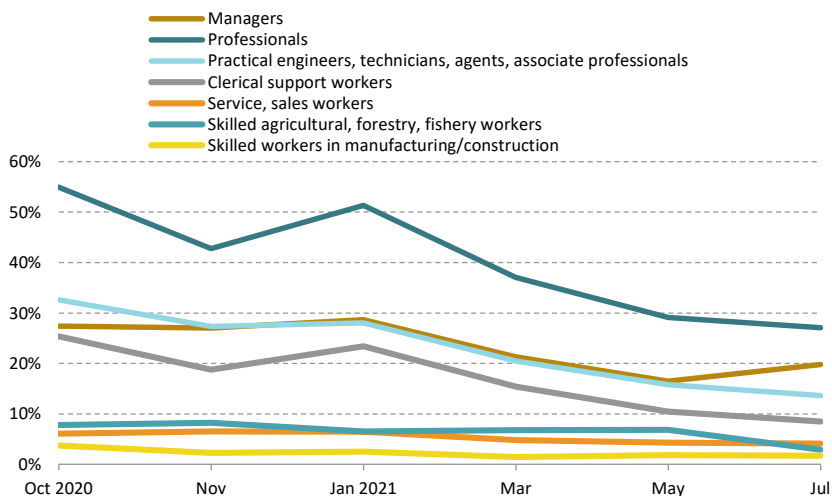
Figure 10 (continued). Share of those working from home by employment sector

c. “Distinctly public” employment sector



Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 11 presents the complementary picture, showing the share of those working from home by occupation rather than by economic sector. We see that the amount of online work (and its volatility) were highest among those in occupations requiring academic training, less high among managers, practical engineers, and clerical workers, and low (and stable) among persons employed in manufacturing, trade, and services.

Figure 11. Share of those working from home by occupation

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

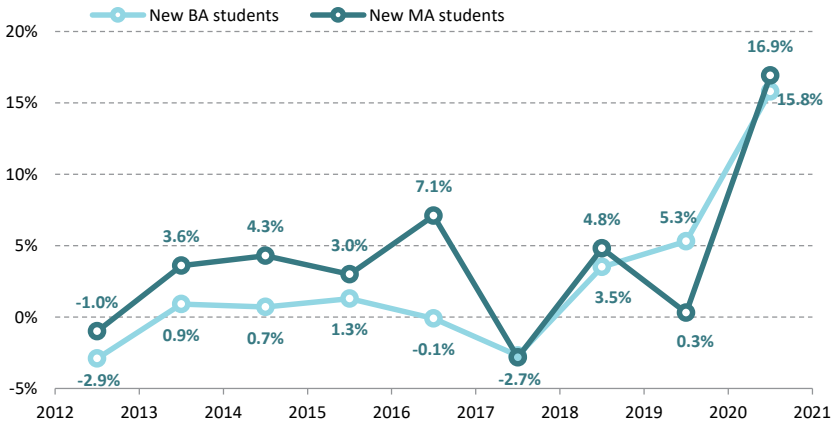
Higher education and vocational training

Higher education

For years the economic literature has documented the phenomenon whereby an increase in unemployment drives rising enrollment in higher education or vocational training (Barr & Turner, 2015; Hillman & Orians, 2013), especially when the state offers unemployment insurance on generous terms (Sievertsen, 2016). The present crisis has confirmed the existence of this phenomenon in Israel as well, and in the absence of employment and foreign travel possibilities, young unemployed persons have been increasingly enrolling in higher education programs (Frankel, 2020; Ilan, 2020). Figure 12 shows the annual rate of change in the number of new bachelor's and master's degree students over the past decade. The graph clearly shows a surge in the share of new students during the 2020/2021 academic year, when the growth in the number of new bachelor's and master's degree students was more than 15 and 14 percentage points greater than the average growth in the previous eight years, respectively. Although some of the increase may possibly be attributed

to deep-seated processes such as improved access to higher education and the growing importance of it in today's knowledge-based economy, there can be no doubt that the sharp rise in the annual growth rate stems largely from the conditions created by the crisis.

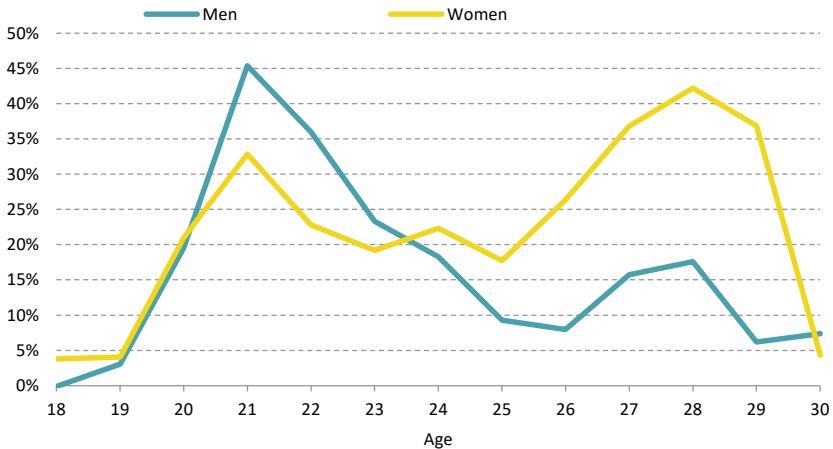
Figure 12. Percent change in the number of new bachelor's and master's degree students



Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Figure 13, which shows the distribution of new bachelor's and master's degree students over the past two years by age and gender, supports this explanation. For both men and women, the greatest increases occurred among those in the 20–24 and 27–28 age ranges. This finding points to large numbers of discharged soldiers unable to work or travel, as well as young adults with low skill levels who lost their jobs during the crisis. Moreover, the data show that the change among women was greater in the 25–29 age range, while for men it grew more in the 21–23 age range — mainly because in the preceding years a larger percentage of women in their early twenties and men in their late twenties began their studies. In absolute terms, there was, in fact, no major difference in the age distribution between the genders among all newly-enrolling students in the 20–30 age group, but in percentage terms the changes were substantially different.

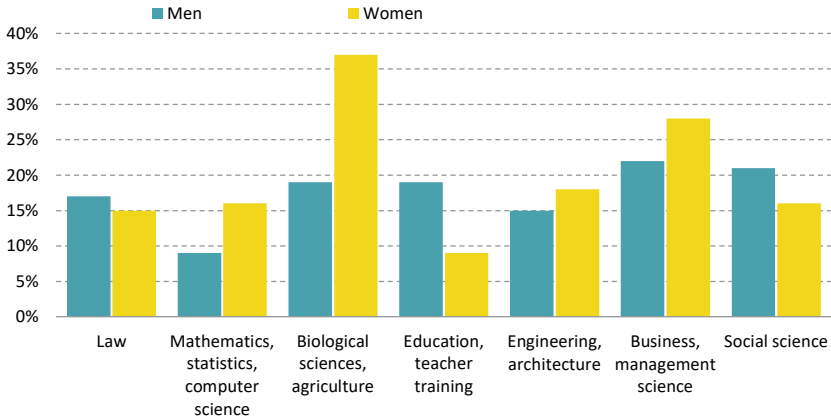
Figure 13. Rate of change in the number of new bachelor's degree students between 2019/2020 and 2020/2021, by age and gender



Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

It is interesting to consider how the crisis has affected the study majors of new students. Figure 14 presents the change in the number of those starting undergraduate studies by gender and major. For women, the sharpest increases occurred in the biological sciences (37%), business (28%), and engineering (18%), while the most modest enrollment increase was in education and teaching (9%). For men, the sharpest increases were in business (22%), the social sciences (21%), and the biological sciences (19%), while the most modest rise in enrollment was in mathematics, statistics, and computer science (9%). It may be that the “biological” character of the crisis, along with the shock sustained by the business sector, contributed to a rise in demand for life science and business studies. It should be noted that, although in percentages the increase among women in these fields was larger, it translated into a smaller rise in absolute numbers. The gender difference in the relative rise in demand seems to be connected with the fact that, in previous years, these subjects were thought of as relatively “masculine.”

Figure 14. Rate of change in the number of new bachelor's and master's degree students between 2019/2020 and 2020/2021, by study major and gender



Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: CBS

Vocational training

The ongoing crisis has made it very difficult to help unemployed persons with job placement and vocational training. Despite the steep rise in demand for such training, the Israeli Employment Service was unable to provide most of the aid and tools due to social distancing guidelines and the cancellation of in-person activity. Many vocational training programs require that participants be physically present, and thus could not be offered during the lockdowns. Programs that can be conducted remotely, such as high school equivalency studies and vocational Hebrew, depend on the availability of internet infrastructures to unemployed participants; for many of these participants the infrastructures at their disposal (especially in the geographic periphery and in the Arab sector) are dubious at best. Moreover, many unemployed persons probably hoped to return to work quickly, and so did not take advantage of all the tools available to them.

Table 3 shows the change in the number of participants in placement and vocational training activities between 2019 and 2020 (Israeli Employment Service, 2021, p. 85). Despite a large rise in the number of unemployed persons (nearly tenfold, per the expanded definition), program participant numbers rose by only 13%, with the increase occurring in the assistance, counseling,

workshops, and fundamental skills program areas. In the vocational training and skill-improvement programs there was a 35% decline in participant numbers, mainly due to the difficulty of holding classes while the health restrictions were in force at the pandemic's peak.

Most of the increase in these programs was in Ma'aglei Ta'asuka ("Circles of Employment") (103%) and BiShvil HaKaria ("On the Path to a Career") (643%) — the Employment Service's flagship programs, which combine counseling, personal coaching, and job search workshops. Most of the decline in vocational training and skills-improvement courses was in core programs in the areas of in-service training (-74%), vocational Hebrew (-62%), and vocational training (-34%), along with a decline that was comparatively steeper — though modest in absolute numbers — in high school equivalency studies, in Hakhshara B'Hatama (specific training based on employer needs) and in the Shovarim L'Ma'asikim (Employer Vouchers) program, which was not utilized at all.

Table 3. Rate of change in the number of participants in Employment Service programs between 2019 and 2020

	2019	2020	Percent change
Ma'agalei Ta'asuka	15,881	32,312	103%
Ashkelon College Work & Age	1,680	1,530	-9%
BiShvil HaKaria and job search	483	3,591	643%
IAM	5,933	4,914	-17%
Psychological counseling	1,408	547	-61%
Total assistance, advice, workshops, and fundamental skills programs	25,385	42,894	69%
Remote work grants and bonuses (support tools)	7,879	633	-92%
Vocational training and skills improvement	3,680	2,418	-34%
Vocational Hebrew	516	197	-62%
Vouchers	2,540	2,597	2%
Continuing education program	3,491	1,245	-64%
High school equivalency studies	57	15	-74%
Employer vouchers	419	0	-100%
Personalized training	55	9	-84%
Advanced Microsoft	467	442	-5%
Basic Microsoft	1,722	1,547	-10%
Total professional training and skills improvement programs	12,947	8,470	-35%
Total of all programs	46,211	51,997	13%

Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data and definitions: Israeli Employment Service

With this, there is a sense that the opportunity afforded by people's confinement at home was largely squandered. It would have been possible to offer online training on a large scale to many different populations, thereby substantially upgrading their skills — which would then have translated into improved labor productivity and higher wages for these workers once the economy re-opened; however, this failed to happen.

As the population became vaccinated and the closures were lifted in the course of 2021, placement and vocational training activities returned in full force. Since unemployment rates remained relatively high, we may reasonably assume that the demand for these activities stayed high as well. However, because a large majority of workers returned to work, fewer people are likely to benefit from the training programs than would have benefited during and between the lockdowns in 2020. We may hope that the online format devised for some of the placement activities will be incorporated into the array of employment assistance services once things return to normal, thereby promoting access for residents of the periphery and for other populations that have trouble coming for in-person services.

Projections for full employment

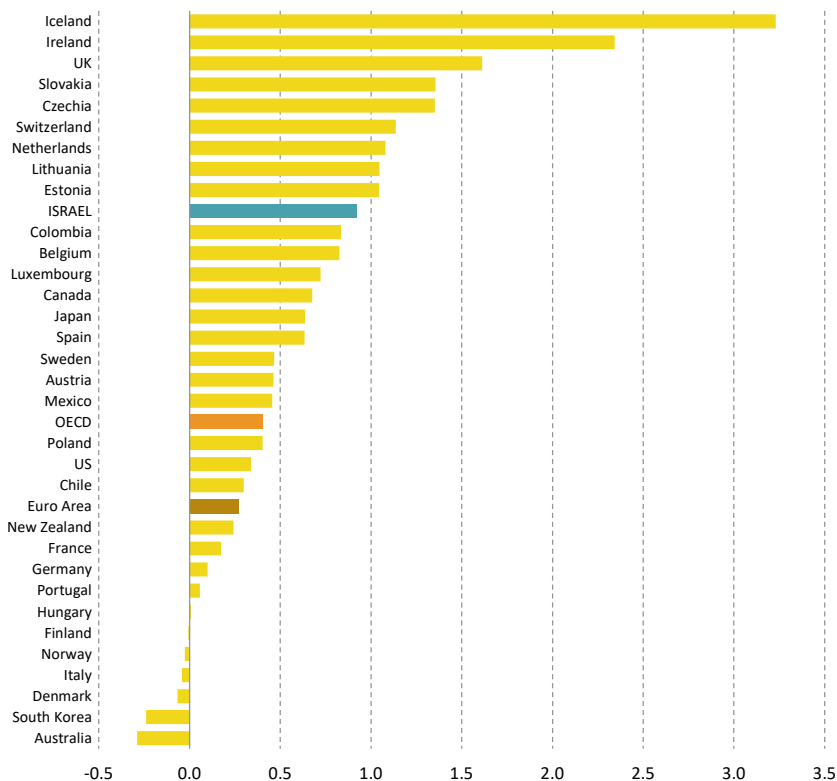
As noted in the Introduction, Israel's labor market was at full employment in 2019, with unemployment rates at a historic low of 3.8%. During the crisis, unemployment — redefined to include workers on furlough, and workers who left the labor market due to Covid-19 — reached a peak of 36% in April 2020. By the end of 2020, the unemployment rate (with the expanded definition) reached 15.9%, and by mid-November 2021 the rate had dropped to 6.7%, while the rate of unemployment per its original definition was 4.7%. In addition, CBS Labor Force Surveys show that the employment rate has returned to 61.8% in November — its level before the pandemic. This finding, combined with the number of job seekers (higher than before the pandemic), implies that participation rates have increased over the last two years. As far as what is to be expected in the coming years, expectations vary.

According to a Bank of Israel projection from this October, the expanded-definition unemployment rate may be expected to drop by late 2022 to 5.2% (Bank of Israel, 2021). A more optimistic short-term projection emerges from OECD calculations (Figure 15) that put Israel's employment rate in late 2022 at less than 1 percent above its rate at the end of 2019 — i.e., below 5%.

However, the gap predicted for Israel is higher than that forecast for most OECD countries. Moreover, the OECD predicts that the Israeli economy will not return to full employment until 2025 at the earliest — later than in most other countries. According to the organization, this projection is based on Israel's lack of policy measures focused on the hardest-hit populations (see Bental & Shami, 2021). We may assume that this OECD forecast is also based on the high employment bar that was set in 2019, when unemployment in Israel was historically low, and far below the developed-country average.

Figure 15. OECD projection for unemployment in the fourth quarter of 2022 relative to the fourth quarter of 2019

Percentage points



Source: Michael Debowy, Gil Epstein, and Avi Weiss, Taub Center | Data: [OECD](#)

Conclusion

The Covid-19 pandemic is one of the greatest shocks ever experienced by the Israeli labor market. The crisis peaked in 2020, while 2021 witnessed a gradual recovery as well as adjustment to a new reality in the labor market. Although the unemployment rate is still falling, it will likely take a few more years for the labor market to return to the impressive unemployment rate that characterized it prior to the pandemic.

The various sectors of the Israeli economy were affected differently by the crisis, and coped differently with it as well. Predominantly “public” sectors such as healthcare, education, and public administration did not suffer major activity or employment disruptions, while other sectors, such as trade, transport, accommodation and food services, and, in particular, tourism, were hit hard; the latter is still struggling to recover. In terms of geography, the Tel Aviv, Central and Haifa Districts exhibited a high degree of employment recovery, while in the Jerusalem, Northern, and Southern Districts employment has remained far below its pre-crisis level. At the same time, Arab men exhibited the largest decline in employment rates (a substantial, though more modest, drop was observed among Haredi men as well). With respect to this finding, it is important to keep in mind two important things. First, this reflects ongoing processes that were underway before the pandemic, and, second, there have been signs of some recovery of late. Women in all sectors sustained a more moderate blow in employment terms, but as Zontag et al. (2020) show, the damage to them was greatest during the lockdowns, both in terms of the share of women placed on leave and in terms of work hours.

The combination of ongoing processes and pandemic-driven constraints accelerated structural changes in the labor market, whose long-term impact is still hard to predict. The crisis opened the door to remote work in those occupations and sectors that allow it — in some fields the share of those working from home in late summer 2021 was around 50%. This was particularly true of academic, managerial, and technical occupations, and in “intangible” sectors where educated workers of high earning ability are concentrated (see Debowy et al., 2021). At the same time, there was an exceptional rise in the share of those enrolling in higher education programs, apparently driven by two factors: labor market incentives/returns to education, and a lack of alternatives for young adults due to the closing of the borders and reduced economic activity. Additionally, during the crisis there was a rise in Employment Service placement activity (alongside a drop in vocational training due to the lockdowns), and this increase may be expected to continue during 2022.

Regarding the degree of unemployment that persists, and how to address it in the foreseeable future, emphasis should be placed on focused measures vis-à-vis disadvantaged populations. The recovery of these populations — less-educated workers and workers in the geographical periphery and among the Haredi and Arab Israeli populations — has been much more modest than in the rest of the economy, and, so, requires a focused effort. Vocational training should be expanded, while higher education and relevant skills should be made accessible to these populations. The remote work revolution should be leveraged and online vocational training and study promoted where professionally and technically feasible (including investment in broadband infrastructures in the periphery as a central labor market policy tool).

To conclude, the vaccination campaign and the rapid reopening of the economy promoted a swift recovery of the labor market as a whole. The general recovery, however, conceals starkly differing trends between economic sectors, geographic districts, and population sectors. In order to help the economy reach its full potential, and to adjust the nation's labor force to changing market needs (related or unrelated to the pandemic), we need to adopt a proactive policy of investment in human and physical infrastructures, and in the development of skills and qualifications among all Israeli workers.

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