

The Impact of the Coronavirus on the Economy of Israel: An Overview

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Benjamin Bental and Labib Shami

When the coronavirus pandemic began, Israel's economy was healthy and, in some respects, was even flourishing. In a presentation by Prof. Amir Yaron, the Governor of the Bank of Israel, on January 20th, 2020, to the Knesset Finance Committee, the growth rate of GDP was forecasted to be 2.9 percent in 2020 and 3.2 percent in 2021 (Yaron, 2020). The labor market was in excellent shape. According to the presentation, the labor force participation rate in October 2019 was 80.9 percent, the employment rate was 78.3 percent and the unemployment rate was 3.2 percent. On the fiscal side, the Governor reported a stabilization of the national debt-to-GDP ratio at 60 percent.¹ Nonetheless, according to the presentation, the government's budget deficit had reached 3.7 percent of GDP, which is significantly higher than the 2019 target of 2.9 percent.

In that same presentation, the Governor discussed processes in the economy that are sources of concern. The drop in the debt-to-GDP ratio was in part due to "technical" and transitory factors and as a result the trend could change. In particular, the index of output prices was rising faster than the CPI and accordingly, in current prices, GDP was rising at a faster rate than the debt (see also Bental & Brand, 2019). Another effect that was reducing the debt was the appreciation of the shekel, which reduces the value of shekel-denominated external debt. The government's expenditure programs at that time and the addition to the defense budget that was being discussed were expected to increase the deficit during the subsequent five years to a level of 5.2 percent of GDP and the national debt ratio to 75.5 percent. Meeting the target for total

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1 The debt-to-GDP ratio at that level is considered not to present a problem for debt servicing. See below for further details.

expenditure and the deficit target as specified by law would have lowered the deficit gradually to 1.5 percent of GDP in 2025, alongside a slight drop in the debt (relative to the existing situation) to 59.6 percent of GDP.

From a structural perspective, the Governor presented several fundamental problems we have also discussed in the *State of the Nation Report 2019* (Bental & Brand, 2019). The first is the low level of labor productivity in Israel and the widening gaps over time relative to other developed countries. The second is the lack of change in the low labor force participation rate among Haredi (ultra-Orthodox Jewish) men and the continuing low rate among Arab Israeli women, despite the notable upward trend in that group. The low level of productivity is attributed to the low level of human capital, as reflected in the PIAAC surveys and the PISA tests, and to a low level of physical capital and transportation infrastructure, as well as burdensome regulations that hinder business sector activity in Israel. The low participation rates of the two population groups mentioned is well known and has been discussed in, for example, Fuchs and Epstein (2019). Needless to say, the coronavirus crisis has not solved any of these problems and seems to have only exacerbated them. Finally, the Governor mentioned the challenges facing the Bank of Israel and central banks in general, including, among others, the “emergence of new risks.” He, of course, could not have imagined that the challenge would arrive with such short notice.

At the beginning of 2020, the trends of the previous year continued — until the arrival of the coronavirus crisis which changed the situation dramatically. Accordingly, the macroeconomic survey this year will focus on the immediate impact of the coronavirus crisis on economic activity in Israel and will relate to the indications for coming years.

A brief timeline of events

The healthcare system began preparing for the coronavirus pandemic at the end of January 2020. On January 30th, flights from China were stopped and other countries were added during February. On March 12th, the education system in Israel was closed down and on the 19th a lockdown was imposed that prohibited people from leaving their homes except when necessary. On April 12th, the mandatory wearing of face masks was introduced. Some loosening of restrictions were introduced on the 19th, which included the reopening of businesses in selected sectors. Additional exemptions were introduced

on April 26th. The education system reopened at the beginning of May but under limitations on activity, and on the 14th it began operating without any restrictions. At the same time, economic activity was allowed to return to a nearly normal level, including traffic through Ben Gurion Airport (except for incoming tourism which was still prohibited). Towards the end of June, as the rates of infection began to rise, restrictions were again imposed on gatherings of various sizes and on a variety of activities. The failure of these measures led to a second lockdown, which began on September 18th and was further tightened on the 25th. In particular, it was decided to close workplaces and the airport and to severely limit mobility. During the first half of October, the process of ending the lockdown gradually began, with the lifting of restrictions on mobility, the reopening of the airport, preschools, and schools.

Main macroeconomic variables

The coronavirus crisis drastically changed the trends of the previous years. The following graphs focus on the data for growth, unemployment, the deficit, and the public debt over the past decade. In all of the graphs, the effect of the coronavirus pandemic is presented by the Bank of Israel forecasts (made at the end of October) for 2020 and 2021.²

GDP

Figure 1 describes the path of growth in GDP per capita and the Bank of Israel forecast.³ The Bank of Israel believes that if the pandemic is brought under control (the optimistic scenario), the decline in GDP for 2020 will be 5 percent.⁴ Taking into consideration the rate of increase in the population, which is 1.9 percent per year, this is a major drop in standard of living, as reflected in the decline of 6.9 percent in GDP per capita. This decline returns the level of GDP per capita to where it was in 2014 (about NIS 139,000).

2 See [Research Department Staff Forecast, October 2020](#), Bank of Israel.

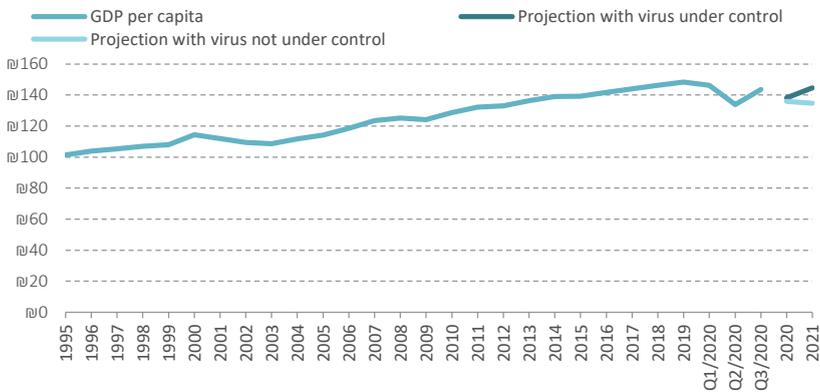
3 The calculations for the first three quarters of 2020 are based on the change in GDP per capita compared to each of the same quarters in 2019. At this time, the drop in GDP is about 3 percent relative to the same three quarters in 2019.

4 In its latest update, the Bank of Israel estimated that the GDP would drop from 4.5 percent to 5 percent. See the [presentation by the Governor of the Bank of Israel, December 2020](#) (in Hebrew).

According to the optimistic scenario, GDP will grow in 2021 by 6.5 percent, which puts GDP at the end of next year at a level that is 5 percent less than what was expected without the coronavirus pandemic. The level of GDP per capita will be similar to what it was in 2017 (about NIS 144,000). This scenario is similar to that reflected in the IMF forecasts made in October 2020 for other developed countries.⁵ The IMF expects that in 2020, GDP per capita will drop by 6.2 percent in this group and will rise by 3.6 percent in 2021. This forecast puts the 2020 level of GDP per capita in the group of developed countries at the level it was at in 2015 and in 2021 back to its level in 2017.⁶

Figure 1. GDP per capita in Israel

In 2015 prices, NIS thousands



Note: Annual GDP per capita for each quarter are based on the quarterly per-capita growth rate relative to the previous quarter.

Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel; CBS

In contrast, if control over the pandemic is not achieved and additional lockdowns are imposed toward the end of 2020 (the pessimistic scenario), the Bank of Israel predicts negative growth of 6.5 percent in 2020. According to that scenario, the level of GDP per capita in Israel will return to its level in 2013 (about NIS 136,000). Moreover, in this scenario GDP is expected to grow

5 The IMF includes 36 countries in this group, 34 of which are members of the OECD (all of the countries in the organization except for Chile, Colombia, and Turkey), and also Hong Kong and Singapore.

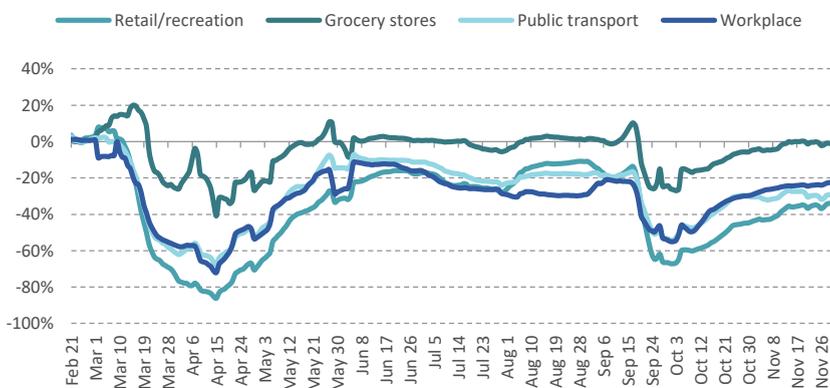
6 See the [IMF](#) site.

in 2021 by only 1 percent, i.e., a negative growth rate of 0.9 percent in per capita terms. As a result, GDP per capita will return to almost what it was in 2012 (about NIS 133,000).

Consumer activity during the coronavirus crisis

The fear of infection during a pandemic has a moderating effect on economic activity. For example, research recently carried out in Scandinavia showed that the decline in consumer activity in Sweden, where restrictions were only voluntary, was only somewhat less than in Denmark, which imposed a formal lockdown on its citizens (Andersen, Hansen, Johannesen & Sheridan, 2020). Nonetheless, a formal lockdown has a greater effect on economic activity, as reflected in Google's mobility reports (Figure 2).⁷ The graph provides information on the change in the mobility of Israel's residents relative to the situation prior to the coronavirus crisis for the purpose of retail purchases and recreation and grocery shopping, and movements in public transportation centers and workplaces. All of the curves point to a strong decline in activity during the first and second lockdowns and a lower level than prior to the crisis also during the period between the lockdowns. Activity for the purpose of grocery shopping declined the least and even returned to its original level when the first lockdown was lifted.⁸

Figure 2. Mobility of Israeli residents between February and November, 2020
Seven-day moving average, percent change from baseline



Source: Benjamin Bental and Labib Shami, Taub Center | Data: [Google community mobility report](#)

7 See the timeline of the imposition of lockdowns below.

8 For a discussion of the connection between the severity of the restrictions on the one hand and mobility and economic activity on the other, see also IMF, 2020.

The restrictions on mobility also had an effect on purchasing habits among Israeli consumers, who shifted a significant portion of their activity to online purchasing, which can be carried out only with a credit card. As a result, the Bank of Israel began to report the daily levels of credit card purchases, which essentially made it possible to track consumer responses to the development of the crisis. Moreover, the Bank of Israel breaks down the data by industry, so it is possible not only to track total consumer activity but also to identify the effect of the crisis on specific components of the consumption basket. Figures 4–6 describe the daily average credit card purchases in sectors whose activity was particularly affected (hotels, recreation, and restaurants), average purchases at grocery store chains which were unaffected, and activity at gas stations, which represent the degree of mobility in the economy.⁹

In order to facilitate the discussion, we divided the time axis into six periods that represent the development of the crisis in Israel:

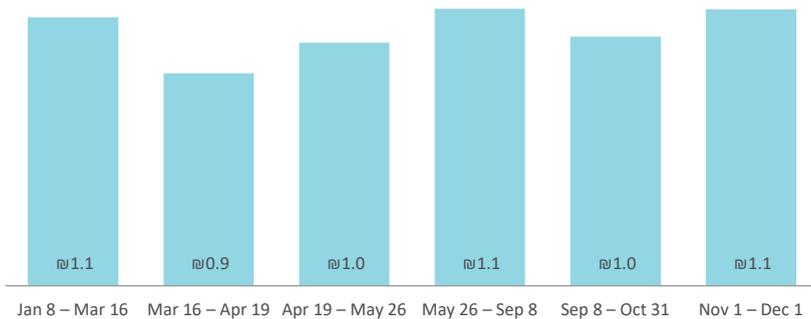
1. The original situation of the economy: from the beginning of 2020 until the first lockdown of the economy — January 8th, 2020, until March 16th, 2020.
2. The first lockdown period: March 16th, 2020, until April 19th, 2020 (after Passover), which is reflected in the sharp drop in activity in Figure 2.
3. The end of the first lockdown until the opening of restaurants, swimming pools, and tourism: April 19th, 2020, until May 26th, 2020, represented by the upward trend in Figure 2.
4. A return to restricted activity: May 26th, 2020, until September 8th, 2020, represented by the stabilization of activity in Figure 2.
5. Declaration of restricted zones (including a second lockdown) until a gradual return to routine with restrictions: September 8th, 2020, until November 1st, 2020, represented by the sharp drop and then a recovery during the second wave in Figure 2.
6. The end of the second lockdown period and a staged return to normal from November 1st, 2020 to December 1st, 2020.

9 In the graphs, sectors are grouped according to their scope of activity for ease of comparison.

Figure 3 presents average total daily credit card purchases in each of the periods. The graph shows a sharp drop in economic activity, as reflected in the 21 percent drop in credit card purchases following the government declaration of economic restrictions on March 16th. Simultaneous with the removal of restrictions, there was a recovery in economic activity, as reflected in the rise in credit card purchases, back to pre-crisis levels and slightly higher. The second lockdown, which began on September 8th, again led to a drop in the level of activity, but this time it was much more moderate (about 10 percent). It can be assumed that the difference in the reactions to the two lockdowns is an indication of the lower severity of the second lockdown relative to the first, as well as the public's changing consumption habits. Along with the ending of the lockdown came a return to economic activity at the level prior to the beginning of the second lockdown.

Figure 3. Average daily credit card purchases

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

A similar pattern characterizes the average credit card purchases broken down by sector, though to a different extent. Figures 4 and 5 focus on four sectors whose level of activity was particularly sensitive to the restrictions on mobility (gas stations) and the restrictions on gatherings (restaurants, recreation, and hotels). The restrictions on mobility in the first wave reduced activity in the gas stations by 49 percent, but once the restrictions were lifted, gas stations returned to nearly the pre-crisis level (Figure 4). Here again, the effect of the second lockdown was much more moderate than the first and the activity

of the gas stations fell by only 21 percent. In the restaurant industry, the reaction was more pronounced. The first lockdown reduced activity in this industry to about one-third of its normal level while the second lockdown led to a reduction of only 34 percent. As of the beginning of December, and considering the continued restrictions on the restaurant industry, economic activity has not returned to pre-second lockdown levels.

Figure 5 focuses on the hotel and recreation sectors. In both of these sectors, the first lockdown reduced the level of activity to one-quarter of its normal level. However, with the lifting of the first lockdown, there was a dramatic recovery in these sectors and activity in the hotel industry even exceeded the pre-crisis level (apparently as a substitute for traveling abroad during the summer). The second lockdown, in which the hotels were again closed, led to a drastic reduction in activity. Activity in the recreation industry was cut in half.

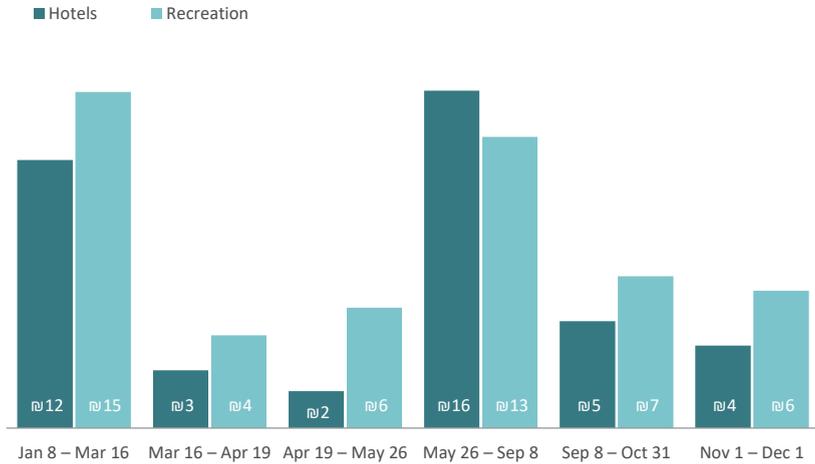
Figure 4. Average daily credit card purchases on gasoline and in restaurants
NIS millions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

Figure 5. Average daily credit card purchases on hotels and recreation

NIS millions

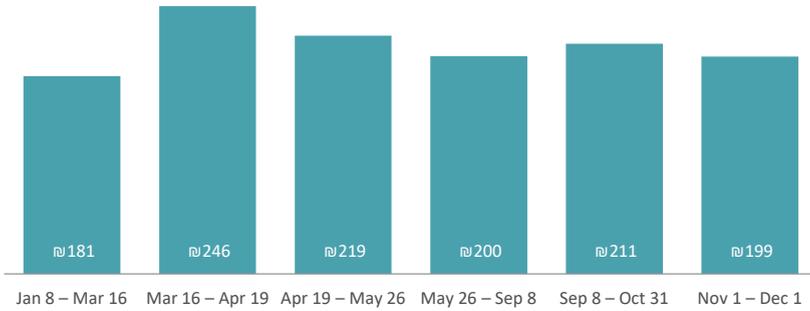


Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

In comparison to the aforementioned industries, the trends in the various grocery store chains were dramatically different. Figure 6 shows that during the period of the first lockdown credit card purchases rose by more than one-third. This is apparently consistent with the drop in mobility which led to a shift from in-store shopping, where cash purchases are possible, to online shopping where only credit cards can be used. It appears that these purchase habits also had a lasting effect, since total credit card purchases in the summer months remained higher by about 10 percent than their pre-crisis level. The second lockdown led to an increase in credit card purchases by another 6 percent, but left them at a level that was about 14 percent lower than the peak during the first lockdown. These data, together with the gas station data, tend to confirm the hypothesis that the second lockdown was much less stringent than the first.

Figure 6. Average daily credit card expenditure in the grocery store chains

NIS millions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

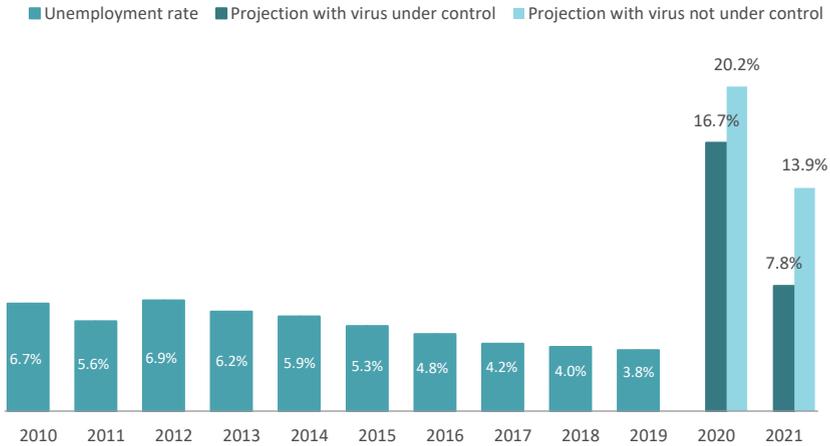
Unemployment and unpaid leave¹⁰

Under normal circumstances, unemployment is measured as the share of individuals of working age who are not working but are engaged in active job seeking. As can be seen in Figure 7, that rate declined consistently during the past decade and, during the first quarter of 2020, it was also at a low level.

As a result of the coronavirus crisis, the concept of unemployment was modified to fit the new circumstances. In mid-March, with the imposition of the first lockdown, about a million Israelis were sent on unpaid leave. As a result, it was decided to expand the definition of “unemployed” to include those who were absent from their place of work for at least a week because of the coronavirus crisis. The expanded definition also includes individuals who were working before the crisis, were laid off and are no longer seeking employment (under normal circumstances they would be classified as “not participating in the labor force”). The Bank of Israel believes that in a scenario where the virus is brought under control, the rate of unemployment according to the expanded definition will be 16.7 percent at the end of 2020 and 7.8 percent at the end of 2021. If the virus is not brought under control, the rates will be 20.2 percent and 13.9 percent, respectively. The last time that unemployment exceeded 10 percent was during the second *intifada*. It appears therefore that in this context, too, the coronavirus crisis has set us back many years.

¹⁰ Zontag, Epstein, and Weiss (2020) discuss this issue in more detail.

Figure 7. The rate of unemployment in Israel between 2010 and 2019 and the forecast for 2020 and 2021



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

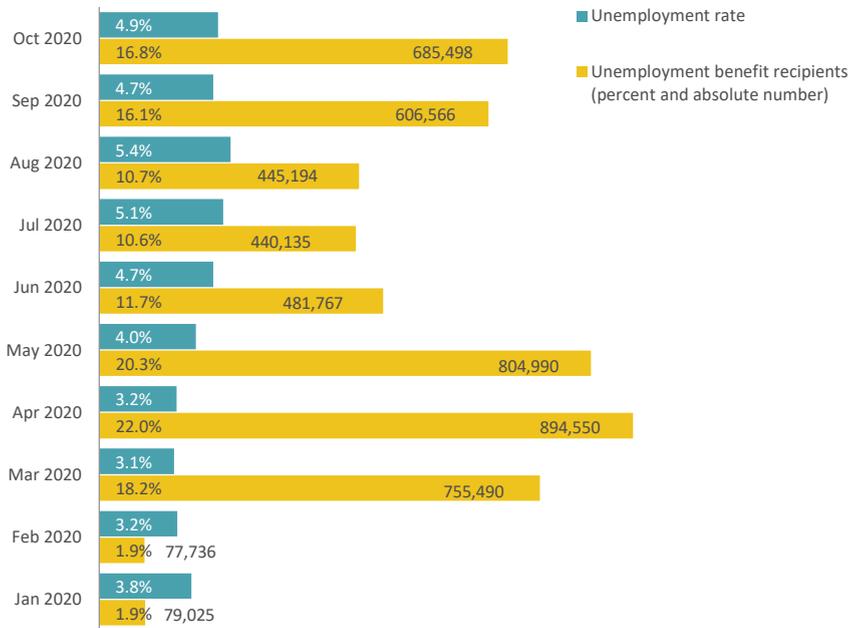
As mentioned, with the imposition of the first lockdown, it was announced that workers on unpaid leave are eligible for unemployment benefits from their first day without a job.¹¹ Figure 8 presents the rates of unemployment benefit recipients during the first nine months of the year. As can be seen, the rate jumped 10-fold in March 2020 relative to February and continued to climb to a peak of 22 percent of the labor force (almost 900,000 workers) in April 2020. The exit from the lockdown during June, July, and August lowered the number of workers on unpaid leave by 50 percent, but the second lockdown in September–October again led to a significant increase and returned about 240,000 workers to this category.¹² The graph also depicts a picture of the gap between the two characteristics of the non-employed: the “classic” unemployed and the workers on unpaid leave. While at the start of the year the unemployment rate was higher than the rate of unemployment benefit

11 Under normal circumstances, unemployment benefits are paid to workers who have been on unpaid leave after 30 days. There are those, who do not meet the criteria to receive unemployment benefits. There are also unemployment benefit recipients who continue to work (in particular, self-employed individuals).

12 For further discussion of the safety net put in place by the National Insurance Institute for workers on unpaid leave, see Gal and Madhala, 2020.

recipients (due to duration restrictions on eligibility for unemployment benefits in normal times), since the onset of the crisis, there has been a separation of the two definitions. In April, this separation reached its peak when the unemployment rate was only 3.2 percent of the labor force. The drop in the rate of unemployment benefit recipients during the summer was in fact accompanied by an increase in the unemployment rate, such that the second lockdown in September and October was characterized by a small drop in the unemployment rate. It appears that this decline primarily reflects the exit from the labor force of those who have stopped seeking employment, which is also reflected in the slight drop in the size of the labor force in September.¹³

Figure 8. Rate of unemployment benefit recipients relative to labor force and the unemployment rate, January to October 2020



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel; CBS

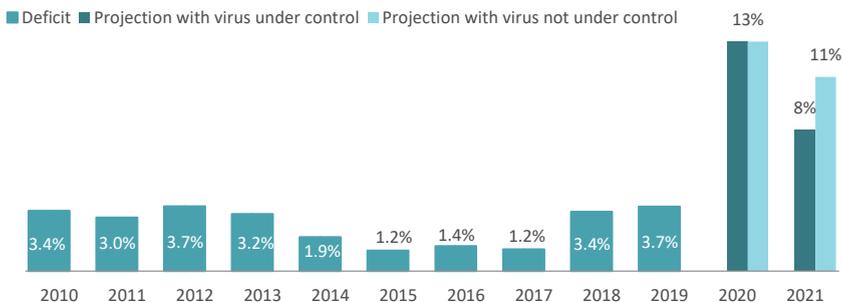
13 The change was from 4,126,300 workers in August to 4,069,400 in October. CBS, *Monthly Statistical Abstract for Israel*, November 2020.

The government budget

Support for workers on unpaid leave and the massive healthcare needs as a result of the coronavirus crisis are forcing many governments, including Israel's, to dramatically increase their expenditure. At the same time, the crisis has led to a significant decline in tax revenues, which has further increased the deficit. Figure 9 shows the forecasted deficit for this year and next year relative to that of recent years. The graph depicts the actual budget deficit in each year relative to GDP in current prices.¹⁴ The increase in the deficit to 3.7 percent, which was, as mentioned, also reported by the Governor of the Bank of Israel in 2019, exceeded the target that had been set (at 2.9 percent) and turned out to be an impediment in view of the developments during the first half of 2020 and those that are expected in the course of this year and in years to come. The deficit forecasted by the Bank of Israel for 2020 in the scenario where the virus is brought under control is 13 percent with a drop to 8 percent in 2021. If the virus is not under control, the deficit for 2020 is expected to be 13 percent, but in 2021 it is expected to drop to only 11 percent. This trajectory for the deficit is quite similar to that expected by the IMF for the developed countries, where the deficit for 2019 was 3.6 percent of GDP on average. In the current year, the deficit in these countries is expected to be 11 percent, but the drop next year is expected to be larger — down to 5.6 percent.

The shortage in resources will have to be found by the government at the capital markets, i.e., increasing the national debt and shifting the burden of repayment into the future (see below).

Figure 9. The deficit in the government budget relative to GDP

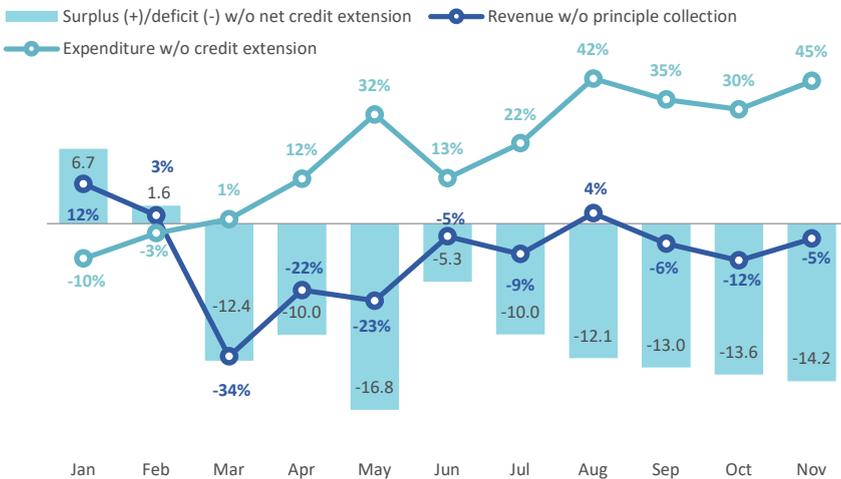


Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

14 The data for the deficit can be found at [The Accountant General Department, Ministry of Finance](#).

Figure 10 presents the source of the increased deficit. The graph presents the gap between government revenues, government expenditure, and the deficit for each of the months in 2020 and the same months in 2019, in millions of shekels. It can be seen that, in the first quarter of 2020, the trajectory of the government’s expenditure was similar to that in the same month in 2019, which reflects the continuation of the 2019 budget in the absence of a new budget for 2020 (according to the rule that allows monthly expenditure of 1/12 of the total budget each month). Moreover, In January and February 2020, the deficit was lower than in the same months in 2019. This trend was reversed with the full onset of the crisis in March. Expenditure had still not adjusted to the new situation but government revenues plummeted as a result of the lockdown imposed on the economy and the deferral of payment of various taxes. As a result, the monthly deficit in March was NIS 12 billion higher than in March 2019. In April, a sharp increase was recorded in expenditure and in May the addition to the monthly budget reached approximately NIS 17 billion. It is worth mentioning that with the exit from the first lockdown the gap between government revenues in 2020 and 2019 narrowed but the gap in expenditure continued to grow as did monthly deficits relative to 2019. At this stage, the accumulated deficit during the first three quarters of 2020 stands at 12 percent of the accumulated GDP.

Figure 10. Revenue, expenditure, and the deficit in 2020 relative to 2019



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

Finally, Figure 11 shows the dramatic impact of the coronavirus crisis on the structure of public expenditure in Israel. It can be seen that relative to the same months in 2019, defense expenditure at the beginning of the year fell somewhat and later in the year rose somewhat.¹⁵ In contrast, starting in April, civilian expenditure was much higher than in the previous year, with the gap widening over time. Accordingly, civilian expenditure is almost entirely responsible for the rise in the deficit, as can be seen in the figure.¹⁶

Figure 11. Civilian and defense expenditure in 2020 relative to 2019

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

The national debt

In contrast to the exceptionally large deficit relative to other developed countries, Israel's national debt is at a low level. Figure 12 shows the continuous decline in the debt-to-GDP ratio over the years. The downward trend that characterized the Israeli economy since the 1990s put Israel in a very favorable

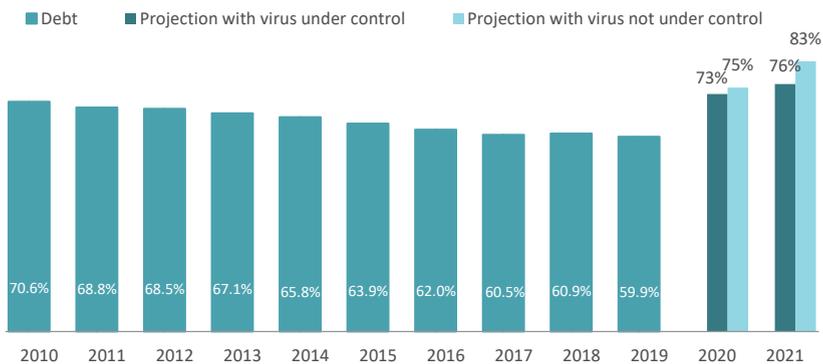
15 The majority of the rise is due to defense establishment activities related to the coronavirus epidemic.

16 Expenditure on social welfare is discussed in detail in Gal and Madhala, 2020.

position in the international capital markets (see below). The debt-to-GDP ratio of about 60 percent, which Israel reached prior to the coronavirus crisis, was set thirty years ago in the Maastricht Treaty as a criterion for joining the euro bloc (which was violated by most of the bloc's member countries as a result of the Great Recession of 2008). This ratio was determined at the time under the notion that the economic growth rates and the interest rate environment of about 3 percent, which prevailed at the time the euro bloc was created, made it possible to service the debt over time without exceeding a deficit of 3 percent, which was also set as a target.

However, it is clear that the increase in the deficit seen in Figure 9 and the drop in GDP depicted in Figure 1 will necessarily lead to an increase in the debt-to-GDP ratio to levels beyond 70 percent. According to the estimates of the Bank of Israel, in the optimistic scenario the debt-to-GDP ratio in 2020 will be 73 percent and in 2021 will reach 76 percent. In the scenario where the virus is not under control, the ratio will reach 75 percent and 83 percent, respectively. In order to put these forecasts into perspective, it is worth mentioning that the last time that the debt-to-GDP ratio exceeded 70 percent was at the end of the 2000s, and it had exceeded 80 percent in the mid-2000s. Therefore, once the pandemic has passed, the government will need to rapidly reduce its deficit and encourage growth in order to return the debt-to-GDP ratio to its pre-crisis level within a span of about 10 years. Nonetheless, the situation of Israel's national debt is much better than that of the other developed countries. According to IMF figures, the national debt of those countries in 2019 was 104 percent of GDP and in 2020 and 2021 it is expected to rise to 124 percent.

Figure 12. Debt-to-GDP ratio



Source: Benjamin Bental and Labib Shami, Taub Center | Data: Bank of Israel

In order to correctly assess the increase in debt in Israel and in other countries, account should be taken of the dramatic change in the economic environment since the signing of the Maastricht Treaty and particularly following the Great Recession in 2008. The significant monetary expansion that has characterized the central banks since then has reduced short-term nominal interest rates to their lower boundary, namely zero, without any significant rise in the rate of inflation. This interest rate environment has also influenced long-term interest rates. This phenomenon can also be seen with respect to Israel's national debt. Figure 13 shows the trend in the yields on Israeli government bonds with 10-year maturity for the past year. As can be seen, following a sharp rise in mid-March (as a result of the total lockdown), the nominal annual yields on these bonds fell to about 0.6 percent by the end of the first lockdown. However, notice that there has been a continuous increase of about 25 basis points during the summer months, and in particular prior to the imposition of the second lockdown, with some moderation towards the end of November. This interest rate environment relieves the pressure created by debt servicing on the state budget. In particular, if the economy returns to the growth rate characteristic of the years prior to the coronavirus crisis in the foreseeable future, i.e., about 3.5 percent, then the rate at which the debt-to-GDP ratio declines will be accelerated.

Figure 13. Yields on 10-year government bonds



Source: Benjamin Bental and Labib Shami, Taub Center | Data: [World Government Bond](#)

Another measure of the global capital market's confidence in the Israeli economy is the premium paid on credit default swaps (CDS). In using these swaps, a lender to a company or a country is buying a kind of insurance, in which the insurer will return the amount of the loan (or part of it) to the lender if the borrower defaults. Figure 14 shows that the CDS premium on five-year bonds issued by the State of Israel is about 57 basis points, a drop from about 81 basis points at the beginning of April.¹⁷ These premiums can be "translated" into a probability that the capital market attributes to an event with which the borrower (in this case, the government of Israel) cannot meet its obligations under various assumed levels of the insured debt. For example, if the insurer promises to return 40 percent of the debt in the case of a breach of contract, according to the market there is a probability of 0.95 percent that Israel will not repay its debt in another five years, as compared to 1.35 percent at the beginning of April.¹⁸ At the same time, the credit rating companies of Fitch, Moody's, and S&P left Israel's credit rating at relatively high levels (A+, A1, and AA-, respectively) despite the sharp rise in the deficit and the debt-to-GDP ratio. These levels are evidence of the confidence of the companies in Israel, which provides Israel with fairly wide margins within which to increase its debt. Nonetheless, this confidence is dependent on the belief in Israel's ability to service its debt, which in turn depends on the investment of resources in growth-oriented programs that will justify this confidence.

17 In this context, Israel is similar to Portugal, Poland and Spain. For the sake of comparison, the CDS on Germany's five-year bonds was about 11 basis points at the end of October and on American bonds it was 16 basis points.

18 The probability of a violation of a commitment is obtained, to a first-order approximation, through dividing the market premium by the proportion of the loan that will not be returned by the insurer in the event of a breach in contract.

Figure 14. Credit default swaps transactions in five-year bonds

Source: Benjamin Bental and Labib Shami, Taub Center | Data: [World Government Bond](#)

Monetary policy

In response to the indications of stress that appeared in the financial markets in Israel in mid-March, the Bank of Israel announced a series of steps to calm the market. It allocated an amount of \$15 billion for swap transactions with the banks, which allows the banks to deposit shekel loans with the Bank of Israel and to borrow dollars against them. This measure reduced the liquidity pressure on the banks in foreign currency. In addition, the Bank of Israel increased the level of repo transactions, which allow the banks to obtain liquidity against collateral composed of government bonds, and, later on, it allowed the banks to use high-rated corporate bonds (AA and above) as collateral. Towards the end of March, the Bank of Israel announced its willingness to purchase government bonds in the secondary market in the amount of up to NIS 50 billion. This measure is meant to stabilize the government bond market and lower the long-term interest rate. At the beginning of April, it lowered the monetary rate of interest by 15 basis points to a level of 0.1 percent. At that same interest rate, it introduced a program of loans to the commercial banks for a period of three years in the amount of NIS 5 billion, which is intended to provide loans to micro businesses. At the beginning of July, the Bank expanded its intervention in the capital market by announcing its intention to purchase corporate bonds in the secondary market within a wide range of ratings (from AA and upward). At the same time, it was active on the regulatory level in order

to lessen the capital requirements of the banks. These measures were meant to “strengthen the transmission from monetary policy to the credit market, by reducing the interest at which companies obtain credit in the capital market and free up additional sources of credit in all of the economy’s sectors.”¹⁹ As part of this trend, the Bank of Israel left the interest rate at 0.1 percent at the end of November and also decided to expand the purchase of government bonds in the secondary market by another NIS 35 billion. In addition, and in order to reduce the interest rate for small and micro businesses, it declared the establishment of a NIS 10 billion shekel program in which the commercial banks can obtain loans for four years at a negative interest rate of 0.1 percent against loans they provide to small and micro businesses at an interest rate of not more than prime plus 1.3 percent.

The government program in response to the coronavirus crisis

In response to the health and economic crisis as a result of the spread of the coronavirus in Israel and worldwide, the government of Israel began to formulate an economic program to mitigate its effects. On April 7th, an amendment to the Basic Law: The National Economy was passed, according to which the government can increase its expenditure to beyond the limit of the continuation budget in order to finance excess expenditure needed to deal with the crisis. Since the approval of the first amendment to the law, another five have been approved, the last of which was on September 30th. Figure 15 presents the cumulative allocation at the beginning of each month (in dark blue) and the addition to it as specified in the amendment to the Basic Law: The National Economy during the period prior to it (in light blue), according to the report on budget execution in each of the months issued by the Accountant General Department in the Ministry of Finance.²⁰ Accordingly, the total amount of the economic program for coping with the coronavirus crisis stood at NIS 139 billion at the end of November.²¹

19 See [The Bank of Israel announces an additional set of steps to expand the monetary response to the coronavirus crisis](#), Bank of Israel.

20 The negative addition in September is the result of the cancellation of a program intended to encourage continued employment.

21 It is important to mention that the last amendment to the Basic Law: The National Economy includes additional budgets that are intended for use in 2021 (such as the extension of eligibility for unemployment benefits and the assistance grant paid every two months to the self-employed and business owners up to the end of June 2021). These budget allocations do not appear in the economic program for coping with the coronavirus crisis for 2020.

Figure 15. The development of the economic program for 2020

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance, Budget Execution for March to December

The economic program for coping with the coronavirus crisis in 2020 has four components:²²

1. Healthcare and civilian response in the amount of NIS 16 billion

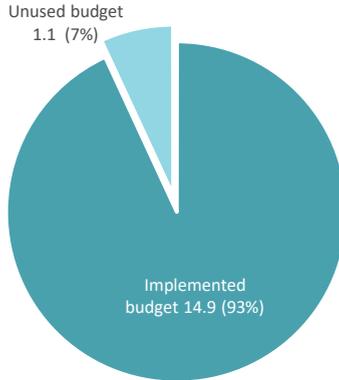
This component includes Ministry of Health expenditures related to the coronavirus crisis (acquisition of respirators and protective equipment, testing, etc.), expenditure related to government ministry measures taken to minimize exposure to the virus and solutions for populations at risk, such as the elderly.

Figure 16 presents the total budget implementation in cash and commitments within the total budget designated to this component. The graphs shows that, as of the end of November, the implementation rate in cash and commitment within the total budget designated to this component is 93 percent and is in line with the time elapsed since the establishment of the program.

22 For further discussion, see [Ministry of Finance — Economic plan for coping with the coronavirus crisis](#).

Figure 16. Civilian and healthcare response, implemented and unused budget as of November, 2020

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

2. Expansion of the social security net: Budget cost of NIS 52.1 billion (of which NIS 12.5 billion is from the budget of the NII and is designated for workers on unpaid leave)

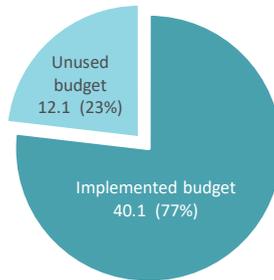
This component includes the grant to the self-employed that was paid in several rounds, a one-time assistance grant (Passover grant), an extension of eligibility for unemployment benefits, a special grant for those aged 67+ who were sent on unpaid leave or fired, wage subsidies for workers on unpaid leave (up to 80 percent of their last salary), a universal grant, and the distribution of food coupons to disadvantaged populations (in the process of implementation at the time of writing). The rest of the budget is to finance the early withdrawal of grants to discharged soldiers, budget assistance to non-profit organizations that are supported by the government, and the program of vocational training for the unemployed (in the process of implementation as of the end of November).

Figure 17 presents the total execution in cash and commitments within the total budget for this component. The graph shows that as of the end of November, the rate of execution in cash and commitments within the

budget designated for this component stood at 77 percent. The reasons for the relatively low rate of implementation are, among others, the low utilization of the budget designated for vocational training programs and for the early withdrawal of discharged soldier grants, and the non-utilization of budgets for food stamps for weaker populations and other grants for soldiers.

Figure 17. Social security, implemented and unused budget as of the end of November, 2020

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

3. **Business continuity: Budget in the amount of about NIS 25 billion and credit in the amount of about NIS 41.2 billion (total of about NIS 66.2 billion)**

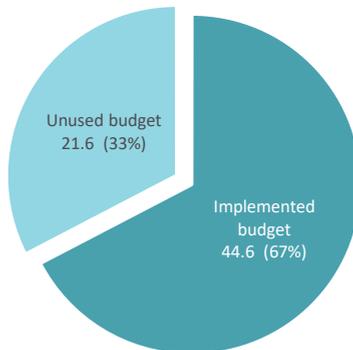
This component includes a participation grant in the financing of fixed costs for small businesses whose economic activity has been adversely affected by the coronavirus crisis, an employment support grant for businesses, a grant to maintain employees as a result of the lockdown during the High Holidays, assistance to industries in distress (such as hotels), deferral of VAT payments, national insurance, electricity and water for small and mid-size businesses, reimbursement of tax advances to the Tax Authority, reduction in municipal taxes for business owners who were not permitted to open, a loan fund under state guarantee for small and mid-size businesses, a loan fund under state guarantee for large businesses and businesses at risk, the creation of a joint investment fund between the government and

institutional investors for assistance to Israeli companies in raising capital to fund their activities (in the process of implementation at the time of writing), business compliance with the directives of the Ministry of Health, financing solutions for large employers, and regulatory exemptions for the renewal of licenses and permits.

Figure 18 presents the total implementation in cash and commitments out of the total budget designated for this component. The figure shows that as of the end of November, the implementation rate in cash and commitments out of the total budget designated for this component stood at only 67 percent. Particularly noticeable is the under-utilization of the business assistance lines, such as assistance for industry branches during the crisis (51 percent utilization) and the employment encouragement grant (56 percent utilization), in addition to the low utilization rates for the program to provide loans under state guarantee to large businesses and businesses at risk. Furthermore, the budget for the preservation of workers as a result of the High Holidays lockdown in the amount of NIS 600 million was not utilized at all.

Figure 18. Business continuity, implementation and unused budget as of the end of November, 2020

NIS billions



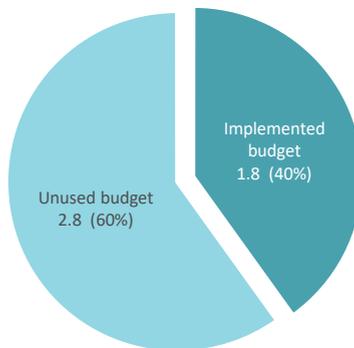
Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

4. **Program for acceleration and development of the economy: Budget cost of NIS 3.1 billion and credit totalling NIS 1.5 billion (for a total of NIS 4.6 billion)**

This component includes the acceleration of infrastructure projects, acceleration of high tech infrastructure projects (under the responsibility of the Innovation Authority and the Ministry of the Economy), encouraging investment in high tech institutional investors, and the improvement of service to the customer by means of digitization, including remote learning. Figure 19 presents the utilization in cash and commitments within the total budget designated for this component. The figure shows that as of the end of November, the implementation rate of cash and commitments within the total budget designated for this component stood at 40 percent. Apart from the budget lines for the acceleration of infrastructure projects led by the Ministry of Transportation, whose rate of utilization stood at 100 percent, and the increase in high tech programs, with an uptake of 86 percent, the rate of utilization for the other budget lines of this component was less than 25 percent. In contrast to previous components, this component is meant to achieve long-term goals with the hope that over time projects will be identified that can be funded by this allocation.

Figure 19. Acceleration and development of the economy, implemented and unused budget as of the end of November, 2020

NIS billions



Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance

In conclusion, and in view of the fact that at the time of writing there is one month remaining in the year, the budget implementation rate for the economic program for 2020 for the months March to November (73 percent) is not on schedule. An in-depth examination of the four components of the economic program paints a complex picture. On the one hand, under-utilization of the acceleration and development of the economy program (40 percent) and the business continuity program (67 percent) is liable to hinder the economy's ability to recover and limit the future engines of growth. On the other hand, and despite the utilization according to schedule in the healthcare and civilian component, there is excess utilization in the sub-component of Ministry of Health measures (109 percent), primarily as a result of the expenditures that focused on the additional needs of the healthcare system during the first half of the year. These additions, which may turn out to be inefficient or non-optimal (for example, an expenditure on items that have passed their date of expiry), may lead to a budget deficit and an inability to meet future commitments.

Size of Israel's assistance budget relative to other countries

Bruegel, the European think tank specializing in the economy based in Belgium, built a database of assistance programs in a number of European countries and the US.²³ The information only includes data on programs that are actually being implemented and compares the assistance programs of various countries according to a classification into three assistance channels. The first is the immediate fiscal impulse, which includes direct support to households, grants to businesses, tax reductions, investment in the healthcare system, etc. The expenditure in this channel is "genuine" and directly raises the government's budget deficit. The second is the deferral of tax payments, such as municipal taxes, VAT and the like, which is meant to ease the cash flow problem. The expenditure in this channel raises the deficit in the immediate term but not over time. The third is the provision of state guarantees to private borrowers. These guarantees solve the market failure problem associated with aggregate risk, in which case the state should provide insurance to lenders against a general failure among borrowers resulting from the crisis, in contrast to failures arising

23 See [Bruegel](#).

from individual business conduct. This channel has no immediate effect on the deficit but may have an effect later on if borrowers are unable to redeem their loans and the state is forced to realize the guarantee.²⁴

Figure 20 presents the structure of the support programs included in Bruegel's comparison, with the addition of Israel and a number of countries with a similar population.²⁵ The data are updated for the months of June and July and are calculated relative to GDP for 2019.²⁶ The graph is organized according to the size of the fiscal incentive, and it can be seen that Israel is in the group of countries with a relatively large incentive.²⁷ In contrast, in terms of total scope of the program, Israel is in the group of countries with a low level of intervention. This fact is primarily the result of the limited scope of state guarantees provided to borrowers in the private market. In this context, Italy is an outlier whose policy constitutes a sort of mirror image to Israel's: a high level of guarantees and tax deferrals and a low level of fiscal incentives. In Israel, the government leaves the management of risk in the hands of the banks to a large extent. In view of the character of the risk, it appears that it is worth considering the expansion of the use of guarantees in order to provide the business sector with certainty and the ability to weather the crisis.²⁸

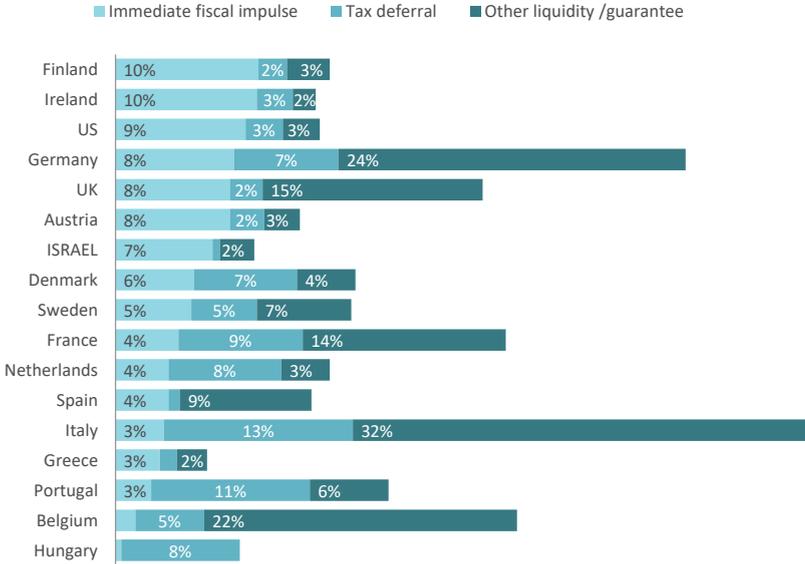
24 For another international comparison, see Benmelech and Tzur-Ilan, 2020. They divide the assistance programs according to fiscal expenditure, healthcare expenditure, support of households, support of small and mid-size businesses, support of large businesses, expenditure on hotel infrastructure, restaurants and tourism, local government and guarantees. Their data include 85 countries but there are significant data gaps.

25 Austria, Belgium, Denmark, Finland, Ireland, Netherlands, and Sweden, which are similar to Israel in population but are wealthier, and Hungary, Greece, and Portugal which are similar to Israel in population but are less wealthy. Italy, Spain, and France are larger countries that were adversely affected during the first wave of the pandemic.

26 For Ireland, the data is for GNI* (modified gross national income), which is unique to it and includes, in contrast to GDP, also income from abroad. This definition of national income takes into account the presence of numerous multinational companies in Ireland, which makes it difficult to measure GDP in the conventional manner.

27 These data do not include the addition of NIS 50 billion (4.2 percent of 2019 GDP) that the government of Israel approved at the end of July for the year 2021.

28 For further discussion of the success of the US assistance program to small businesses (which relied on forgivable loans), see Hubbard and Strain, 2020.

Figure 20. Structure of the support program in various countries

Note: The data are updated to November 2020. It should be mentioned that assistance programs were finalized as early as autumn 2020.

Source: Benjamin Bental and Labib Shami, Taub Center | Data: The Accountant General Department, Ministry of Finance; [Bruegel](#); [IMF](#)

Conclusion

The coronavirus crisis is having a far-reaching effect on the economy of Israel, as well as those of most other countries. As shown in international studies, the fear of infection is enough to reduce economic activity to a considerable extent. Restrictions on mobility and the lockdowns imposed by many countries in order to reduce contact have led to additional declines in economic activity. According to the IMF, the global economy is expected to shrink by 4.4 percent this year as a result of the crisis.

Israel's economy has been seriously affected, even if other OECD countries have been affected to a greater extent. It should be remembered that the rate of growth of Israel's population of 1.9 percent annually is three or more times higher than the OECD average, which is only 0.6 percent and therefore, in terms of GDP per capita, the effect on Israel's economy is much more significant.

The crisis has led to unprecedented levels of unemployment in Israel, which has forced the government to put a social security net in place for hundreds of thousands of workers who have lost their livelihood. At the same time, the government and the Bank of Israel have initiated assistance programs for the business sector. A comparison to other countries shows that the size of the fiscal assistance program (which has a direct effect on the state budget, on the deficit, and on the national debt) in Israel is similar to those of other OECD countries, and is in some cases larger. However, the assistance program to the business sector, and in particular the provision of guarantees, is of a smaller scope than in other countries. This situation weakens the ability of businesses to survive, especially small businesses, and is liable to hinder the recovery from the crisis following the implementation of a large-scale vaccination effort.

The recovery process is also dependent on active support for getting workers back into the labor market. This assistance must include vocational training programs and an upgrade of information systems in order to shorten the process of search, placement, and acclimation of workers in a new job. The improvement of information systems is only one part of an overall information reform that the government needs to implement in order to improve the communication between citizens and the government, the ability to work from home, and the ability to learn remotely. The coronavirus has led to an unprecedented crisis in Israel's stormy history. Nevertheless, despite the difficulty, the Israeli government and society must find the strength to fix flaws and to revitalize the economy in order to facilitate a return to full employment and a path of growth.

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