INTERNATIONAL MONETARY FUND

IMF Country Report No. 22/81

ISRAEL

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

March 2022

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Israel, the following documents have been released and are included in this package:

- A **Press Release**.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis following discussions that ended on February 7, 2022, with the officials of Israel on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on March 3, 2022.
- An **Informational Annex** prepared by the IMF staff.
- Supplementary Information.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

PRESS RELEASE

PR21/82

IMF Executive Board Concludes 2022 Article IV Consultation with Israel

FOR IMMEDIATE RELEASE

Washington, DC – March 21, 2022: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Israel.

Israel's economy has weathered the pandemic exceptionally well. The Bank of Israel's (BOI) monetary and prudential measures provided liquidity, kept credit flowing, and prevented undue tightening of financial conditions. Fiscal measures supported households, businesses, and the public health system. Israel's world-leading vaccination campaign boosted confidence and helped mitigate the impact of the pandemic in the face of new, virulent variants. Banks' solid capital, liquidity, and asset quality also allowed them to support the economy.

After a mild downturn in 2020, real GDP exceeded its pre-pandemic level reaching growth of 8.2 percent in 2021. Consumption and the high-tech sector led the recovery. The 2021 fiscal deficit—4.3 percent of GDP—was significantly smaller than expected due to buoyant tax revenues, and public debt declined to 69 percent of GDP. The current account reached a surplus of 4.6 percent of GDP, driven by exports of high-tech services. Unemployment declined to near pre-pandemic levels, and job vacancies are high across all sectors. Thus far, the war in Ukraine has had a limited impact on Israel's economy given its low direct exposure to Ukraine and Russia. Nonetheless, the economic outlook is subject to significant uncertainty.

Executive Board Assessment[2]

The economic recovery is projected to solidify in 2022 and over the medium term. Growth will be supported by strong private consumption, investment, and net exports. With temporary factors winding down, inflation is projected to ease and stay within the BOI's target band over the medium term. The external position is assessed as moderately stronger than the level implied by medium-term

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

fundamentals and desirable policies. The policy mix should remain agile in the face of high growth and still significant uncertainty.

The planned 2022 fiscal stance is appropriate, and the medium-term fiscal path aims to put debt on a downward path. In 2022, pandemic support should target the most affected sectors and vulnerable population groups. Refocusing medium-term policy on reducing public debt and rebuilding pre-pandemic buffers is also appropriate. However, the authorities' planned expenditure restraint may be challenging to implement given Israel's already low civil spending, and a review of public spending efficiency would therefore be useful. There is scope to increase tax revenues by broadening the tax base and making the tax system more progressive. This would also support a needed increase in growth-enhancing spending.

The fiscal framework should be strengthened. A review of the framework should assess the appropriateness of the fiscal rules, the necessary size of fiscal buffers, the ability to face exceptional events, and the potential usefulness of establishing an independent fiscal council.

Inflation pressures have risen, calling for commencing data-driven monetary policy tightening. Inflation has exceeded the BOI's target range despite appreciation of the shekel, which continues to restrain price growth. Signs of underlying inflationary pressures are strong, and inflation expectations have increased quickly in line with CPI. The conditions are in place for the BoI to start raising the policy rate gradually. Foreign exchange purchases should taper off, allowing the shekel's value to be determined by market forces, without precluding future purchases should appreciation pressures threaten to move inflation or inflation expectations below the target band.

Emerging risks in the financial system need to be addressed. Housing risks stress the need to advance structural measures to ease housing supply. Further tightening of macroprudential measures could help stem banks' exposures to housing market risks and prevent potentially unsustainable borrowing. While Israel's financial regulatory architecture has served the economy well, the establishment of a committee to review it is welcome in view of the push for greater competition and financial innovation.

Well-targeted structural reforms could foster productivity, labor reallocation, and inclusiveness. Active labor market policies should seek to expand vocational training and improve its quality. A greater adaptation of the different education streams will be needed to help align student qualifications with labor market needs. Continued efforts to reduce trade barriers and red tape would promote efficient resource allocation, investment, and innovation. Accelerating digital and physical Infrastructure would improve job accessibility.

Further efforts are needed meet the authorities' climate objectives. Options could include larger increases in carbon prices and providing greater regulatory and fiscal support for Israel's innovative green technologies.

Israel: Selected Economic Indicators, 2017–2027

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Projections						
Real Economy (percent change)											
Real GDP	4.4	4.0	3.8	-2.2	8.1	5.0	3.6	3.5	3.5	3.5	3.5
Domestic demand	4.1	4.5	3.6	-4.3	9.2	5.8	4.3	4.2	4.1	4.1	4.1
Private consumption	3.6	3.5	3.9	-9.2	11.7	6.6	4.8	4.8	4.6	4.6	4.5
Public consumption	3.4	4.3	2.7	2.5	2.9	6.1	3.3	3.3	3.3	3.3	3.3
Gross capital formation	6.3	7.0	3.8	1.0	9.9	4.0	3.9	3.5	3.6	3.7	3.8
Gross fixed investment	3.8	7.2	3.1	-4.0	10.5	5.7	2.7	3.5	3.5	3.6	0.0
Foreign demand (contribution to growth)	0.3	-0.5	0.2	2.3	-1.0	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6
Potential GDP	3.7	3.6	3.5	1.7	5.1	4.0	3.9	3.6	3.7	3.5	3.5
Output gap (percent of potential)	0.3	0.6	0.9	-3.0	-0.2	0.7	0.4	0.2	0.1	0.0	0.0
Unemployment rate (percent)	4.2	4.0	3.8	4.3	5.0	3.9	3.8	3.7	3.7	3.7	3.7
Overall CPI (percent change, average)	0.2	0.8	0.8	-0.6	1.5	2.7	2.1	2.0	1.9	1.9	1.9
Overall CPI (percent change, end of period)	0.4	0.8	0.6	-0.7	2.8	2.4	2.0	1.9	1.8	1.9	1.9
Core CPI (percent change, average)	0.4	0.9	0.6	-0.3	1.2	1.6	2.5	2.3	2.1	2.0	2.0
Saving and investment balance											
Gross national saving (percent of GDP)	24.7	24.7	24.7	27.6	27.3	27.0	26.7	26.3	26.0	25.7	25.4
Foreign saving (percent of GDP)	-3.6	-2.8	-3.4	-5.4	-4.6	-4.5	-4.2	-3.9	-3.7	-3.4	-3.1
Gross capital formation (percent of GDP)	21.1	21.9	21.3	22.1	22.7	22.5	22.4	22.4	22.3	22.3	22.3
Public Finance (percent of GDP)											
Central government											
Revenues and grants	26.3	25.2	24.5	22.7	26.6	24.4	24.2	24.1	24.1	24.1	24.1
Total expenditure	28.2	28.1	28.2	34.1	31.0	28.0	27.5	27.2	27.0	26.9	26.9
Overall balance	-1.9	-2.9	-3.7	-11.4	-4.4	-3.6	-3.2	-3.1	-2.9	-2.9	-2.9
Structural balance 1/	-2.9	-3.1	-3.9	-10.4	-4.4	-3.8	-3.3	-3.2	-2.9	-2.9	-2.9
Interest payments	2.3	2.2	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3
General Government											
Overall balance	-1.1	-3.6	-3.9	-10.8	-4.3	-3.4	-3.1	-3.1	-3.0	-3.0	-3.0
Structural balance 1/	-2.4	-3.9	-4.3	-9.5	-4.2	-3.7	-3.3	-3.2	-3.1	-3.0	-3.0
Debt	60.2	60.4	59.5	71.7	69.0	67.1	66.4	65.8	65.2	64.7	64.2
Of which: Foreign currency external debt	7.9	8.7	7.9	11.7	10.7	10.6	10.5	10.4	10.3	10.2	10.1
Balance of Payments (percent of GDP)											
Current account balance	3.6	2.8	3.4	5.4	4.6	4.5	4.2	3.9	3.7	3.4	3.1
Goods and services balance	1.9	0.8	2.0	4.6	3.8	3.3	3.0	2.7	2.5	2.2	1.9
Exports of goods and services 2/	29.4	30.0	29.5	28.0	29.7	31.1	30.8	30.5	30.3	30.0	29.7
Real growth rate (percent)	5.3	5.1	3.9	-1.9	13.6	7.3	2.9	2.9	2.9	2.9	2.8
Export prices growth (percent)	2.9	2.1	0.3	-0.7	10.6	8.7	2.1	1.7	1.7	1.3	1.2
Imports of goods and services 2/	27.5	29.2	27.3	23.4	25.3	27.2	27.1	27.1	27.1	27.1	27.1
o/w Oil imports (billions of U.S. dollars)	7.5	9.7	9.2	5.5	10.0	12.5	11.9	11.5	11.5	11.6	11.8
Real growth rate (percent)	4.4	6.8	3.4	-9.5	18.7	9.9	5.0	5.0	4.8	4.7	4.5
Import prices growth (percent)	2.8	4.4	-3.4	-3.7	10.4	9.8	0.8	0.6	0.8	0.5	0.5
Foreign reserves (eop, US$ billions)	113.0	115.3	126.0	173.3	213.0	243.9	256.6	270.0	284.0	297.6	312.9
Exchange Rate											
NIS per U.S. dollar (period average)	3.60	3.59	3.56	3.44	3.23	3.12	3.12	3.12	3.13	3.15	3.17
Nominal effective exchange rate (2010=100)	118.7	118.3	123.2	128.8	134.6	138.8	139.7	139.9	140.4	140.9	141.1
Real effective exchange rate (2010=100)	108.2	106.0	108.9	111.3	114.0	115.6	116.2	116.4	116.7	116.9	117.1
Terms of trade (2010 = 100)	104.6	95.3	98.7	99.5	92.8	92.7	94.0	95.1	95.8	96.3	96.7

Sources: Bank of Israel; Central Bureau of Statistics; Haver Analytics; and IMF Staff estimates and projections.
1/ Percent of potential GDP.
2/ National Accounts data.

INTERNATIONAL MONETARY FUND

ISRAEL

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

March 3, 2022

KEY ISSUES

The Israeli economy has weathered the COVID-19 crisis exceptionally well, but risks are high. With substantial fiscal and monetary support, real GDP growth reached 8.1 percent in 2021, driven by consumption and high-tech exports. The rapid vaccination campaign boosted confidence. The outlook is positive but still subject to high uncertainty.

The policy mix should begin refocusing on longer-term challenges, while remaining alert to short-term risks.

- **Fiscal space needs to be reoriented toward productivity-enhancing spending**. The fiscal deficit has narrowed faster than anticipated, placing debt on a downward path. Additional fiscal space would nonetheless be needed elsewhere in the budget for labor market policies, infrastructure spending, and supporting the authorities' climate goals. There is scope to raise personal and corporate income tax revenues. A review to identify inefficient spending could also be useful.
- **The conditions are in place for the BoI to start raising the policy rate gradually.** The recent discontinuation of liquidity programs is appropriate in view of the emergence of broad-based inflation pressures. With the output gap closing rapidly, monetary policy needs to become less accommodative. Foreign exchange intervention should also taper off, allowing the shekel to be determined by market forces.
- **The financial system has supported the recovery, but risks have emerged.** A conservative supervisory approach has kept the financial system sound. Nonetheless, rapid mortgage growth has contributed to a surge in housing prices. It is critical to advance structural measures to ease housing supply. Tightening of the debt-service-to-income cap could help prevent potentially unsustainable borrowing.
- **Concerted efforts are needed to keep growth inclusive.** The large number of vacancies across sectors indicates the presence of skill gaps and mismatches. Strengthening ALMPs, improving marketable skills of Haredi and Arab students, increasing digital penetration, and investing in future human capital would help address these challenges. Further progress in product market reforms, infrastructure building, and advancing the authorities' climate agenda would also help support more resilient and inclusive growth.

Approved By
Philip Gerson (EUR) and Stephan Danninger (SPR)

Virtual discussions were held during January 18–February 7, 2022. Mission members included Iva Petrova (head), Enrique Flores, Karina Garcia, and Shakill Hassan (all EUR). Shay Tsur (OED) joined the discussions. Indra Mahadewa, Kelly Gao, and Gloria Li supported the mission. The mission met with Bank of Israel Governor Yaron, senior representatives of the Ministry of Finance and the Prime Minister's Office, other senior officials, and private sector representatives.

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ANNEXES

CONTEXT

1. Israel led the world vaccination efforts, giving a powerful shot of confidence to its economy. In December 2020, as a third COVID-19 wave was gaining ground, the authorities initiated a swift and effective campaign, starting by fully vaccinating the most vulnerable first and then reaching 55 percent of the population by end-May. The confidence boost to the economy and public health helped mitigate the impact of the pandemic in the face of new variants (Figure 1).

2. Government and central bank support were timely and ample, underpinned by Israel's strong economic fundamentals. The Bank of Israel's (BoI) liquidity measures (near 8 percent of GDP) and macro- and micro-prudential measures eased financial conditions, provided liquidity, and strengthened monetary policy transmission (Annex I). Fiscal measures (7.6 percent of GDP in 2020 and 4 percent of GDP in 2021) supported households and businesses. Israel's investment credit rating allowed the government to finance itself at favorable terms. A strong current account balance kept the net international investment position (NIIP) at 35 percent of GDP, with low and stable gross external debt at 33.2 percent in 2021Q3. The banks' solid capital, liquidity, and asset quality allowed them to support the economy amidst low household and corporate leverage.

3. An uneven rebound of Israel's economic sectors exposed long-term challenges. While the high-tech sectors drove Israel's robust growth, other sectors struggled to recover. Labor productivity is well below that of other small open advanced economies. Relative poverty is prevalent among the Israeli-Arab and Haredi groups, due to low labor force participation and skills. The social safety net—underfunded and poorly targeted—has so far failed to integrate the most vulnerable in the economy.

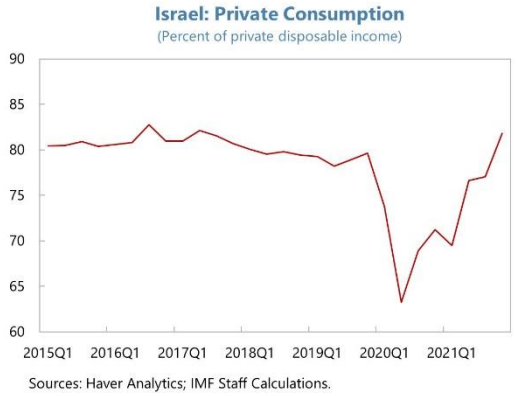
4. A new administration has taken office. Amid deep political fragmentation, the Likud-led government of former Prime Minister Benjamin Netanyahu dissolved after failing to reach an agreement on the budget. The March 2021 elections further fragmented the Knesset, but a broad-based coalition was established in May. Under the terms of the coalition agreement, Prime Minister Naftali Bennett is to rotate the position with Yair Lapid in August 2023. Likud was ousted from power for the first time since 2009, and an Arab party joined the governing coalition for the first time in Israel's history.

5. The new government has an ambitious reform agenda. Its priorities include reducing red tape and trade barriers—and hence the high cost of living—completing a pension reform to increase female labor force participation and old-age security, improving public transportation infrastructure, strengthening government digitalization, and encouraging the transition to clean energy, including through carbon taxes. The 2021–22 budget was passed on November 4, 2021.

6. Traction of previous Article IV advice has been mixed. Monetary policy has remained accommodative. Fiscal policy support has gradually tapered, as the recovery gained ground. The pandemic and political uncertainty have delayed major reforms, including tax reforms needed to rebuild fiscal buffers and provide space to strengthen the social safety net and enhance infrastructure. Further efforts are needed to strengthen the governance framework. Progress toward setting up deposit insurance and plans for a deep education reform are also pending.

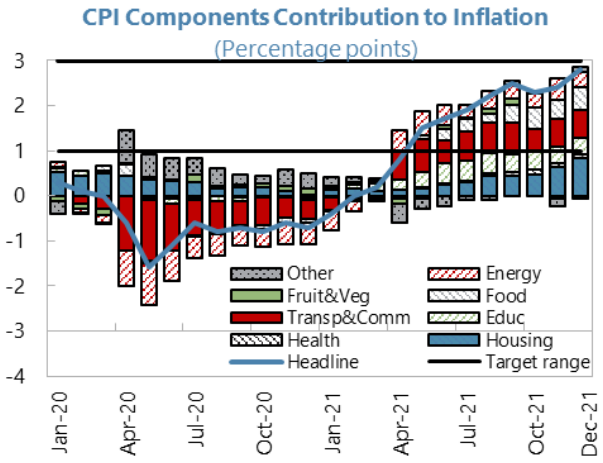
RECENT ECONOMIC DEVELOPMENTS

7. With a high-tech boom underway, real GDP grew by 8.1 percent in 2021. While the third COVID-19 wave and nationwide lockdown led to a contraction in 2021Q1, rapid progress with vaccinations boosted confidence and the recovery in Q2, and less stringent containment measures during the fourth wave kept growth robust for the remainder of the year. Real GDP exceeded its pre-pandemic level in 2021Q2, and private consumption gained speed throughout the year, with private savings reaching pre-pandemic levels in Q4 (Figure 2). Growth of in the high-tech sectors drove the recovery, accompanied by strong recoveries in wholesale and retail trade and transportation. The output gap turned positive in 2021Q4.



Sources: Haver Analytics; IMF Staff Calculations.

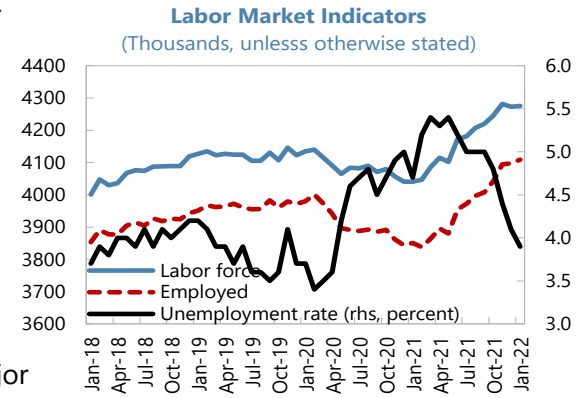
8. Inflation surged, marginally exceeding the upper bound of the BoI's target range.[1] After a deflationary 2020, and despite a strengthening shekel, headline yoy inflation reached 2.8 percent in December 2021 and 3.1 percent in January 2022. A combination of base effects and temporary global factors contributed to the price level hike, including inflation in key sources of imports, supply bottlenecks, and a rebound in energy prices from their record low level in 2020 and early 2021. These effects were amplified by strong domestic demand, with prices across main CPI categories driving a broad-based inflation rise. Inflation expectations—especially one- and two-years ahead—have moved up sharply, reaching 2.9 percent, close to the upper bound of the target band (Figure 3).



Sources: Bank of Israel; and Haver Analytics.

[1] Israel's government, in consultation with the BOI's Governor, sets a price stability target. Currently, the target is set as an annual CPI increase in the range of 1–3 percent without a specific point target.

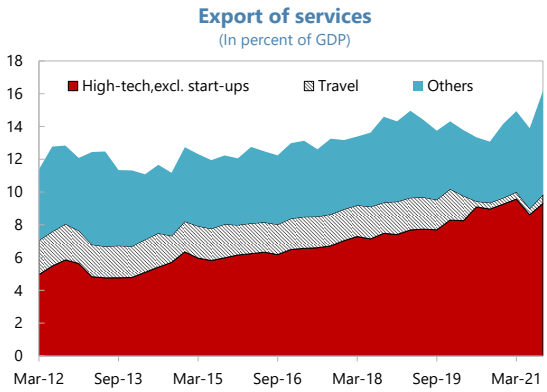
9. The labor market has recovered fast. After taking a dip in 2020, labor force and employment have steadily increased and exceed end-2019 levels (Figure 4). Unemployment has also fallen to near pre-pandemic levels, and average wages have risen.[2] But the recovery has been uneven, with employment growth in heavily affected high-contact sectors still lagging.[3]An all-time high in job vacancies across all sectors also suggests that post-pandemic skill mismatches are becoming a major obstacle to further reducing unemployment.



Sources: Haver Analytics.

10. The 2021 fiscal deficit was smaller than expected. The strong economic recovery resulted in buoyant tax revenues and gradual tapering of COVID-related support (Figure 5). Robust consumption raised indirect tax revenues. The global shift to digital services increased the valuation of Israeli high-tech companies and led to a wave of IPOs, raising income tax revenues. Real estate investments propped up property prices and tax revenues. The absence of a budget until November 2021 and the winding down of pandemic support kept fiscal spending contained. The 2021 overall government deficit is estimated at 4.3 percent of GDP—5.4 percentage points lower than projected during the 2020 Article IV consultation. Key credit rating agencies have recently confirmed Israel's investment grade rating.

11. The external position remains strong. High-tech exports— which account for about two thirds of services exports—grew by 21 percent in the year to September 2021 driving the four-quarter current account to a surplus (4.5 percent of GDP), despite a deficit in merchandise trade (Figure 6). Foreigners remained net buyers of Israeli assets through the COVID-19 shock and into 2021, with particularly large bond portfolio and equity direct investments in the first half of 2021. The large current account surplus and net (non-official) capital inflows strengthened the shekel and prompted the BoI to preannounce foreign exchange interventions (FXI) of USD 30 billion in 2021, which have been over-executed by USD 4.8 billion (Annex II: ESA). Israel's share of the IMF's 2021 allocation of Special Drawing Rights, equivalent to USD 2.6 billion, was used solely to supplement existing official reserve assets.



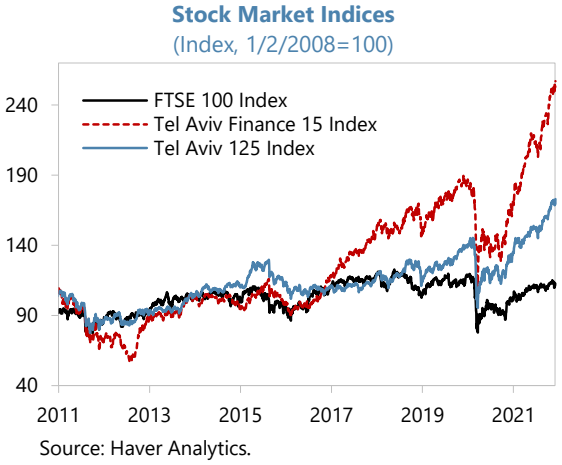
Source: Haver Analytics; and IMF staff calculations

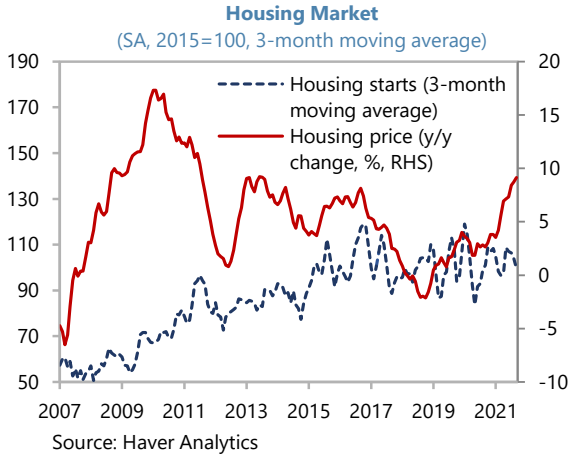
12. A resilient financial sector has supported credit growth. Banks' non-performing loans (NPLs) have remained low and stable through the crisis. The system-wide liquidity coverage ratio increased. Return on equity, capital, and the ratio of Tier 1 capital to risk-weighted assets

[2] The increase in wages is thus far concentrated in the export-oriented high-tech sector.

[3] Support for workers was mainly in the form of unemployment benefits, including to those placed on unpaid leave. Most of these benefits ended in mid-2021 (Annex I. Table 3).

strengthened, while the leverage ratios (Tier 1 capital to consolidated assets) stayed well above the Basel III minimum (Figure 7–8). Share prices of Israel's main financial institutions have surged. Borrowing conditions eased, supported by monetary and macroprudential relaxation. Lending expanded (mainly mortgage and business loans) faster than nominal GDP but remained fully funded by deposits. The rise in mortgage lending and chronic limited housing supply, exacerbated by a drop in construction investment in 2020, led to an increase of 10-percent in housing prices in 2021.





OUTLOOK AND RISKS

13. The economic recovery is projected to solidify in 2022. Staff's baseline projection envisages growth of 5.0 percent, supported by strong private consumption and investment, as private savings keep declining towards pre-crisis levels. With a large share of the population fully vaccinated, and in light of the success in managing the fourth wave, no significant lockdown measures are envisaged under the baseline. Average unemployment is expected to decline by about 1 percentage point, remaining marginally higher than its pre-crisis level. The output gap, which turned positive in 2021Q4, is projected to approach ¾ percent of potential GDP in 2022. Inflation is expected to decline as temporary factors dissipate. However, the effects of the inflation spike in 2021Q4 will carry over to the next year and, together with the positive output gap, will result in higher average 2022 inflation rate.

14. A strong medium-term outlook defines Israel's post-pandemic period, but growth needs to become more inclusive. Real output is expected to exceed potential, with the output gap closing only in the medium term.[4] The Israeli economy has shown significant resilience to shocks, and output is also expected to exceed its pre-pandemic trend. Employment is projected to fully recover in the medium term. Nonetheless, as sectors are recovering unevenly, Israel's long-standing challenges of increasing productivity, fostering labor force participation, enhancing human capital

[4] Recent methodological changes in the national accounts lead to a revision of GDP deflators and result in higher historical output and productivity growth.

among minority groups, and strengthening capital accumulation—particularly infrastructure—are taking a front row again.

15. **Risks are tilted to the downside.** While the baseline envisages a strong recovery, uncertainty remains high due to a wide array of risks (Annex III), including the escalation of the conflict between Ukraine and Russia. Vaccination efforts have been successful but new variants may present a threat, particularly if they are more virulent and vaccine resistant. The challenge of addressing skill gaps and mismatches as workers shift to more productive sectors might prove more difficult than envisaged, with the impact of training limited in the short run. A potential increase in inequality could lead to widespread social discontent and damage the political cohesion of the government coalition, which has a slim majority and a diverse set of ideologies. Geopolitical risks remain high and could cause socioeconomic and political disruption. Tightening of global financial conditions could lead to a stock market fall, lower government revenues, and a rise in the cost of capital. The government's long debt maturities and mainly domestic borrowing are mitigating factors, and external and public debt sustainability risks are low (Annex IV). On the upside, the recent trend in the high-tech sector could be more permanent than envisaged, with significant productivity gains leading to spillovers to other sectors.

16. **Authorities' views**. The BoI was slightly more optimistic about real GDP growth in 2022 (5.5 percent) on account of catch-up effects to a higher projected potential output. However, the authorities emphasized that the high-tech sector is starting to face capacity constraints, and the normalization of consumption away from durables is unlikely to boost domestic demand as much as it did in 2021. They also do not envisage output or labor market scarring over the medium term and agreed broadly with staff on the sources of risk.

POLICY DISCUSSIONS: NAVIGATING THE RECOVERY

The discussions focused on the policy mix in the context of rapid growth, still high uncertainty, and the reemergence of long-term challenges. The phasing out of pandemic-related measures has been timely, and the conditions are in place for gradual withdrawal of monetary policy accommodation. However, targeted fiscal support and monetary easing may still be needed in the event of downside risks, and policy should remain agile in the face of high uncertainty. Medium-term policies should seek to address labor market bottlenecks, support infrastructure spending, and advance the achievement of climate objectives.

A. Fiscal Policy

17. **The overall fiscal deficit is expected to revert to pre-pandemic levels, reaching 3.4 percent of GDP in 2022.** Revenues are projected to remain strong, but will not keep up with GDP growth, as the temporary income tax collection related to the high-tech sector is expected to dissipate in 2022. The improvement in the headline deficit largely reflects lower spending due to the tapering of COVID-19 support measures (Annex I Table 3). In 2022, pandemic support (about

2¼ percent of GDP) should target the most affected sectors and vulnerable population groups.[5] Health spending will remain larger by ¾ percent of GDP and the funding for infrastructure will be higher by 1.3 percent of GDP relative to 2019 levels. The planned 2022 fiscal stance is appropriate in view of the projected narrowing of the output gap.

18. The authorities' medium-term fiscal path aims to put debt on a downward path, but the planned expenditure restraint may not be feasible. The medium-term plan reduces spending by about 1¾ percent of GDP by 2025.[6] A tripartite agreement among the government, employers, and labor unions, which envisages a cumulative increase of 13.5 percent in the minimum wage for 2022–25—less than cumulative nominal growth—is expected to contain the rise in the civil service wage bill. However, further expenditure measures have not been specified and may not materialize given Israel's already low civil spending and track record of exceeding planned expenditure paths (Annex V). While the medium-term fiscal path envisaged by the authorities would bring government debt to its pre-pandemic level of 60 percent of GDP by 2027, staff's baseline suggests a more modest debt reduction to 64 percent of GDP by 2027 and 60 percent of GDP in a decade (Annex IV). Nonetheless, while there is some fiscal space, Israel faces greater inherent uncertainties than most advanced economies (Annex III). Staff supports the authorities' medium-term fiscal path and plans to restore fiscal buffers, subject to further policy measures that allow achieving these objectives. In this regard, conducting a review of public spending efficiency would be useful.

19. Moreover, there is scope to increase income tax revenues and make the system more progressive.[7] Raising low-bracket tax rates would raise the average rates for high-income taxpayers, while increasing the earned income tax credit would protect lower-income taxpayers and limit the impact on their work incentives. Additional income tax revenue could be raised by reducing tax incentives for selected groups and streamlining pension tax exemptions. On the corporate side, profit-based corporate tax incentives could be scaled back while also increasing effective rates for intellectual property.[8] VAT exemptions could also be streamlined.

20. Greater fiscal revenues should also support larger growth-enhancing spending:

- ***Addressing long-standing challenges***. The gradual increase in the retirement age for women will improve the actuarial balance of the pension system. However, a more ambitious medium-term plan is needed to support spending on active labor market policies (ALMPs) and the ongoing reforms of the education system, including better quality early childhood education. Supporting these areas and significantly boosting infrastructure will require more resources than currently envisaged in the authorities' medium-term framework.

[5] The government has adopted a package worth about ¼ percent of GDP to address the recent increases in the cost of living. Measures include increased tax benefits for working families, a reduction in tariffs and custom duties on food and other goods, expanding daycare subsidy to middle-income families, increasing the EITC and reducing the excise on coal. The proposal envisages the measures to expire in 2022, but they may become entrenched.

[6] Israel's fiscal rule sets a multiannual deficit target for the central government and a real expenditure growth limit based on the 10-year average real GDP growth and deviations in debt from 60 percent of GDP (Annex V).

[7] IMF Country Report 21/20.

[8] Israel is a signatory of the OECD's *Statement on the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalization of the Economy*. Compliance may require higher CIT rates for Israel's existing special regimes.

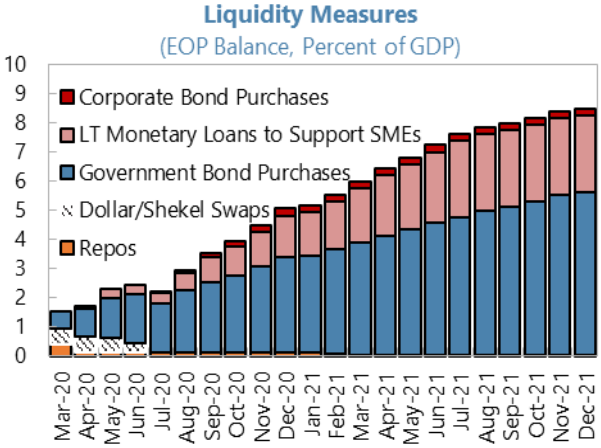
- ***Supporting the authorities' ambitious climate agenda.*** The planned gradual increase in excises on coal and other fuels in 2023–28 is a step toward supporting the authorities' environmental goals while providing some modest revenues. A further increase in carbon prices may have substantial distributional implications. Meeting the authorities' climate goals through investment in R&D would also be costly. Moreover, Israel lacks a funded national action plan to prepare for the effects of climate change, with most public entities failing to assess such risks in their operational risk management process.[9]

21. Israel's fiscal framework needs to be strengthened (Annex V). A review of the framework should assess whether the fiscal rules are appropriate—binding, flexible, and transparent—and the size of fiscal buffers that would be desirable to provide reasonable protection against adverse events. A review of the framework should also consider whether establishing an independent fiscal council could strengthen the framework's effectiveness.

22. Authorities' views. The authorities were cautiously optimistic about the prospect of strong revenues in 2022 and agreed with staff that such revenues are unlikely to persist over the medium term. Combined with conservative spending projections—in line with the Israeli fiscal rules—the MOF foresees a robust rebuilding of fiscal buffers. While the MOF agreed with staff that productivity-enhancing reforms would require additional spending, they were adamant that room for it could be created by rationalizing existing inefficient spending. They considered that revenue reforms should focus on broadening tax bases. On staff's recommendation to review the fiscal framework, the MOF emphasized that the expenditure rule has been an effective fiscal discipline device. Views were split on whether establishing a fiscal council would be useful.

B. Monetary and Exchange Rate Policies

23. The monetary policy stance was appropriately accommodative during the pandemic. At the outset of the COVID-19 crisis, inflation was below the BoI's target range and declining. Monetary policy easing, through a policy rate cut to 0.1 percent[10] and a range of liquidity measures—asset purchases, repurchase and currency swap operations, and a long-term lending facility targeting SMEs—allowed for a smooth transmission of policy to liquidity constrained markets and borrowers and supported the fast recovery that ensued (Annex I Table 1).

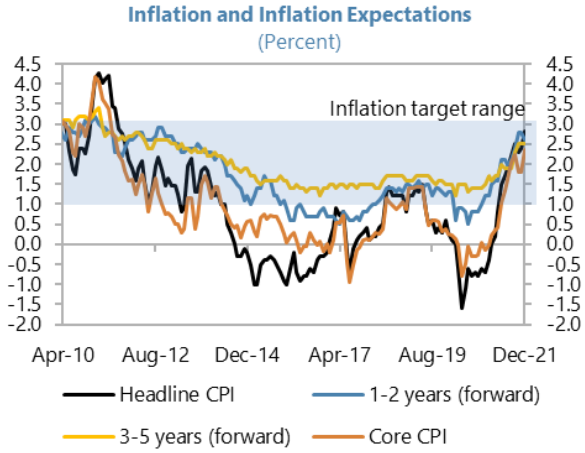


Sources: Bank of Israel; and IMF staff calculations.

[9] Israel approved a national program for adaptation in 2018. However, a recent survey by the State Comptroller found that only 18 percent of public entities assess climate change risks, and only 16 percent of the envisaged tasks are budgeted and scheduled for implementation.

[10] The BOI considers this rate an effective lower bound.

24. However, inflationary pressures have risen, and the future path of inflation is uncertain. Even if base effects and global price pressures due to supply disruptions dissipate quickly, a positive output gap with high rate of capacity utilization, a compressed unemployment-to-vacancy ratio, and rising service prices, show strong signs of underlying inflationary pressures (Annex VI). CPI has risen fast, and one-and two-year inflation expectations have reacted quickly to observed inflation. At the same time, core inflation remains within the BoI's target range. And the recent minimum wage agreement and appreciation pressures on the shekel are important countervailing factors to upward inflation pressures.

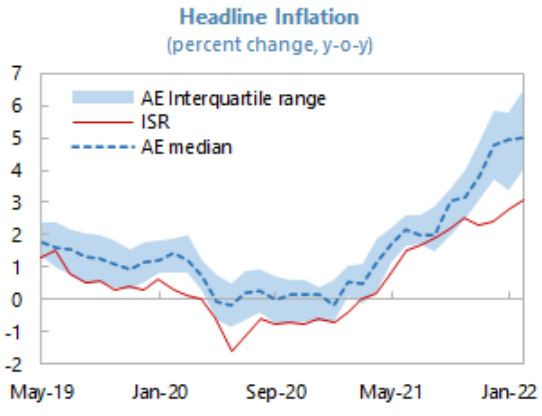


Sources: Haver Analytics; and IMF Staff calculations.

25. The BoI should continue with the gradual reduction of monetary policy accommodation. With a stable policy rate of 0.1 percent and one-year ahead inflation expectations rising to 2.9 percent in January-2022, the ex-ante real interest rate is substantially below neutral and has dropped significantly since the early stages of the pandemic, implying a loosening policy stance (Annex VI). The recent halting of liquidity measures is thus welcome, and the conditions are in place for the BoI to commence a data-dependent increase in interest rates, reducing the degree of monetary policy accommodation. This should help keep inflation and inflation expectations within the target range. If underlying pressures become persistent, a combination of policy rate increases and actively unwinding liquidity support measures, would also be advisable. Clear and effective communication of policy actions will be key to support the BoI's policy objectives.

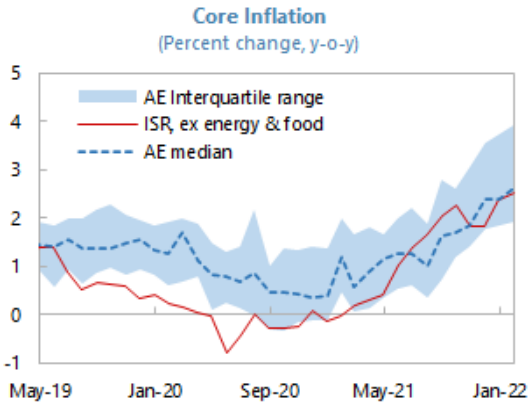
Advanced Economies: Headline and Core Inflation

While still low compared to that in other advanced economies, headline inflation has increased fast…



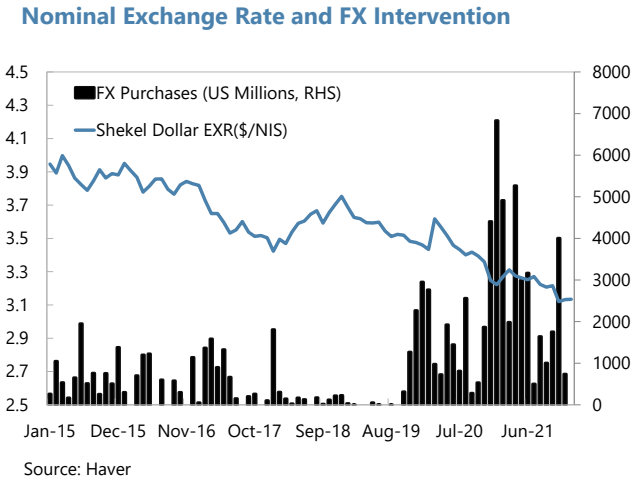
Sources: Haver Analytics; and IMF staff calculations

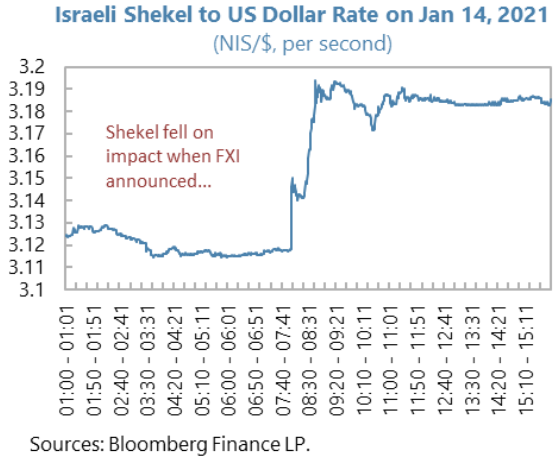
…with broad-based pressures reflected in the rise of core inflation.

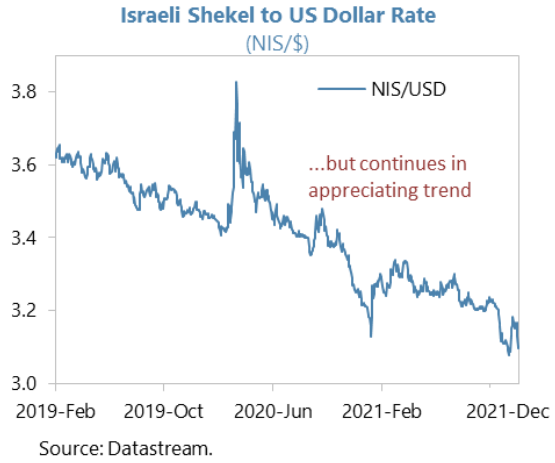


Sources: Haver Analytics, IMF staff calculations

26. Foreign exchange intervention should taper off, allowing the shekel's value to be driven by market forces. Sharp shekel appreciation in December 2020 pushed its dollar value to the highest level in two decades despite the highly expansionary monetary policy. The shekel appreciation raised the risk of a significant decline in the rate of inflation, possibly to negative rates, and more compressed profit margins of exporters. This threatened to undermine the effectiveness of policy actions aimed at stimulating economic activity during the pandemic. The BoI's FXI program of pre-announced purchases of (but not limited to) USD 30 billion during the year (compared to approximately USD 21 billion in 2020) sought to address this concern. While the shekel fell when the program was announced, it quickly resumed its appreciation trend. FXI has declined substantially since the expiration of the program at end-2021. Israel's robust export performance, ample international reserves, and the rise of the inflation rate above the target range weaken the case for continued intervention. Staff assess Israel's external position to be moderately stronger than justified by medium-term fundamentals and desired policy settings: the current account is above staff's estimate of its norm (Annex II). Therefore, market forces should be allowed to set the price of the shekel, with FXI limited to addressing disorderly market conditions. Nonetheless, if inflation returns to a level below the target range while the interest rate is at the effective lower bound, FXI to lean against shekel appreciation could help prevent de-anchoring of inflation expectations.[11]







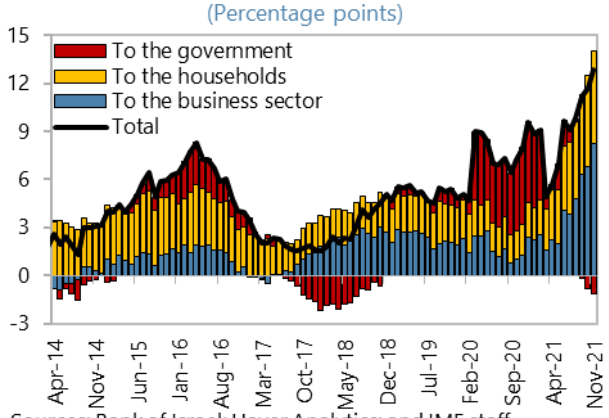
27. Authorities' views. The BoI recognized the need to stand ready to act in response to further inflationary pressures and—during the February 2022 Monetary Committee meeting— signaled the

[11] See Adrian et al, 2020, "A quantitative model for the integrated policy framework", IMF Working Paper 2020/122, and Basu et al, 2020, "A conceptual model for the integrated policy framework", IMF Working Paper 2020/121.

possibility of a gradual process of raising the interest rate in the coming months. They considered that inflation would briefly breach the upper bound of the target range but remain on average within the target band of 1 to 3 percent in 2022 and the medium term. The authorities agreed that inflation uncertainty was high, and monetary policy should remain data driven. They also recognized that the case for using foreign exchange intervention has weakened but emphasized the possibility of a significant decline in the rate of inflation due to shekel appreciation, which may call for a continued need to maintain an accommodative monetary stance, including through the use of foreign exchange intervention.

C. Financial Sector Policies

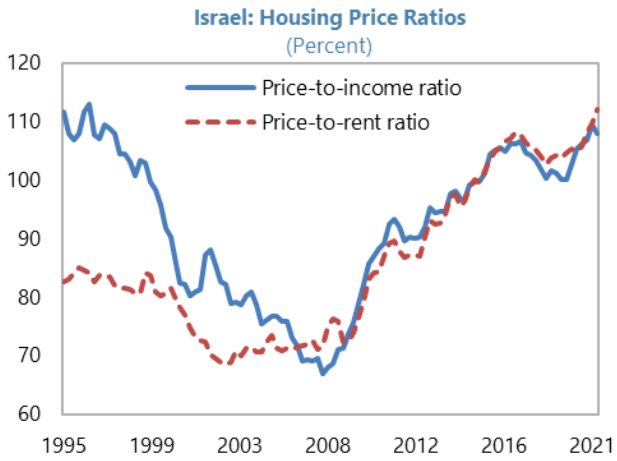
28. The financial system has navigated the COVID-19 crisis smoothly. Banks' solid balance sheets and macroprudential easing allowed them to expand credit support to the economy, leading to double digit growth in business and mortgage lending in 2021. The rapid economic recovery protected asset quality and boosted bank profitability, with high recovery of loan-loss provisions and profits from bank's long positions in inflation-indexed assets playing a significant role. The completion of long-standing cost-cutting reforms also contributed to the banks' strong performance. The BoI's stress tests show that the banking system is stable even under pessimistic scenarios, with none of the banks (or credit card companies) likely to see its capital ratio fall below a Tier 1 capital ratio of 6.5 percent—the minimum required by the BoI—under the most extreme scenario. The result holds under the assumption that credit continues to grow through the scenario.



Sources: Bank of Israel; Haver Analytics; and IMF staff calculations.

29. The unwinding of COVID-19 support measures has been timely, given the strength of the recovery. The reduction in banks' capital requirement by 1 percent and in the leverage ratio by 0.5 percent expired at end-2021. The loan deferral framework expired at end-March 2021, as business default risk indicators improved. Deferred loans—almost 18 percent of total loans at their peak—were around 1 percent of total loans at end-2021. Banks have also been allowed to distribute dividends.

30. Furthermore, the reversal of several measures was needed to address emerging risks in the housing market. The rapid rise in housing prices—due to limited supply and rapid mortgage growth—rekindled concerns of price misalignment. With the house price-to-income and price-to-rent ratios at high levels, the BoI has appropriately reversed the increase in the LTV limit and the relaxation of an additional Tier 1 capital requirement for housing loans. Further tightening of macroprudential measures—e.g., lowering the debt-service-to-income cap from its current 50 percent ratio—could help stem banks' exposures to the housing market and prevent potentially unsustainable borrowing.



Sources: BIS; IMF Staff Calculations.

31. Addressing housing affordability should be high priority for the government. Given strong population growth and little growth in housing starts since 2019, investment in housing needs to accelerate significantly to curtail the existing housing shortage. In October, the government announced a plan for construction of 280,000 homes and approval of 500,000 homes in 2022–25. In December, to discourage investors in favor of first-time residence buyers, parliament increased the residential purchase tax on investors from 5 to 8 percent for the next 3 years. Further structural measures to ease housing supply—reforming property taxes, increasing land auctions, streamlining building regulations, allowing fast-track approvals of mixed-use development—should also be advanced.[12]

32. Israel's financial landscape is evolving, raising both efficiencies and risks. The BoI's regulatory measures have aimed to increase competition between incumbent banks by lowering bank switching costs for customers and facilitating the entry of new bank and non-bank institutions, including fintech. Israel's first digital bank (no branches) started operating in 2021 after the introduction of regulatory changes designed to foster competition in automation infrastructures. Institutional investors' share of consumer credit (excluding mortgages), has quadrupled since 2013, reaching 11 percent in 2021. Credit card companies have doubled their share since 2013, to 12 percent. Potential risks to financial stability from the development of a securitization market and from measures to attract new entrants in the financial system that rely on favorable regulatory treatment (e.g., lower capital requirements) need to be weighted and managed carefully.

33. Israel's financial regulatory architecture has served the economy well during crises. A conservative regulatory emphasis on risk mitigation has protected the financial system from global negative spillovers and excessive risk-taking. However, the push for greater competition and financial innovation will test the agility of the current three-regulator model. Potential gaps and overlaps in responsibilities will require close coordination to ensure the continued safety of the

[12] IMF Country Report 18/111.

financial system while pursuing greater financial innovation. The establishment of a committee to review the financial supervision structure is thus welcome.

34. Authorities' views. The authorities agreed that banks' strong balance sheets and macroprudential easing allowed the financial system to support the economy during the pandemic. The authorities insisted that supply-side bottlenecks in the housing market need to be addressed and were less concerned about banks' exposures to housing market risks due to conservative LTV ratios and capital buffers. They noted that the committee reviewing the financial supervision structure was just commencing its work. Nonetheless, some committee members indicated a preference for retaining the current bank supervision architecture under the central bank given the experience of effective financial stability coordination during the pandemic.

D. Macro-Structural Policies

35. The COVID-19 crisis exposed persistent labor market frictions (Annex VII)**.** Contact-intensive sectors suffered disproportionately large job losses, while the high-skilled ICT and professional activities continued expanding given their adaptability to remote working and greater demand for their products. Staff's sectoral output forecasts suggest this labor market duality may deepen in the future. Low-skill contact-intensive sectors (trade and accommodation) are likely lose about 1 percentage point of their employment share in the medium term, which may not be compensated by the projected increase in the share of employment in high-skilled services (ICT, finance, and real estate).[13] Due to skill gaps and mismatches, inter-sector reallocation is costly and could affect unevenly the employment and wages of different demographic groups. Past recession episodes suggest that women, the low-skilled, and young workers are less likely to switch occupations.[14] Prospects are particularly challenging for workers in the hard-hit service sectors (mostly, Arab and young workers) given their relatively large skill deficits.

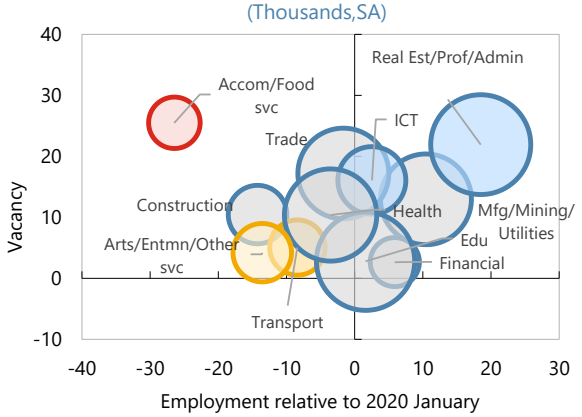
[13] Based on country and sector-specific estimates of the relationship between output and employment of 29 European countries. Regional Economic Outlook, Europe, Ch. 3. IMF. October 2021.

[14] World Economic Outlook; Chapter 3. IMF, April 2021.

Labor Market Trends

Job losses were uneven across sectors....

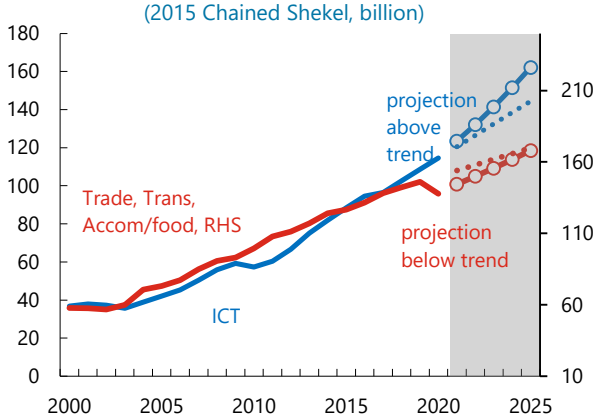
Job Losses and Vacancies
(Thousands,SA)



Sources: Central Bureau of Statistics
Note: Bubble size represents sectoral employment in 2020. Data as of July 2021.

...and are bound to deepen over time.

Sectoral GVA Projections
(2015 Chained Shekel, billion)



Sources: Central Bureau of Statistics; Fitch Solutions; and IMF staff calculations.
Note: The projections of level is derived from projections of the underlying growth. Projection of accommodation/food service sector employment growth uses restaurants and hotels spending and international tourism receipts projections from Fitch solutions. Projection of ICT real GVA growth uses software sales projections from Fitch Solutions.

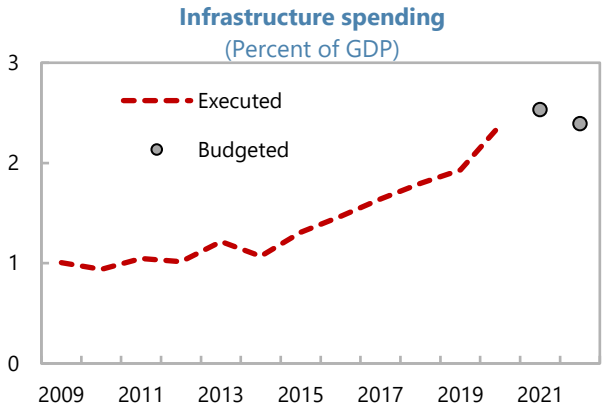
36. Policies should facilitate job creation and ensure a smooth labor reallocation. Reducing the large variation of skills across Israeli workers is key to facilitating labor reallocation and addressing the inequity associated with the labor market duality. Stepping up the quality and selection of retraining programs and job-search support, particularly for vulnerable groups, is needed to help the unemployed transition to new jobs.[15] The policies need to foster digital penetration among the low-skilled—to allow them better access to government services—and favorable conditions for job access and labor force participation, such as affordable housing and quality childcare services. The provision of early childhood programs is also important for the enhancement of the overall quality of education. Furthermore, advancing the ongoing education reforms should focus on addressing the growing demand for marketable skills. These reforms should aim at reducing the differences between the educational streams across Israeli communities and encouraging students to enroll in programs that provide digital skills.

37. Further progress on product market reforms would facilitate labor reallocation and boost productivity over the medium term. Significant progress has been made in improving the business environment. However, product market restrictions remain relatively high in some areas hampering competition and the efficient allocation of resources. In particular, barriers to trade and investment and occupational entry remain relatively high and price regulations are still widespread

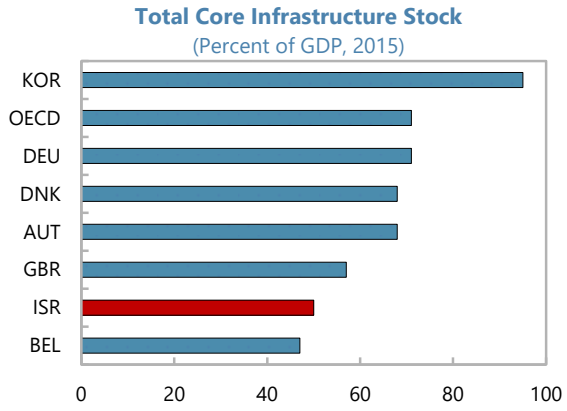
[15] Empirical evidence from previous crisis shows that reallocation policies -hiring and start up incentives, job-search and matching assistance, and retraining programs- raises the likelihood of job finding and-on the-job occupational switches and tended to boost job finding chances for young and female workers. IMF. WEO April 2021.

in the economy.[16]At the same time, lowering barriers that protect low-productivity domestic sectors from international competition would be key to promote investment and innovation. To this end, further reducing tariff and non-tariff trade barriers on goods and services and streamlining trade regulations would help boost competition and reduce costs of trade, especially for smaller firms.

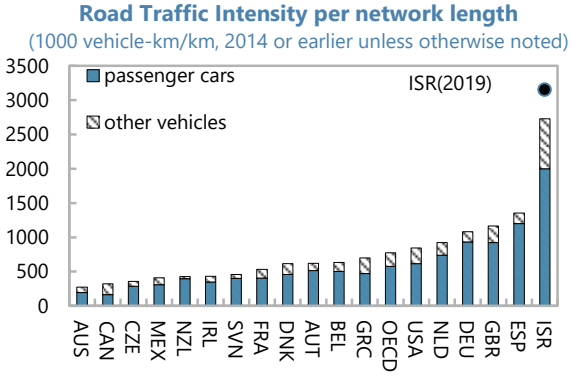
38. Improving infrastructure—which is critical to improving job accessibility—has been a long-standing challenge. Since 2015, the government has gradually increased its infrastructure spending seeking to raise the core infrastructure stock. The infrastructure budget is about 2½ percent of GDP in 2021–22. While such levels are the highest in the last 25 years, and slightly above other advanced economies,[17] the pace needs to accelerate further if Israel is to close the infrastructure stock gap relative to other OECD countries. Infrastructure improvements are particularly pressing in transportation, as road network use is significantly higher than in other advanced economies. Traffic intensity makes the need to allocate funding for complementary solutions an urgent matter, especially as job accessibility is critical to improve job matching and reduce unemployment.[18]



Sources: Ministry of Finance; Central Bureau of Statistics; and IMF staff Calculations.



Sources: OECD (2020), OECD Economic Surveys: Israel 2020, OECD Publishing, Paris.



Sources: OECD (2015), Environment at a Glance 2015:OECD Indicators. OECD Publishing, Paris; Central Bureau of Statisics; and IMF staff calculations.

39. The authorities have strengthened their commitment to address climate change. They submitted an updated NDC in mid-2021 aiming to reduce emissions by 27 and 85 percent by 2030 and 2050, respectively, relative to 2005 levels. However, specific plans to fully achieve these goals

[16] OECD, 2020. OECD Economic Surveys: Israel.

[17] The Global Infrastructure Hub estimates Europe spends 2¼ percent of GDP in infrastructure.

[18] The construction of the Tel Aviv metro is expected to start in 2025 and finish by 2032, with a cost close to 9¼ percent of GDP.

are yet to be fleshed out.[19] Staff's analysis suggests that the envisaged gradual phase-in of excises on coal and other fuels[20] between 2023–28 and the phase-out of coal by 2025—are likely to fall short of achieving the authorities' stated objectives (Annex VIII). Even replacing the envisaged excises with a phased in carbon tax of $75 per ton of CO_2 would not be sufficient to achieve the 2030 target; and would have distributional implications, as the lowest decile's share of energy intensive goods (electricity, water, and gas for cooking) is twice as large as the highest decile. It is therefore imperative to look for alternative approaches to support climate goals, with Israel's innovative technologies providing a promising avenue, but one that likely requires substantial fiscal support for R&D.[21]

40. Authorities' views. The authorities agreed that pre-crisis structural challenges need to be addressed for the economy to fully benefit from the rapid growth in the high-tech sectors and to ensure a smooth labor reallocation. They noted that strengthening current active labor market policies is important to reduce job mismatches, but efforts need to focus on addressing disparities in the education system. The authorities underscored a number of recent measures seeking to align students' skills with the needs of the labor market. They emphasized that quality early childhood education is key for improving future education outcomes, and the focus should be on improving access of disadvantaged families. They agreed that further progress in improving the business environment and infrastructure is needed to increase overall labor productivity. The authorities concurred that further efforts are needed to meet their climate targets.

STAFF APPRAISAL

41. The economic recovery is projected to solidify in 2022 and over the medium term. Growth will be supported by strong private consumption, investment, and net exports. With temporary factors winding down, inflation is projected to ease and stay within the BOI's target band over the medium term. The external position is assessed as moderately stronger than the level implied by medium-term fundamentals and desirable policies. The policy mix should remain agile in the face of high growth and still significant uncertainty.

42. The planned 2022 fiscal stance is appropriate, and the medium-term fiscal path aims to put debt on a downward path. In 2022, pandemic support should target the most affected sectors and vulnerable population groups. Refocusing medium-term policy on reducing public debt and rebuilding pre-pandemic buffers is also appropriate. However, the authorities' planned expenditure restraint may be challenging to implement given Israel's already low civil spending, and a review of public spending efficiency would therefore be useful. There is scope to increase tax

[19] The authorities have identified a set of measures whose impact on emissions is yet to be assessed.

[20] By 2028, the excise tax on coal and LPG would imply a charge of about $60 per ton of CO_2, while for diesel it would reach about $101. The excise tax on gasoline would remain unchanged at about $124 per ton of CO_2, while the excise tax rate on natural gas would reach only $19 per ton of CO_2.

[21] At COP26 PM Bennett announced a net zero commitment for 2050. He also emphasized the scope to develop carbon sequestration technologies and establish a "green sandbox" to facilitate funding and address regulatory hurdles for startups focusing on climate innovation.

revenues by broadening the tax base and making the tax system more progressive. This would also support a needed increase in growth-enhancing spending.

43. The fiscal framework should be strengthened. A review of the framework should assess the appropriateness of the fiscal rules, the necessary size of fiscal buffers, the ability to face exceptional events, and the potential usefulness of establishing an independent fiscal council.

44. Inflation pressures have risen, calling for commencing data-driven monetary policy tightening. Inflation has exceeded the BOI's target range despite appreciation of the shekel, which continues to restrain price growth. Signs of underlying inflationary pressures are strong, and inflation expectations have increased quickly in line with CPI. The conditions are in place for the BoI to start raising the policy rate gradually. Foreign exchange purchases should taper off, allowing the shekel's value to be determined by market forces, without precluding future purchases should appreciation pressures threaten to move inflation or inflation expectations below the target band.

45. Emerging risks in the financial system need to be addressed. Housing risks stress the need to advance structural measures to ease housing supply. Further tightening of macroprudential measures could help stem banks' exposures to housing market risks and prevent potentially unsustainable borrowing. While Israel's financial regulatory architecture has served the economy well, the establishment of a committee to review it is welcome in view of the push for greater competition and financial innovation.

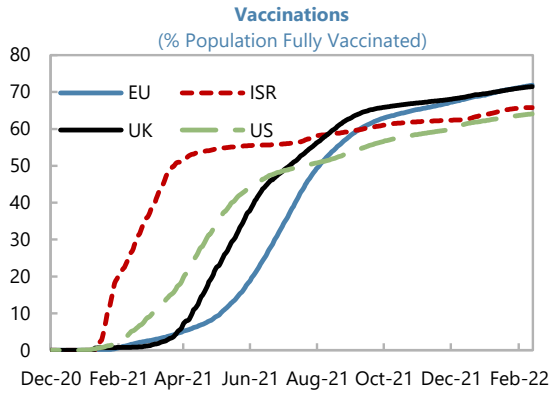
46. Well-targeted structural reforms could foster productivity, labor reallocation, and inclusiveness. Active labor market policies should seek to expand vocational training and improve its quality. A greater adaptation of the different education streams will be needed to help align student qualifications with labor market needs. Continued efforts to reduce trade barriers and red tape would promote efficient resource allocation, investment, and innovation. Accelerating digital and physical Infrastructure would improve job accessibility.

47. Further efforts are needed meet the authorities' climate objectives. Options could include larger increases in carbon prices and providing greater regulatory and fiscal support for Israel's innovative green technologies.

48. It is proposed that the next Article IV consultation with Israel take place on the standard 12-month cycle.

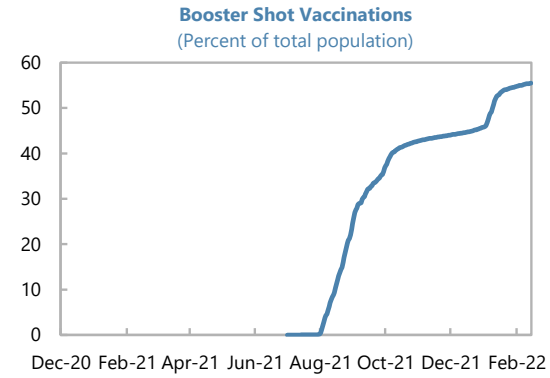
Figure 1. Israel. Covid-19 Developments

Israel led the world vaccination campaign....



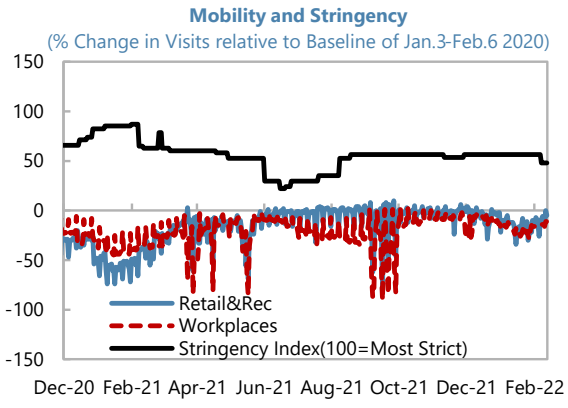
Source: Johns Hopkins University CSEE COVID-19 Data

...and provided booster shots (3rd dose) to almost half of the population.



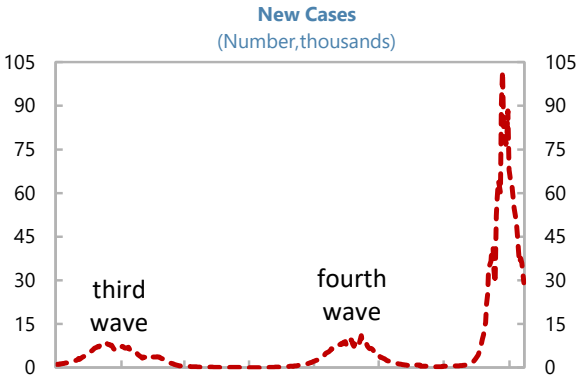
Source: Ministry of Health

This allowed for looser restrictions than during the third wave and ameliorated the impact on mobility.



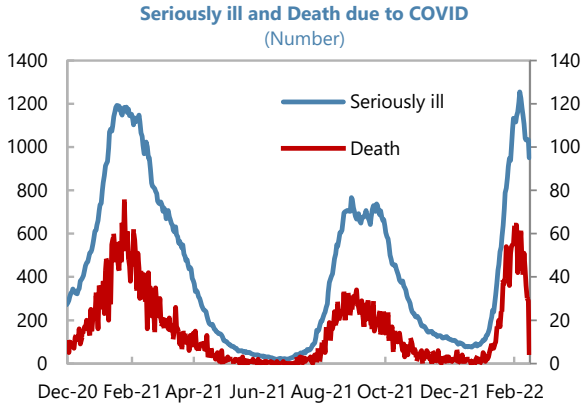
Source: Google; the University of Oxford; Haver Analytics.

...ahead of the fourth wave, in which the highly infectious delta variant was prevalent.



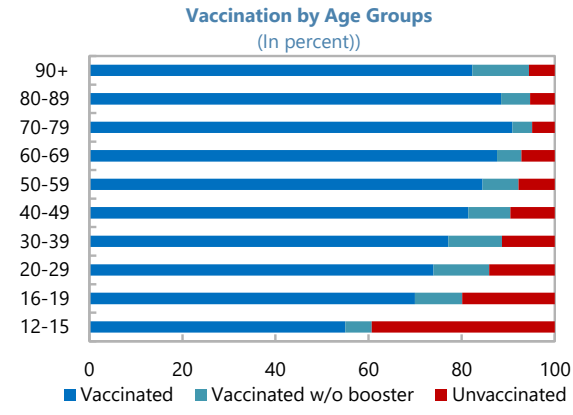
Source: Ministry of Health

Vaccination resulted in a lower number of severe cases and deaths than in the third wave.



Source: Ministry of Health.

However, vaccinations among vulnerable populations and the youth should increase.

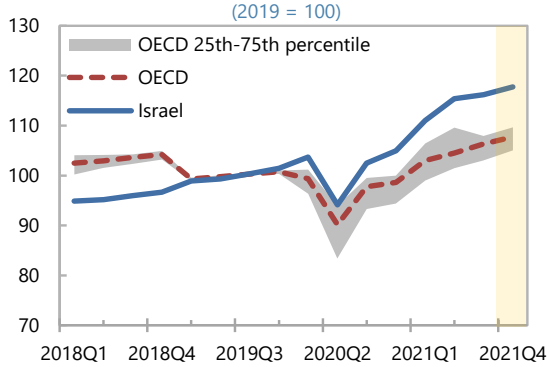


Source: Ministry of Health.

Figure 2. Israel: Recent Economic Developments

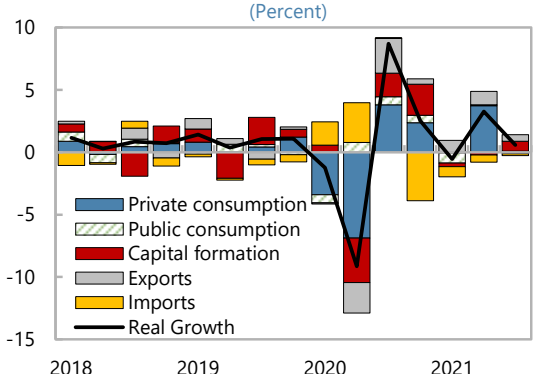
Israel fared well relative to other countries, with a more modest contraction and a stronger recovery...

Real GDP
(2019 = 100)



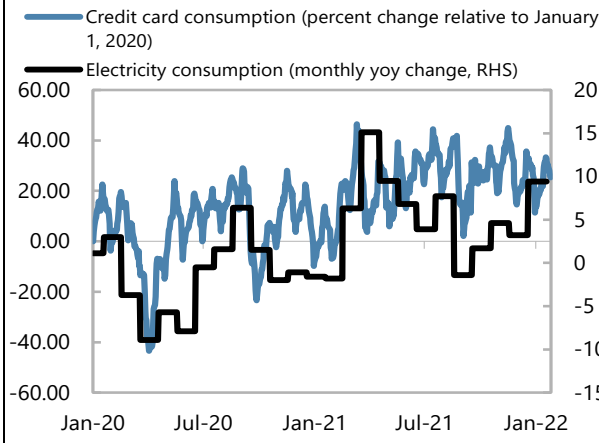
...as private consumption, investment and exports recovered.

Contributions to Real GDP Growth
(Percent)



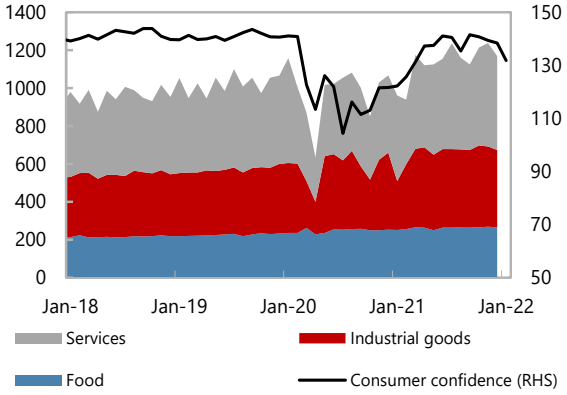
High frequency indicators are consistent with strong consumption in the fourth quarter....

High Frequency Indicators
(Percent deviation compared with baseline)



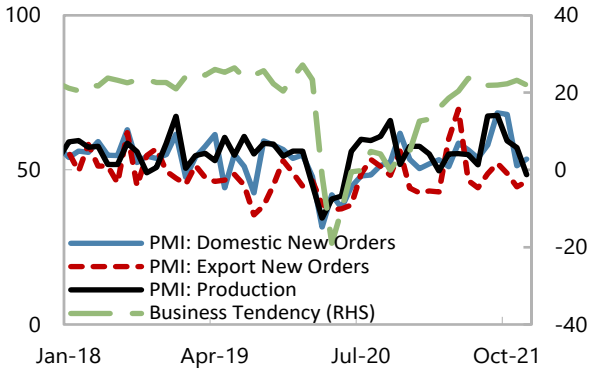
...which is also reflected in consumer confidence.

Credit Card Consumption by Type and Consumer Confidence
(2002=100)



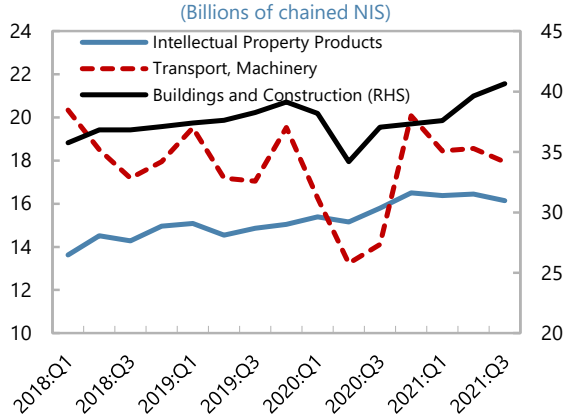
Business confidence has recovered close to pre-crisis levels...

PMI and Business Tendency



...and investment has recovered, driven by the ICT sector.

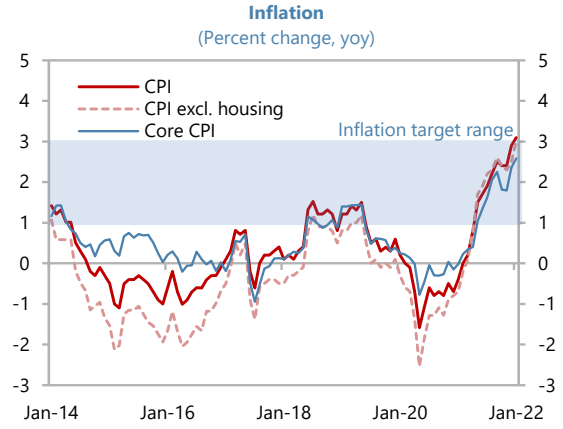
Investment by Type
(Billions of chained NIS)



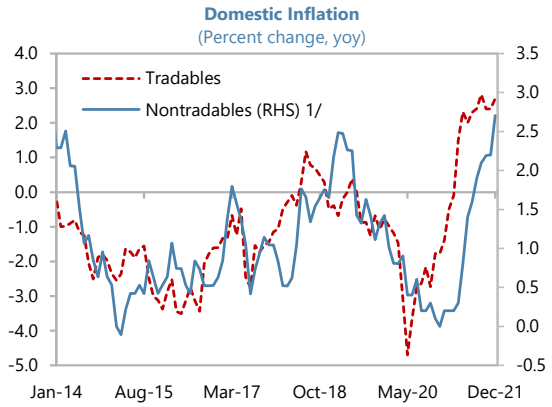
Sources: Bank of Israel; Haver Analytics; IMF, World Economic Outlook; IMF Staff calculations.

Figure 3. Israel: Inflation and Monetary Indicators

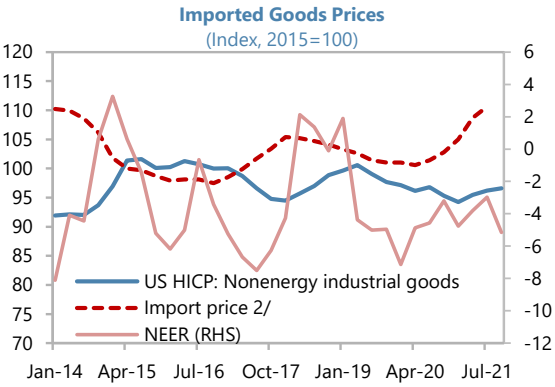
Inflation has just exceeded the target band...



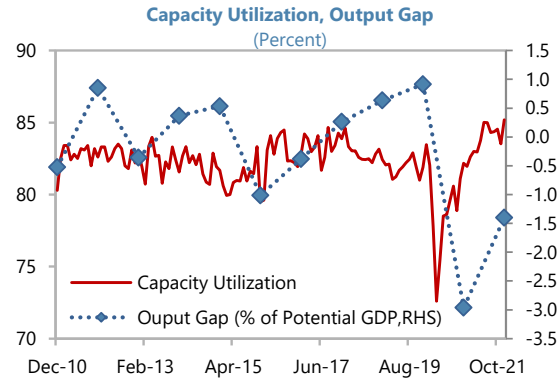
...with tradables in the lead but non-tradables also rising...



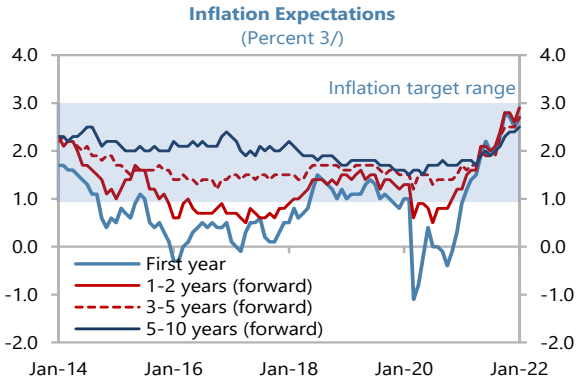
...owing partly to global factors...



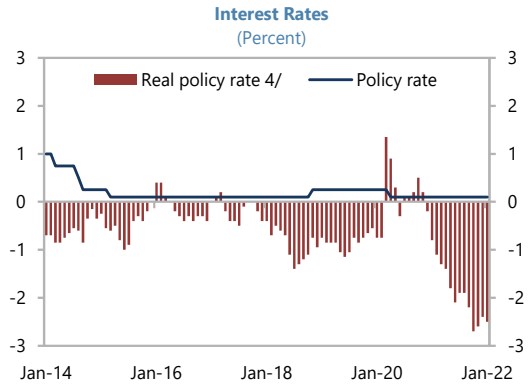
...but also a recovery in domestic demand.



Inflation expectations (from markets) are up at all horizons...



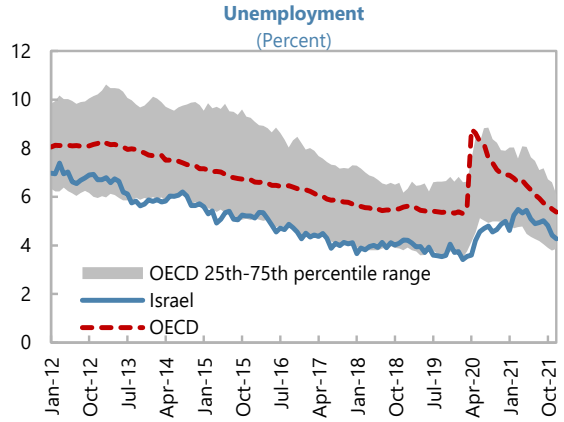
... while the policy rate is unchanged, resulting in substantially lower real interest rates.



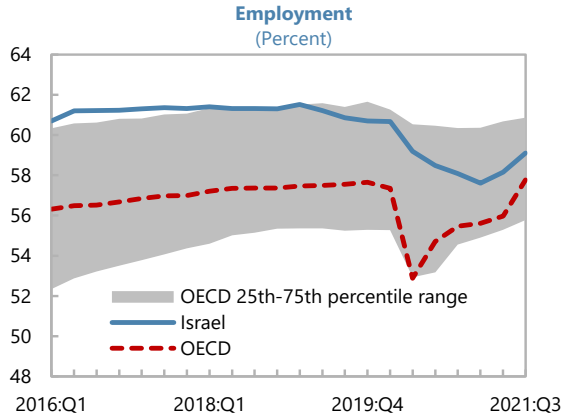
Sources: Haver Analytics; Bank of Israel; IMF, World Economic Outlook; FRED; IMF Staff calculations.
1/ Excluding fruit and vegetables, and estimated impact of government measures.
2/ Excluding ships, aircrafts, diamonds, and fuel.
3/ Inflation expectations from capital markets.
4/ Real policy rate is calculated as the difference between nominal policy rate and one-year ahead inflation expectations.

Figure 4. Israel: Labor Market Developments

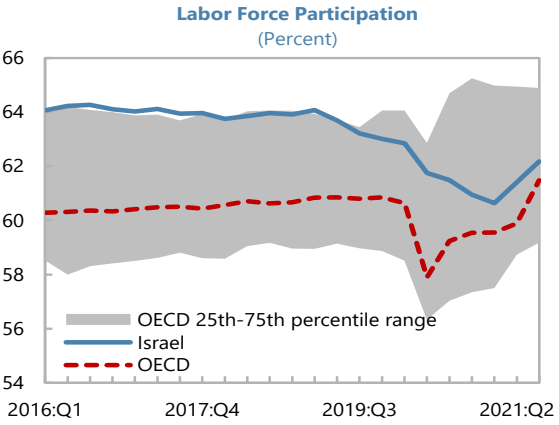
Unemployment has continued to decrease since the lockdowns...



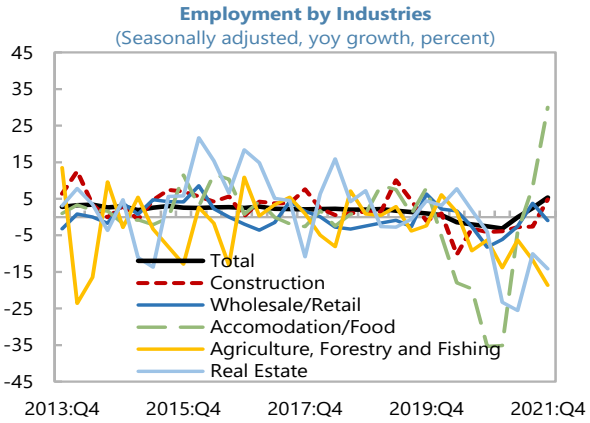
and employment is recovering as in other advanced economies...



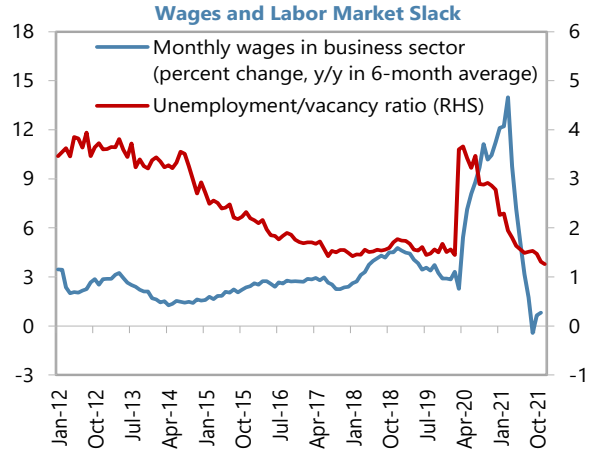
...with labor force participation still below pre-pandemic levels.



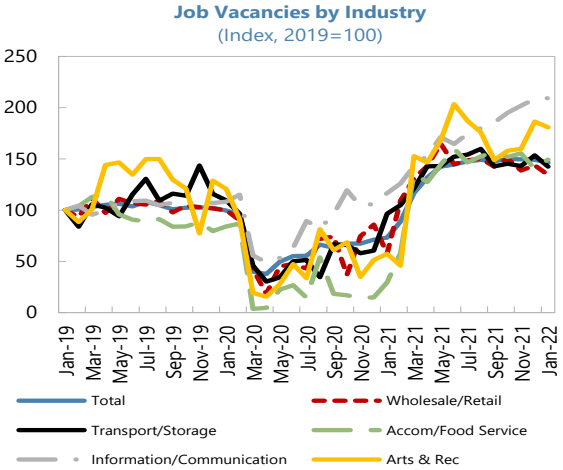
Employment recovery is being slowed down by continued deterioration in several sectors



The labor market has tightened...



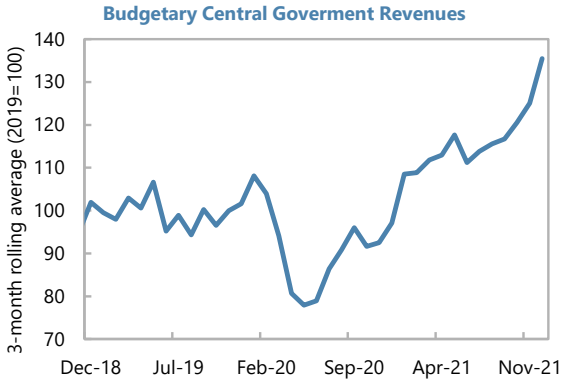
...as job vacancies surge across all sectors.



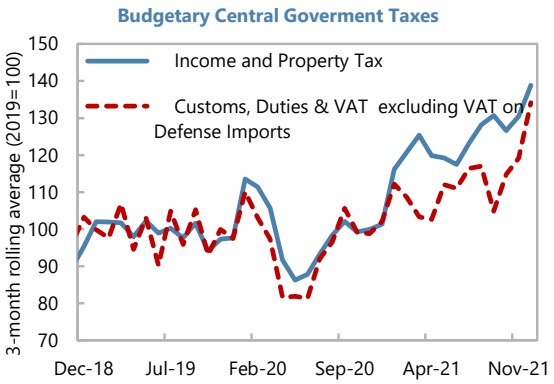
Source: Haver Analytics; IMF Staff calculations.

Figure 5. Israel: Fiscal Developments

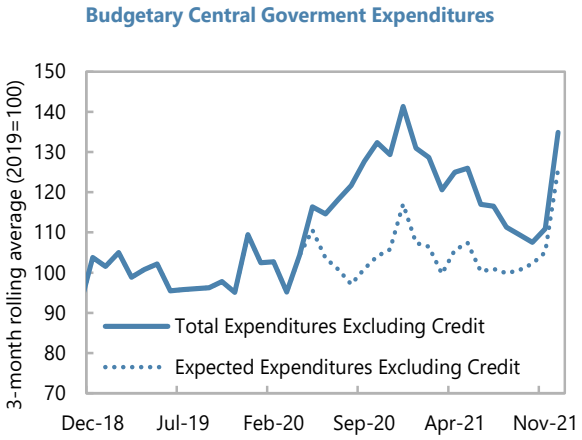
Government revenues are well above pre-crisis levels....



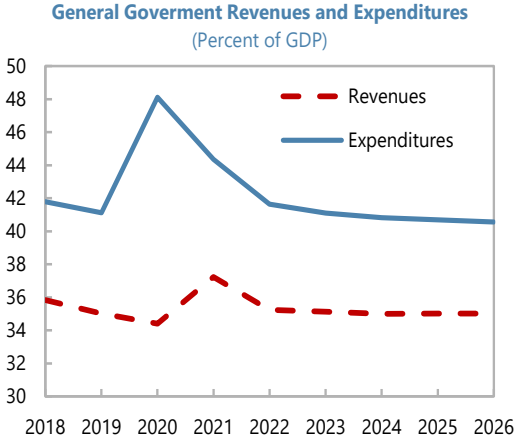
...with a sharp increase in direct taxes and a strong collection of indirect taxes.



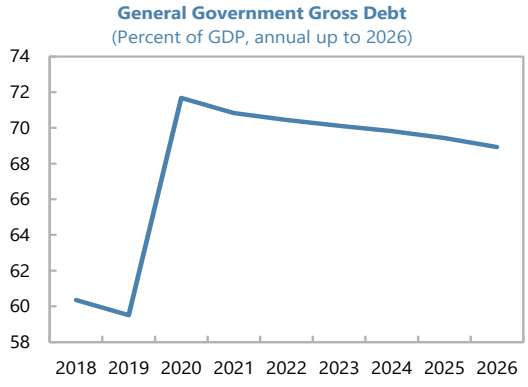
Government spending declined as pandemic-related spending was wound down.



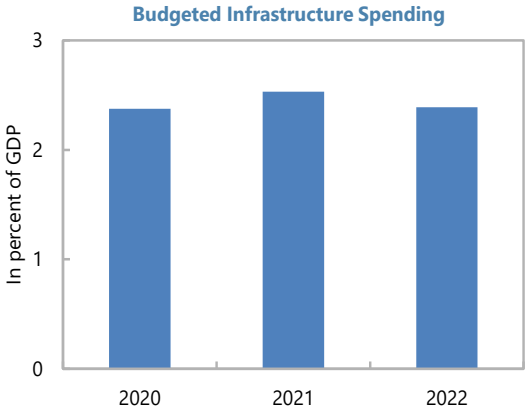
Medium-term consolidation plans are largely based on expenditure restraint.



Government debt is on a downward path.



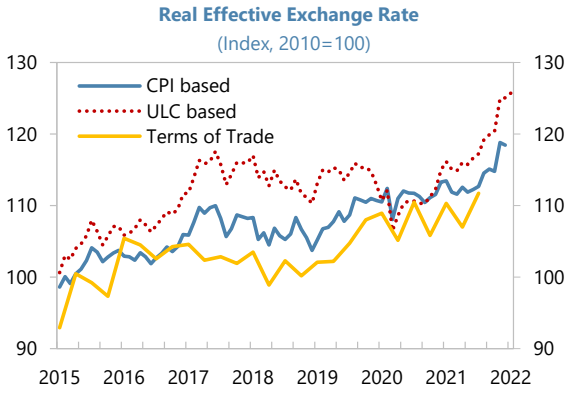
But there is little room to raise priority spending, such as infrastructure.



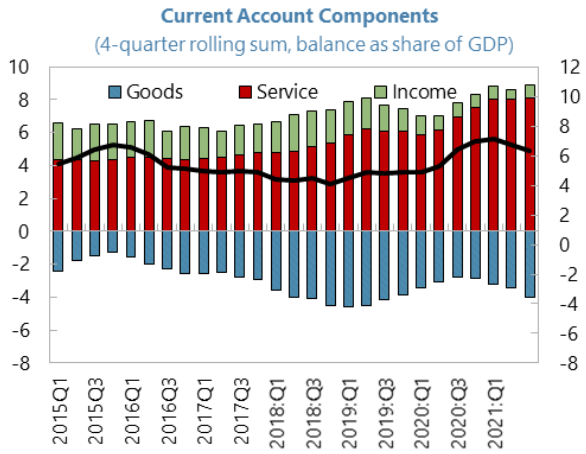
Sources: Ministry of Finance; IMF Staff calculation.

Figure 6. Israel: External Sector Developments

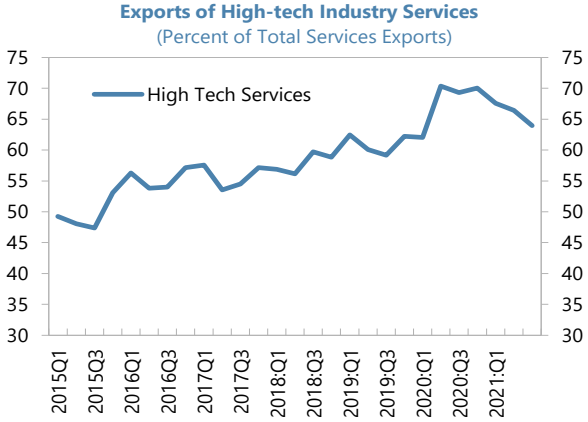
Shekel appreciation pushed the REER up...



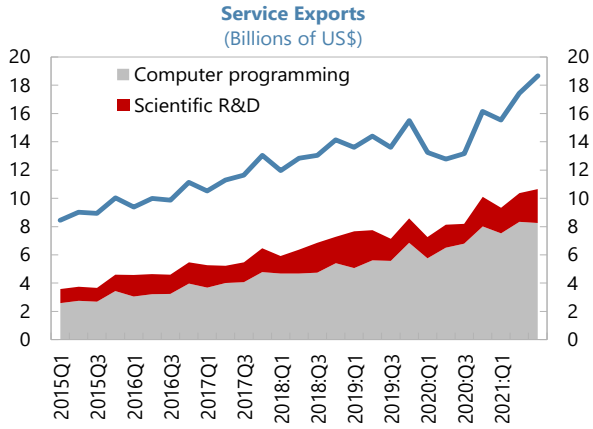
...but the current account balance remains in



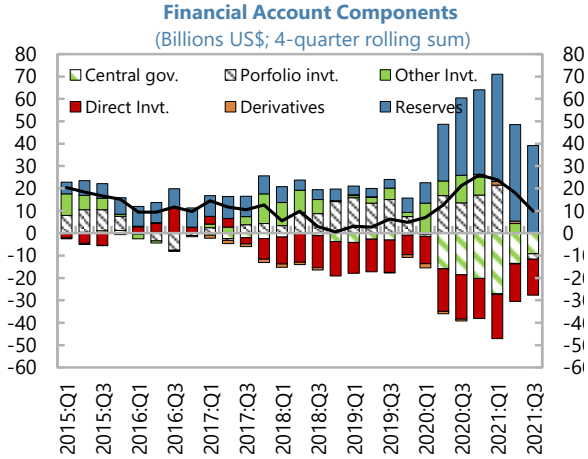
...due to service exports, and despite a rising deficit in goods trade.



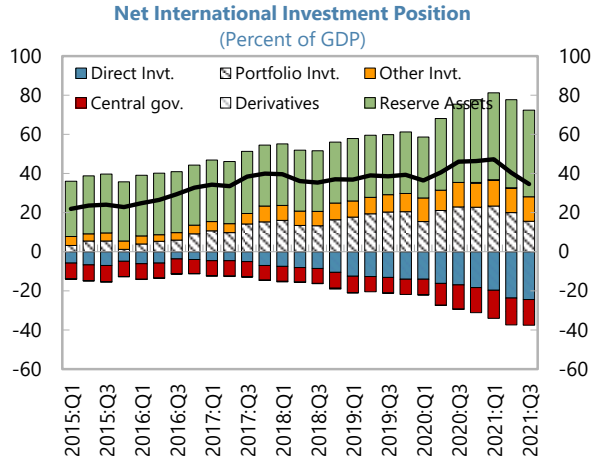
High-tech industries drive service exports.



Portfolio inflows resumed, while reserve accumulation accelerated...



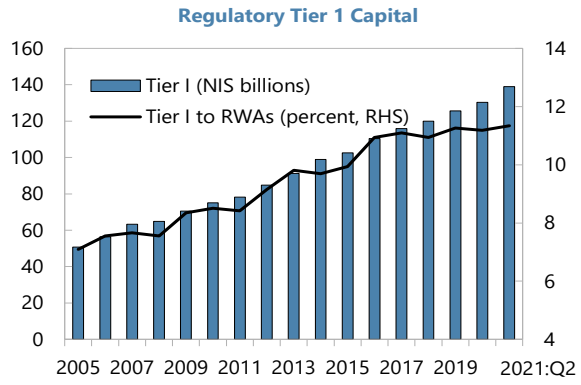
...supporting a solid net international investment position.



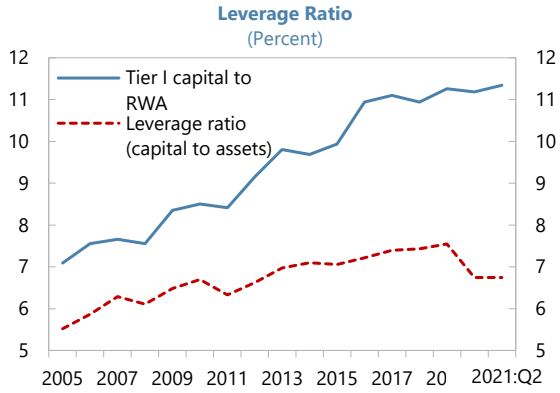
Sources: Bank of Israel; Central Bureau of Statistics; Haver Analytics; IMF Staff calculations.

Figure 7. Israel: Performance of the Banking System

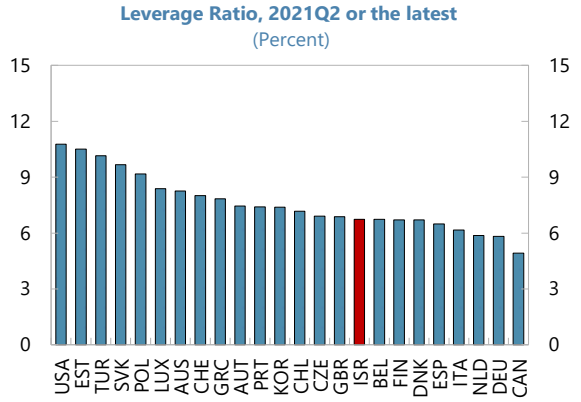
Banks' capital held steady...



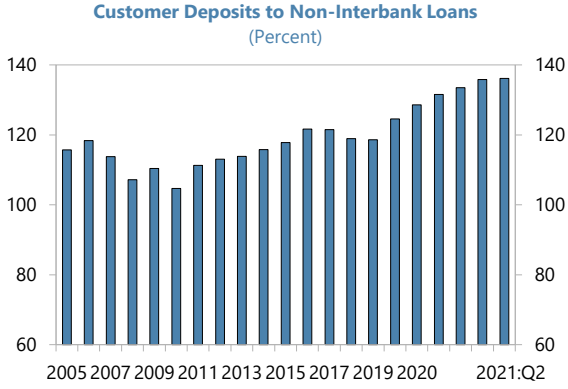
...while leverage ratios dropped slightly...



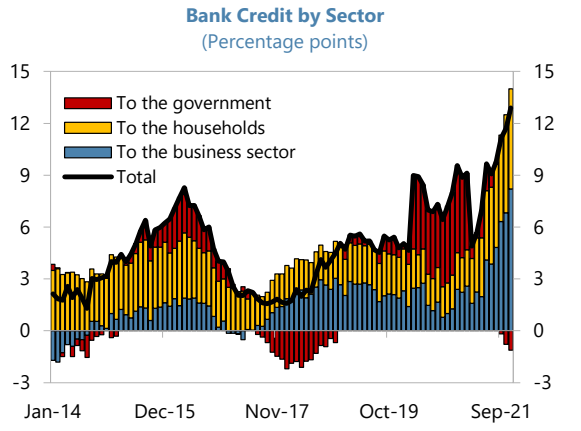
...but remain above the recommended minimum and close to the OECD median.



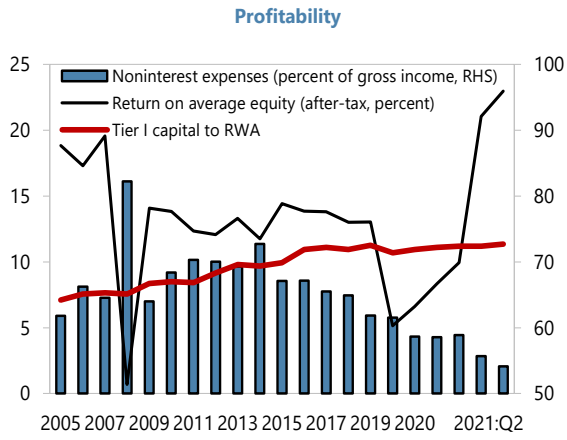
Lending operations remain fully funded by deposits.



Bank funding to the government dropped, with lending to households (mortgages) and businesses accounting for the bulk of credit.



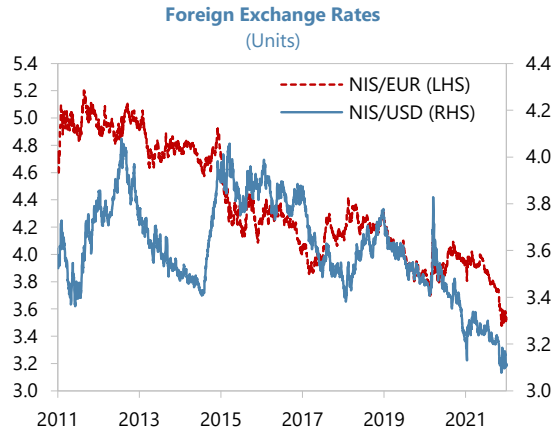
The efficiency of banks improved, contributing to a steep increase in profitability.



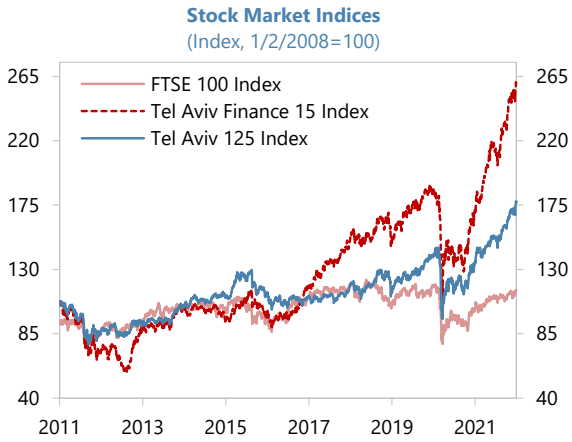
Sources: IMF, Financial Soundness Indicator Database; Haver Analytics; IMF Staff calculations.

Figure 8. Israel: Selected Financial Indicators

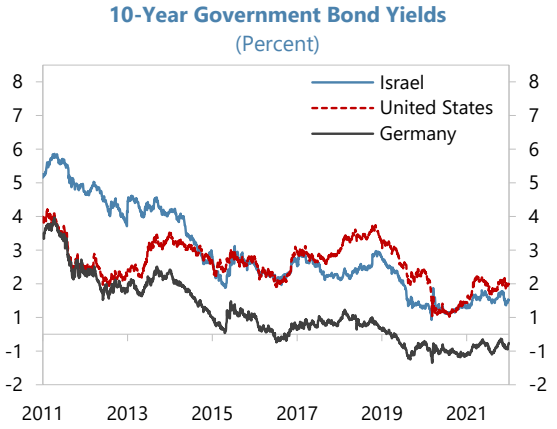
The shekel reached 20-year highs in 2021.



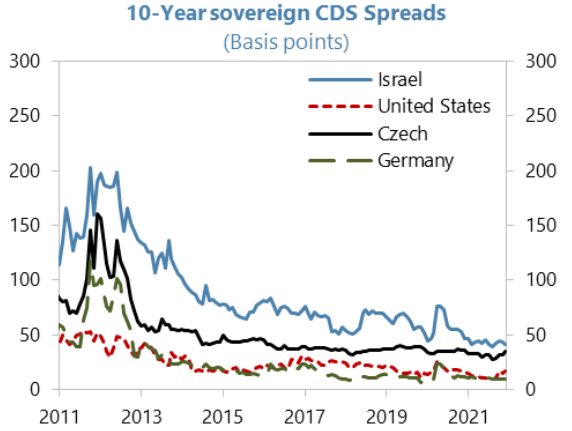
Stock prices are surging, especially of financials...



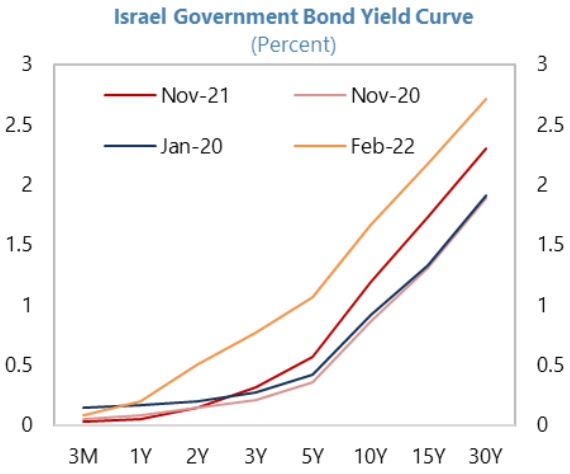
...with modest rises in long-term yields...



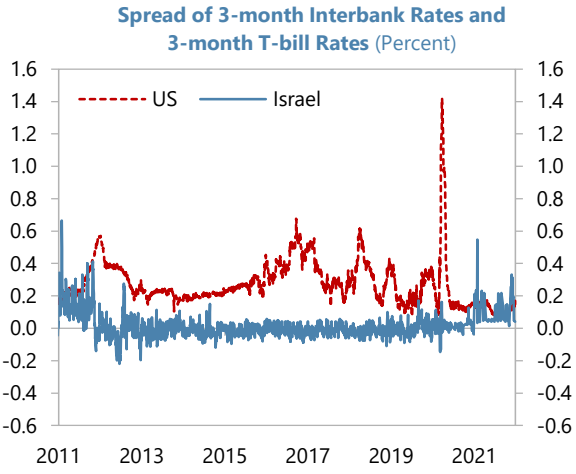
...and stable sovereign CDS spreads.



The term structure of interest rates has however steepened.



Interbank spreads remain near zero.



Sources: Bloomberg; Datastream; Haver; and Moody's Analytics, CreditEdge.

Table 1. Israel: Selected Economic Indicators, 2017–27

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Projections						
Real Economy (percent change)											
Real GDP	4.4	4.0	3.8	-2.2	8.1	5.0	3.6	3.5	3.5	3.5	3.5
Domestic demand	4.1	4.5	3.6	-4.3	9.2	5.8	4.3	4.2	4.1	4.1	4.1
Private consumption	3.6	3.5	3.9	-9.2	11.7	6.6	4.8	4.8	4.6	4.6	4.5
Public consumption	3.4	4.3	2.7	2.5	2.9	6.1	3.3	3.3	3.3	3.3	3.3
Gross capital formation	6.3	7.0	3.8	1.0	9.9	4.0	3.9	3.5	3.6	3.7	3.8
Gross fixed investment	3.8	7.2	3.1	-4.0	10.5	5.7	2.7	3.5	3.5	3.6	0.0
Foreign demand (contribution to growth)	0.3	-0.5	0.2	2.3	-1.0	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6
Potential GDP	3.7	3.6	3.5	1.7	5.1	4.0	3.9	3.6	3.7	3.5	3.5
Output gap (percent of potential)	0.3	0.6	0.9	-3.0	-0.2	0.7	0.4	0.2	0.1	0.0	0.0
Unemployment rate (percent)	4.2	4.0	3.8	4.3	5.0	3.9	3.8	3.7	3.7	3.7	3.7
Overall CPI (percent change, average)	0.2	0.8	0.8	-0.6	1.5	2.7	2.1	2.0	1.9	1.9	1.9
Overall CPI (percent change, end of period)	0.4	0.8	0.6	-0.7	2.8	2.4	2.0	1.9	1.8	1.9	1.9
Core CPI (percent change, average)	0.4	0.9	0.6	-0.3	1.2	1.6	2.5	2.3	2.1	2.0	2.0
Saving and investment balance											
Gross national saving (percent of GDP)	24.7	24.7	24.7	27.6	27.3	27.0	26.7	26.3	26.0	25.7	25.4
Foreign saving (percent of GDP)	-3.6	-2.8	-3.4	-5.4	-4.6	-4.5	-4.2	-3.9	-3.7	-3.4	-3.1
Gross capital formation (percent of GDP)	21.1	21.9	21.3	22.1	22.7	22.5	22.4	22.4	22.3	22.3	22.3
Public Finance (percent of GDP)											
Central government											
Revenues and grants	26.3	25.2	24.5	22.7	26.6	24.4	24.2	24.1	24.1	24.1	24.1
Total expenditure	28.2	28.1	28.2	34.1	31.0	28.0	27.5	27.2	27.0	26.9	26.9
Overall balance	-1.9	-2.9	-3.7	-11.4	-4.4	-3.6	-3.2	-3.1	-2.9	-2.9	-2.9
Structural balance 1/	-2.9	-3.1	-3.9	-10.4	-4.4	-3.8	-3.3	-3.2	-2.9	-2.9	-2.9
Interest payments	2.3	2.2	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3
General Government											
Overall balance	-1.1	-3.6	-3.9	-10.8	-4.3	-3.4	-3.1	-3.1	-3.0	-3.0	-3.0
Structural balance 1/	-2.4	-3.9	-4.3	-9.5	-4.2	-3.7	-3.3	-3.2	-3.1	-3.0	-3.0
Debt	60.2	60.4	59.5	71.7	69.0	67.1	66.4	65.8	65.2	64.7	64.2
Of which : Foreign currency external debt	7.9	8.7	7.9	11.7	10.7	10.6	10.5	10.4	10.3	10.2	10.1
Balance of Payments (percent of GDP)											
Current account balance	3.6	2.8	3.4	5.4	4.6	4.5	4.2	3.9	3.7	3.4	3.1
Goods and services balance	1.9	0.8	2.0	4.6	3.8	3.3	3.0	2.7	2.5	2.2	1.9
Exports of goods and services 2/	29.4	30.0	29.5	28.0	29.7	31.1	30.8	30.5	30.3	30.0	29.7
Real growth rate (percent)	5.3	5.1	3.9	-1.9	13.6	7.3	2.9	2.9	2.9	2.9	2.8
Export prices growth (percent)	2.9	2.1	0.3	-0.7	10.6	8.7	2.1	1.7	1.7	1.3	1.2
Imports of goods and services 2/	27.5	29.2	27.3	23.4	25.3	27.2	27.1	27.1	27.1	27.1	27.1
o/w Oil imports (billions of U.S. dollars)	7.5	9.7	9.2	5.5	10.0	12.5	11.9	11.5	11.5	11.6	11.8
Real growth rate (percent)	4.4	6.8	3.4	-9.5	18.7	9.9	5.0	5.0	4.8	4.7	4.5
Import prices growth (percent)	2.8	4.4	-3.4	-3.7	10.4	9.8	0.8	0.6	0.8	0.5	0.5
Foreign reserves (eop, US$ billions)	113.0	115.3	126.0	173.3	213.0	243.9	256.6	270.0	284.0	297.6	312.9
Exchange Rate											
NIS per U.S. dollar (period average)	3.60	3.59	3.56	3.44	3.23	3.12	3.12	3.12	3.13	3.15	3.17
Nominal effective exchange rate (2010=100)	118.7	118.3	123.2	128.8	134.6	138.8	139.7	139.9	140.4	140.9	141.1
Real effective exchange rate (2010=100)	108.2	106.0	108.9	111.3	114.0	115.6	116.2	116.4	116.7	116.9	117.1
Terms of trade (2010 = 100)	104.6	95.3	98.7	99.5	92.8	92.7	94.0	95.1	95.8	96.3	96.7

Sources: Bank of Israel; Central Bureau of Statistics; Haver Analytics; and IMF Staff estimates and projections.
1/ Percent of potential GDP.
2/ National Accounts data.

Table 2. Israel: Balance of Payments, 2017–27

(In billions of US dollars unless otherwise indicated)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
							Projections				
Current account balance	12.6	10.6	13.5	22.1	22.3	24.1	24.3	23.9	23.4	22.8	22.1
Merchandise	-10.4	-17.1	-15.9	-11.3	-20.1	-27.6	-32.7	-37.5	-42.7	-48.2	-54.2
Exports, f.o.b.	58.1	59.9	60.1	58.5	69.0	77.5	79.7	81.7	83.6	84.9	86.1
Imports, f.o.b.	68.5	77.0	76.0	69.8	89.1	105.1	112.4	119.3	126.3	133.1	140.4
Services	17.0	20.1	23.8	30.1	38.5	45.2	50.0	54.1	58.5	62.9	67.8
Exports	46.4	52.2	56.8	55.3	74.0	90.6	96.8	103.1	109.7	116.6	123.6
Imports	29.4	32.1	33.0	25.2	35.5	45.3	46.8	48.9	51.2	53.7	55.8
Primary income	-1.7	-0.3	-2.3	-4.1	-5.8	-4.3	-4.6	-4.8	-5.1	-5.4	-5.6
Receipts	13.2	15.0	14.6	12.6	15.2	17.3	18.3	19.4	20.4	21.5	22.6
Payments	14.9	15.3	16.9	16.7	20.9	21.6	22.9	24.2	25.5	26.9	28.2
Secondary income	7.7	7.8	7.9	7.4	9.6	10.8	11.5	12.1	12.8	13.4	14.1
Receipts	11.5	11.6	12.1	12.4	14.9	16.7	17.8	18.8	19.8	20.8	21.9
Payments	3.8	3.8	4.2	5.0	5.3	5.9	6.3	6.7	7.0	7.4	7.8
Capital account	1.8	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Financial account 1/	4.5	-4.7	-1.5	-11.8	-11.9	-5.4	13.0	11.9	10.8	10.7	8.2
Direct investment, net	-9.3	-15.4	-8.7	-17.9	-16.0	-14.4	-12.8	-11.2	-9.7	-8.2	-7.2
Foreign direct investment abroad	7.6	6.1	8.7	6.4	8.3	8.7	9.1	9.6	10.1	10.6	10.7
Foreign direct investment in Israel	16.9	21.5	17.4	24.3	24.3	23.1	21.9	20.8	19.8	18.8	17.9
Portfolio investment, net	2.4	10.3	6.5	-2.8	-17.2	2.7	9.3	12.9	13.8	14.7	14.8
Financial derivatives, net	-1.4	0.1	-1.2	1.3	-0.6	-0.7	-0.3	-0.2	-0.1	0.0	0.0
Other investment, net	12.8	0.4	1.9	7.6	21.9	7.0	16.9	10.4	6.8	4.3	0.6
Change in reserves	8.1	5.3	6.4	37.8	35.6	30.9	12.7	13.4	14.0	13.6	15.3
Errors and omissions	-1.9	-11.6	-10.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:											
Current account balance (percent of	3.6	2.8	3.4	5.4	4.6	4.5	4.2	3.9	3.7	3.4	3.1
Terms of trade (percent change)	-3.3	-9.0	3.6	0.8	-6.7	-0.1	1.4	1.1	0.8	0.5	0.4
Gross external debt (percent of GDP)	25.4	25.2	25.9	32.0	31.8	29.4	27.1	25.5	24.7	24.4	24.3
Foreign reserves											
US$ billion	113.0	115.3	126.0	173.3	213.0	243.9	256.6	270.0	284.0	297.6	312.9
Percent of GDP	31.8	30.9	31.7	42.6	44.3	45.2	44.8	44.6	44.5	44.3	44.3
Months of G&S imports	12.4	12.7	15.9	16.7	17.0	18.4	18.3	18.2	18.2	18.2	
GDP (billions of U.S. dollars)	355.3	373.6	397.9	407.1	481.2	539.6	572.7	605.3	638.3	671.7	706.2

Sources: Central Bureau of Statistics; Haver Analytics; IMF Staff estimates and projections.
1/ Excludes reserve assets.

Table 3. Israel: International Investment Position, 2017–27

(In percent of GDP)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Projections						
Net Investment	40.7	36.4	39.6	46.6	33.1	34.3	36.8	39.0	40.9	42.5	43.7
Direct investment	-7.2	-10.5	-14.1	-18.4	-23.1	-23.2	-24.1	-24.7	-24.9	-24.9	-24.7
Portfolio investment	8.7	8.8	13.3	10.6	2.5	2.7	4.1	6.1	7.9	9.7	11.3
Financial derivatives	-0.1	-0.4	0.0	0.4	0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Reserve assets	31.8	30.9	31.7	42.6	43.4	44.4	44.1	43.9	43.9	43.7	43.7
Other investment	7.5	7.6	8.7	11.6	10.2	10.4	12.7	13.7	14.1	14.0	13.4
Total Assets	122.0	117.3	123.3	147.6	141.1	136.4	136.3	136.6	137.1	137.6	137.9
Direct investment	28.6	28.1	26.4	27.1	24.6	23.6	23.8	24.1	24.4	24.8	25.1
Portfolio investment	40.2	37.9	43.0	52.5	50.1	47.4	47.4	47.4	47.6	47.8	47.9
Reserve assets	31.8	30.9	31.7	42.6	43.4	44.4	44.1	43.9	43.9	43.7	43.7
Other assets	21.5	20.8	22.2	25.0	22.8	20.9	21.1	21.2	21.3	21.4	21.2
Total Liabilities	81.4	80.9	83.8	101.0	108.0	102.1	99.5	97.6	96.2	95.2	94.2
Direct investment	35.8	38.5	40.6	45.5	47.7	46.8	47.9	48.8	49.4	49.7	49.8
Equity and Reinvested Earnings	33.2	36.1	38.0	43.0	...	...	...	...	...	...	...
Other Capital	2.6	2.4	2.6	2.5	...	...	...	...	...	...	...
Portfolio investment	31.6	29.2	29.7	42.0	47.7	44.8	43.2	41.4	39.7	38.1	36.6
Equity Securities	22.8	19.6	19.9	26.0	...	...	...	...	...	...	...
Bonds and Notes	8.8	9.6	9.9	16.0	...	...	...	...	...	...	...
Other liabilities	14.0	13.2	13.5	13.5	12.6	10.6	8.4	7.4	7.2	7.4	7.8

Sources: Central Bureau of Statistics; Haver Analytics; IMF Staff estimates and projections.

Table 4. Israel: Summary of Central Government Operations, 2017–27 1/

(In percent of GDP, unless otherwise indicated)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Projections						
Revenue and grants	26.3	25.2	24.5	22.7	26.6	24.4	24.2	24.1	24.1	24.1	24.1
On income and profits	13.1	12.1	11.9	11.9	13.9	12.5	12.3	12.2	12.2	12.2	12.2
VAT and customs	10.3	10.3	10.0	9.8	10.4	9.6	9.6	9.6	9.6	9.6	9.6
Fees	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
VAT on defense imports	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Interest	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans from NII	1.7	1.8	1.6	0.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Grants 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.4	0.5	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Expenditure 3/	28.2	28.1	28.2	34.1	31.0	28.0	27.5	27.2	27.0	26.9	26.9
Administrative Departments	4.1	4.2	4.2	4.4	4.0	4.0	4.0	4.0	3.9	3.9	3.9
Social Departments	12.5	12.6	12.7	15.8	14.5	11.1	10.7	10.6	10.5	10.4	10.4
Economic Departments	2.3	2.4	2.5	3.3	2.9	2.9	2.9	2.9	2.8	2.8	2.8
Defense Expenditure 2/	5.2	5.0	4.9	5.1	4.8	4.9	4.9	4.8	4.8	4.8	4.8
Other Expenditures	0.3	0.2	0.2	1.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest	2.3	2.2	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3
Repayment of Principal to NII	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Budget deficit	-1.9	-2.9	-3.7	-11.4	-4.4	-3.6	-3.2	-3.1	-2.9	-2.9	-2.9
Unsettled Payment Orders	-0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing	1.4	2.9	3.7	11.4	4.4	3.6	3.2	3.1	2.9	2.9	2.9
Foreign (net)	0.7	0.8	0.3	4.3	-0.2	0.5	0.5	0.5	0.5	0.5	0.5
Domestic (net)	0.6	1.9	3.3	7.1	3.8	2.6	2.2	2.4	2.4	2.3	2.3
Loans	6.9	6.5	8.7	12.0	1.9	3.3	7.1	-4.3	-3.0	0.7	-10.7
Repayment	-6.3	-4.6	-5.4	-4.9	-6.2	-6.3	-6.4	-6.5	-6.6	-6.7	-6.8
Sale of assets (net)	0.1	0.2	0.1	0.0	0.9	0.6	0.6	0.3	0.1	0.1	0.1
Memorandum items:											
Structural balance (percent of potential GDP)	-2.9	-3.1	-3.9	-10.4	-4.4	-3.8	-3.3	-3.2	-2.9	-2.9	-2.9
Primary balance (PB)	0.3	-0.8	-1.6	-9.3	-2.3	-1.4	-1.0	-0.8	-0.6	-0.6	-0.5
Cyclically adjusted PB (percent of potential GDP)	0.2	-0.9	-1.8	-8.4	-2.2	-1.6	-1.1	-0.9	-0.6	-0.6	-0.5
Real expenditure growth (in percent)	3.5	3.8	5.0	20.4	-0.8	-4.9	2.1	2.9	3.0	3.6	3.7
Public debt to GDP	60.2	60.4	59.5	71.7	69.0	67.1	66.4	65.8	65.2	64.7	64.2
Nominal GDP (in billions of NIS)	1,279	1,342	1,418	1,401	1,554	1,683	1,786	1,892	2,000	2,115	2,236

Sources: Ministry of Finance; IMF Staff estimates and projections.

1/ Data as per the MoF definition, on a cash basis, covering the budgetary sector and the National Insurance Institute.

2/ Starting from 2017, grants provided by the United States and associated spending are excluded from the MOF's budget presentation.

3/ Registered spending but for which the equivalent cash has not yet been disbursed, hence it does not appear in financing.

Table 5. Israel: General Government Operations, 2017–27

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
							Projections				
	(In percent of GDP; unless otherwise indicated)										
Revenue	479.2	480.4	496.7	483.9	577.2	590.3	624.2	658.7	696.5	736.1	778.4
Taxes	345.9	341.7	352.9	344.8	422.1	421.5	445.1	468.9	495.9	524.3	554.5
Taxes on income, profits, and capital gains	151.6	139.7	144.9	143.9	185.7	180.5	189.2	198.0	209.4	221.4	234.2
Taxes on goods and services	150.8	157.3	161.7	156.8	184.0	184.4	195.7	207.2	219.1	231.7	245.0
Taxes on international trade and transactions	3.0	2.8	3.0	2.9	3.2	3.5	3.7	3.9	4.1	4.3	4.6
Taxes n.e.c.	40.4	42.0	43.3	41.2	49.2	53.2	56.5	59.8	63.3	66.9	70.7
Social contributions	76.1	79.8	83.5	81.9	91.8	100.4	106.6	113.0	119.5	126.2	133.3
Grants	10.3	10.6	10.3	9.7	10.8	11.6	12.4	13.1	13.8	14.6	15.5
Other revenue	47.0	48.3	50.1	47.5	52.5	56.8	60.2	63.7	67.2	71.0	75.1
Of which: Interest income	3.3	3.1	3.4	2.7	3.0	3.3	3.5	3.7	3.9	4.1	4.3
Expenditure	493.6	529.0	552.0	635.6	643.3	647.2	680.2	717.6	757.3	800.1	845.2
Expense	490.3	518.5	539.8	620.1	627.7	630.1	662.1	698.4	737.1	778.8	822.6
Compensation of employees	128.3	134.3	139.7	140.9	142.2	156.3	165.2	174.5	184.3	195.0	206.0
Purchases/use of goods and services	105.1	112.9	116.0	121.1	122.1	124.4	126.6	132.4	139.1	146.8	155.1
Interest expense	28.1	32.4	30.0	28.0	38.3	42.8	46.1	49.0	51.8	54.3	57.2
Social benefits	157.9	166.6	176.9	200.9	202.6	200.9	212.4	224.4	237.0	250.7	264.8
Expense n.e.c.	70.9	72.3	77.2	129.2	122.5	105.8	111.8	118.1	124.8	132.0	139.4
Net acquisition of nonfinancial assets	3.3	10.5	12.1	15.4	15.6	17.1	18.1	19.1	20.2	21.4	22.6
Net lending/borrowing	-14.4	-48.6	-55.2	-151.7	-66.1	-56.9	-56.0	-58.9	-60.8	-64.0	-66.8
Revenue	37.5	35.8	35.0	34.5	37.1	35.1	35.0	34.8	34.8	34.8	34.8
Taxes	27.0	25.5	24.9	24.6	27.2	25.0	24.9	24.8	24.8	24.8	24.8
Taxes on income, profits, and capital gains	11.9	10.4	10.2	10.3	11.9	10.7	10.6	10.5	10.5	10.5	10.5
Taxes on goods and services	11.8	11.7	11.4	11.2	11.8	11.0	11.0	11.0	11.0	11.0	11.0
Taxes on international trade and transactions	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Taxes n.e.c.	3.2	3.1	3.1	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Social contributions	5.9	5.9	5.9	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0
Grants	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other revenue	3.7	3.6	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Of which: Interest income	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Expenditure	38.6	39.4	38.9	45.4	41.4	38.5	38.1	37.9	37.9	37.8	37.8
Expense	38.3	38.7	38.1	44.3	40.4	37.4	37.1	36.9	36.8	36.8	36.8
Compensation of employees	10.0	10.0	9.9	10.1	9.1	9.3	9.2	9.2	9.2	9.2	9.2
Purchases/use of goods and services	8.2	8.4	8.2	8.6	7.9	7.4	7.1	7.0	7.0	6.9	6.9
Interest expense	2.2	2.4	2.1	2.0	2.5	2.5	2.6	2.6	2.6	2.6	2.6
Social benefits	12.3	12.4	12.5	14.3	13.0	11.9	11.9	11.9	11.8	11.9	11.8
Expense n.e.c.	5.5	5.4	5.4	9.2	7.9	6.3	6.3	6.2	6.2	6.2	6.2
Net acquisition of nonfinancial assets	0.3	0.8	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Net lending/borrowing	-1.1	-3.6	-3.9	-10.8	-4.3	-3.4	-3.1	-3.1	-3.0	-3.0	-3.0

Sources: Central Bureau of Statistics; IMF, Government Financial Statistics; IMF Staff estimates and projections.

Table 6. Israel: Financial Soundness Indicators, Banks, 2015–21:Q2

(End-period, in percentage points)

	2015	2016	2017	2018	2019	2020	2021Q1	2021Q2
Capital Adequacy								
Regulatory capital to risk-weighted assets 1/	14.0	14.7	14.5	14.2	14.6	14.4	14.1	14.3
Regulatory Tier I capital to risk-weighted assets 1/	10.1	11.0	11.2	11.0	11.3	11.2	11.2	11.3
Capital as percent of assets (leverage ratio)	7.1	7.2	7.4	7.4	7.5	6.7	6.7	6.7
Asset quality and exposure								
Nonperforming loans to total gross loans	1.8	1.6	1.3	1.2	1.4	1.5	1.5	1.3
Nonperforming loans net of loan-loss provisions to capital	9.8	8.6	7.6	6.9	7.4	7.7	8.0	7.0
Large exposures as percent of regulatory capital	485.3	429.0	403.7	418.0	425.9	132.9	135.0	135.2
Earnings and profitability								
Return on average assets (before tax)	1.0	1.0	1.0	1.0	1.0	0.7	1.4	1.5
Return on average equity (before tax)	8.8	7.9	8.5	8.2	8.2	6.0	13.4	14.7
Interest margins to gross income	56.4	58.6	61.6	64.4	66.2	66.6	63.7	66.2
Trading and fee income to gross income	8.0	8.0	5.1	7.1	7.5	7.4	10.6	8.9
Noninterest expenses to gross income	66.9	67.2	65.5	64.5	61.6	59.1	55.9	54.2
Personnel expenses to noninterest expenses	59.3	58.0	57.8	52.5	53.4	53.3	57.1	57.4
Liquidity								
Liquid assets as percent of total assets	20.8	24.4	23.9	22.2	23.2	28.8	29.1	29.6
Liquid assets as percent of short-term liabilities	110.8	135.3	124.8	128.0	125.3	135.7	138.0	131.3
Customer deposits as a percent of total (non-interbank) loans	117.4	121.3	121.0	118.5	118.3	132.9	135.0	135.2
Foreign exchange risk								
Net foreign exchange open position to capital	-0.4	0.1	0.0	-0.8	0.2	0.0	-0.9	-0.2
Foreign currency-denominated loans as percent of total loans	12.2	11.2	10.2	11.0	9.9	9.8	10.6	10.5
Foreign currency-denominated liabilities as percent of total liabilities	27.6	26.5	23.8	25.2	23.7	23.0	23.5	23.5

Sources: Bank of Israel; IMF, Financial Soundness Indicators Database.

1/ The calculation of capital base follows rules under Basel II.

Annex I. Policy Support During the Pandemic

Annex I. Table 1. Monetary Policy Measures in Response to COVID-19

	Policy Action	Status
Government bond market	BoI purchases of government bonds, up to NIS 85 billion.	Purchases ended in December when the NIS 85 billion target was reached. Bonds will be held to maturity.
Funding for SMEs	Term funding scheme provides 3–4-year loans for banks to fund credit for small and microenterprises.	Expired, with balance of NIS 40bn.
Corporate bond market	Purchased corporate bonds on the secondary market of NIS 15 billion.	Terminated on November 22, with balance of NIS 3.5bn. Bonds will be held to maturity.
Repos	Repo operations to provide shekel liquidity to eligible non-banks; expanded acceptable collateral for repos to include corporate bonds rated AA or higher.	Balance of NIS 0.1bn.
Dollar liquidity swaps	Provided additional USD liquidity through foreign exchange swaps of up to USD 15 billion.	Inactive since July 2020.

[1] As of December 31, 2021.

Annex I. Table 2. Macroprudential Measures in Response to COVID-19		
	Policy Action	**Status**
Capital requirement	Commercial banks' capital requirements reduced by 1 percent, until September 30, 2021.	Extended on September 30, 2021, to December 31, 2021, and expired
LTV	Increased to up to 70 (from 50) percent, until September 30, 2021.	Expired on September 30, 2021.
Additional T1 capital for housing loans	Temporary relaxation of requirement that banks raise T1 capital target by 1 percent with respect to housing loans issued during temporary order.	Expired on September 30, 2021.
Loan deferral framework	Adopted a framework to enable customers to defer loan repayments in three activity segments: mortgages, consumer credit, and business credit	Expired on March 31, 2021.
Restrictions on bank's dividend distributions	Supervisor of Banks instructed the banks' boards of directors to re-examine their dividend distribution and share buy-backs.	On July 2021 the BSD announced that banks may resume dividend distribution with regard to profits earned in 2020 taking into account future impact of the COVID-19 crisis, though payout of more than 30 percent will not be considered prudent. On September 30, 2021, the supervisor announced that the same will apply to profits earned in 2021.
Leverage ratio	Reduced minimum leverage ratio for banks by 0.5 percentage points (from 6 to 5.5 for large banks, and from 5 to 4.5 for small banks).	Extended on September 30, 2021, to December 31, 2021. Expired.
Limits on exposure to construction and real estate sector	The limitation on exposure to the construction and real estate industry was increased by 2 percentage points (from 24 percent to 26 percent of the total credit portfolio when national infrastructure is included; from 20 to 22 excluding infrastructure).	Valid until 2025.

Annex I. Table 3. Selected Fiscal Measures in Response to Covid-19		
	Policy Action	**Status**
Unemployment benefits	Payment of unemployment benefits was extended (after accrued benefits expires) until June 2021. In addition to the relaxation of unpaid leave duration requirement, the increase unemployment benefits for those under 28 with a child, waiving the reduction of benefits after the 126th day, full-rate unemployment for those attending vocational training and the recurring unemployed.	Expired on June 30, 2021.
Unemployment benefits for age 45+	A supplement of unemployment days of 50 percent of initial allocation to be used up to end-2021	Expired on December 31, 2021.
Return to work grant	Return to work grant for those that resume working between November-April 2021.	Expired April 30, 2021.
Maternity benefits	Maternity allowance for those giving birth between July-December 2021 that received benefits during pregnancy	Expired on January 14, 2022.
Long-term unemployment grant	A one-time grant for those who received benefits for 100 or more days and average wage below 422.04 a day.	Expired in December 2020.
Adjustment grants for elderly	Workers aged 67 and older dismissed or placed on unpaid leave due to COVID-19 from March 2020 to September 2021 get a monthly grant.	Expired in September 2021.
Exemption from insurance contributions for employees on unpaid leave	Employers were exempt from national and health insurance contributions for those on unpaid leave from April 2020 to June 2021	Expired at end-June 2021.
Quarantine benefit to employers	A quarantine benefit to employers that paid wages to their quarantine employees.	Expired on October 31, 2021
Passover grant	A one-time grant of NIS 500 per child	Expired in April 2020.
Citizen grants	750 NIS to each resident and additional (300 to 500) for each child for those with income below NIS 649,560	Expired at end-2020.
Grants for self-employed	Grants for self-employed with reduced income due to COVID-19 from May 2020 to June 2021	Expired in June 2021.
Fixed-expenditure grant for businesses	A grant for May-June 2020 and May-June 2021. For business with turnover up to	Expired at end-June 2021

Annex I. Table 3. Selected Fiscal Measures in Response to Covid-19 (concluded)		
	Policy Action	**Status**
	NIS 400 million. The amount is based on fixed expenses, with 7 eligibility periods between May and June 2021.	
VAT deferral	Reporting and payment of VAT for January-February 2020 was deferred until May 25, 2020.	Expired on May 25, 2020.
Income tax deferral	Reporting for 2019 was deferred to July 30	Expired on July 30, 2020.
Tax refunds	Transfer of income and VAT tax refunds totaling NIS 1 billion	Expired at end-March 2020.
Property tax relief	A property tax refund for SMEs that experienced 60+ percent decrease in turnover Sep 2020- June 2021.	Expired at end-June 2021.
Council tax discount	A 3-month discount in the council tax for business that were not allowed to remain open.	Expired at end-June 2020.
Double rate depreciation	Double rate depreciation on equipment purchased from September 2020 to June 2021	Expired at end-June 2021.
Loans under the state guarantee Fund for large businesses (annual turnover over NIS 200 million)	Guarantee on loans for up to 5 years with 1-year grace period. Up to 8 percent of turnover and capped at NIS 100m. Guarantee cap at 75 percent of each loan and 15 percent of the portfolio.	Applications accepted until May 2021. Guarantees will expire by 2028, contingent on the repayment schedule of each individual loan
Loans under the state guarantee Fund for SMEs (annual turnover up to NIS 400 million)	Guarantees on loans of up to 10 years with up to 2-year grace period for which the state subsidizes interest payments during the first year. Up to 40 percent of turnover and capped at NIS 20m. Guarantee cap at 85 percent of each loan and 15 percent of the portfolio. A higher portfolio cap of 60 percent applies for business in the sectors more affected by the pandemic.	Applications accepted until December 2021.
State guarantees for top-up coverage for short-term credit insurance	Assisting Israeli exporters and local businesses by providing state guarantees to private insurance companies that will allow them to offer top-up coverage for short-term credit insurance against the risk of non-payment by buyers, beyond the basic coverage offered by the companies themselves. The top-up coverage provided under the plan is limited to up to 100 percent of the basic coverage provided by the private insurance company.	Applications accepted until 31 of December 2022. Guarantees will expire in 2028.

Annex II. External Sector Assessment

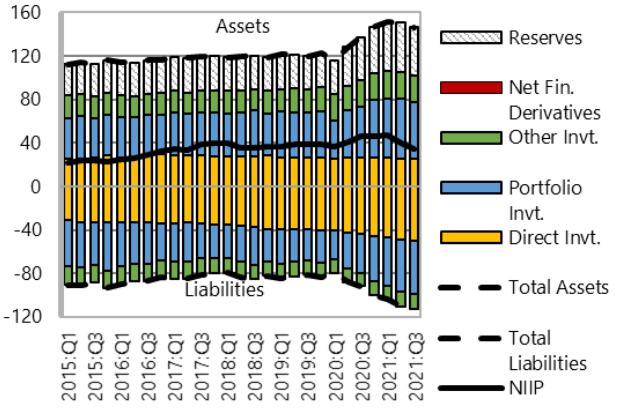
Overall Assessment: *The external position in 2021 is projected to be moderately stronger than the level implied by medium-term fundamentals and desirable policies.* This assessment—while supported by the strength of the net international investment position and international reserves—is subject to uncertainty and based on incomplete information of the state of the economy in 2021. It is also qualified by the limited extent to which the model captures Israel's country-specific factors. The ongoing real appreciation of the shekel—with REER models suggesting overvaluation—may also have a lagged impact on the current account.

Potential Policy Responses: Structural reforms to improve productivity and strengthen the resilience of the economy, including much needed public investment spending, would help prevent potential accumulation of imbalances. With inflation exceeding and inflation expectations within the target band, the BoI should taper off the use of FX intervention for managing inflation expectations and limit its use to addressing disorderly market conditions.

Foreign Assets and Liabilities: Position and Trajectory

1. Background. The NIIP fell from 46 to 35 percent of GDP between end-2020 and 2021Q3, despite positive net purchases of assets abroad by Israeli residents (mainly reserves). The increase in international liabilities was larger than the increase in assets, reflecting a combination of inflows (especially into bonds in the first quarter) and valuation effects, driven by the strengthening shekel and rising prices of Israeli securities. In the year to 2021Q3, non-residents' net purchases of Israeli assets equaled USD 62bn, while international liabilities rose by 148bn, with the value of portfolio equity liabilities increasing by 83 percent.

International Investment Position: Gross Assets and Liabilities
(Percent of GDP)



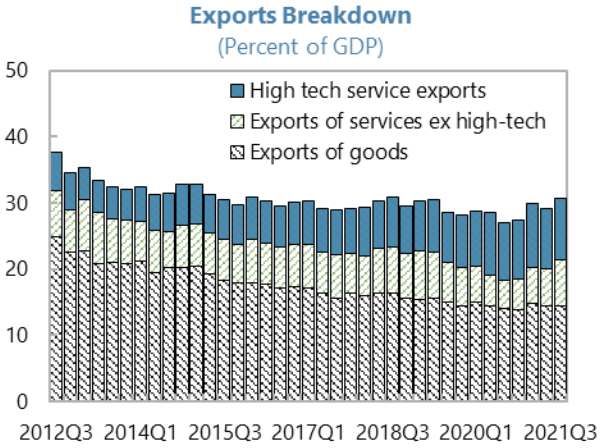
Sources: BOI

2. Assessment. The NIIP does not represent a major risk. Foreign assets, including international reserves at 45.6 percent of GDP at end-2021, exceed liabilities and provide a very large buffer. FDI is the largest component of external liabilities, and the only negative net position: NIIPs for portfolio securities, other investment and financial derivatives are all positive (Table 3). The bulk of FDI liabilities consists of equity claims. Debt assets held abroad exceed debt liabilities to non-residents.

2021, Sept (percent GDP)	NIIP: 34.6	Gross Assets: 147.2	Reserve Assets: 44.5	Gross Liab.: 112.6	Debt Liab.: 33.1

Current Account

3. Background. The current account balance is projected to drop from 5.4 percent of GDP in 2020, to 4.6 percent in 2021. This is mainly due to: (i) a sharp rebound in imports, as domestic activity recovered from the Covid-19 shock, pushing the merchandise trade balance down; and (ii) robust ICT service exports, which continued to grow through the pandemic. Over the medium term, the CA surplus is projected to decline toward about 3 percent of GDP.



Sources: Haver Analylitcs; and IMF staff calculations

4. Assessment. The EBA CA analysis suggests that the cyclically adjusted 2021 CA balance is above the level warranted by fundamentals and appropriate policies by 3.4 percent of GDP. The cyclically adjusted CA balance includes a multilaterally consistent adjustment for the output gap and terms of trade. The current account norm includes an adjustment for geopolitical uncertainty.[1] In addition, considering that pandemic related temporary factors raised the CA surplus by 1.47 percent of GDP (with contributions of 0.4 and 1 percent, respectively, from the shift in household consumption from services to consumer goods and the impact on medical goods trade), staff assess the CA gap to be 1.93 percent of GDP. Other country-specific factors not reflected in the CA norm potentially also play a role in Israel's high savings rate, including its high level of transfer and grant inflows and mandatory pension contributions (2017 and 2018 Article IV Staff Reports).[2]

Text Table. Israel: Model Estimates for 2021 (Percent of GDP)

	CA model	REER Level	REER Index
CA-Actual (projection)	**4.6**		
Cyclical Contributions	-0.2		
EBA model results	-0.2		

[1] This adjustment is derived from the EBA-lite model—estimated without Israel in the sample—which suggests that the impact of uncertainty related to potential armed conflict would increase Israel's current account balance by about 0.8 percent of GDP in 2020.

[2] A pension law enacted in 2008, which requires mandatory pension contributions to fully fund Israel's defined contribution (DC) pension system, has increased private savings from 15.3 percent of disposable income prior to 2008 to 20.3 percent in 2019 after full transition to the new contribution rates. While the cross-country evidence of a permanent impact of DC pension reforms on the savings rate remains inconclusive, previous staff assessments (2017 Article IV Staff Report) suggested a significant adjustment to the CA norm estimated on the basis of the 2015 EBA CA model.

Text Table. Israel: Model Estimates for 2021 (Percent of GDP) (concluded)

	CA Model	REER Level	REER Index
Adjusted CA	**4.8**		
CA Norm (from model)	**0.6**		
Adjustments to the norm1/	0.8		
Adjusted CA Norm	**1.4**		
EBA CA Gap	**3.4**	**-7.32**	**-3.10**
o/w Policy gap	0.8		
Covid-19 Adjustors			
Household consumption shift	0.44		
Medical goods	1.03		
Adjusted CA Gap	**1.93**		
Elasticity	-0.24	-0.24	-0.24
REER Gap	**-8.0**	**30.5**	**12.9**

1/ Cyclically adjusted, including multilateral consistency adjustments.

Real Exchange Rate

5. **Background.** The REER has appreciated significantly over the past decade (by about 20 percent, using the CPI-based REER, and about 25 percent using the ULC-based REER, between end-2011 and end-2021.) It increased by 4.5 percent during 2021 (8.7 percent using the ULC based measure) pushed by an appreciating shekel, which reached its highest value in more than two decades.

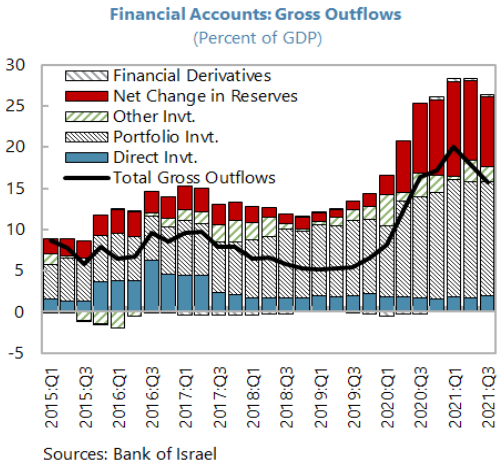
6. **Assessment.** There is an extremely large divergence in the estimates from EBA models. The REER-index and REER-level models point to substantial overvaluation of 12.9 and 30.5 percent, respectively, consistent with the continuing appreciation of the REER.[3] However, the REER gap implied by the CA model suggests an undervaluation of 8 percent. Overall, IMF staff assess the REER gap to be in the range of –8 to 30.5 percent, with a midpoint of 11.25 percent.

Capital Flows

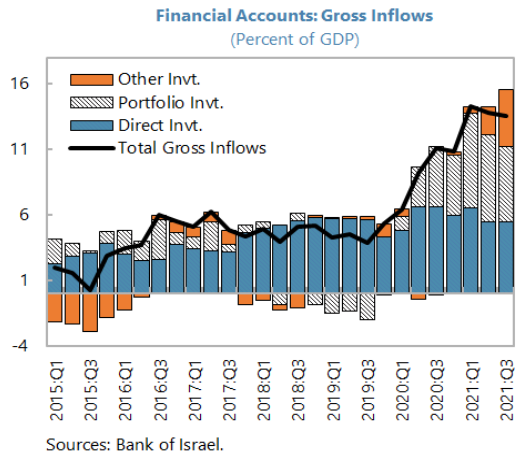
7. **Background.** Non-residents remained net buyers of Israeli assets through the COVID-19 crisis. Gross inflows increased in the first three quarters of 2021, with steady FDI and a rebound into portfolio securities, mainly in the first quarter. Residents continued to accumulate portfolio and reserve assets abroad.

[3] The REER-level model is estimated without Israel in the sample and apply the coefficients for Israel data. This makes it difficult to assess the goodness of fit on Israeli data and weakens the robustness of the results.

Capital Flows



Sources: Bank of Israel



Sources: Bank of Israel.

8. **Assessment.** Risks are limited. Israel's high-tech sector remained attractive for foreign direct investors even during the pandemic. Capital outflow risks are low due to low external indebtedness of the private sector, a banking system with limited reliance on non-core funding from abroad, and long maturity of external government debt.

FX Intervention and International Reserves

9. **Background.** Gross official reserve assets reached USD 213 billion in December 2021 (from 173.7 billion at end-2020). This corresponds to 45.6 percent of GDP. The increase was driven by the BoI's purchases which reached USD 34.8 billion during the year, of which 30bn were pre-announced at the beginning of the year. Predetermined net short-term drains on reserves are low, at USD 6.3 billion; domestic banks' short-term external liabilities are low.

10. **Assessment.** Israel's level of international reserves is large and comfortably exceeds standard benchmarks for reserve adequacy. Large international reserves, and other buffers, are justified in Israel in view of the geopolitical risks that the country faces. At the onset of the pandemic, the BoI's intervention helped prevent substantial undershooting of the inflation target band from de-anchoring inflation expectations at the policy relevant horizon and supported the package of monetary easing measures. With inflation well into the target band, foreign exchange intervention should cease to serve as a tool to manage inflation expectations; its use should now be limited to preventing disorderly market conditions.

Annex III. Risk Assessment Matrix[1]

Risks	Likelihood	Impact	Policy Response
Global resurgence of the Covid-19 pandemic. Local outbreaks lead to a global resurgence of the pandemic (possibly due to vaccine-resistant variants), which requires costly containment efforts.	**Medium:** Despite the high vaccination rate, a virulent variant leads to new lockdowns	**Medium:** While the economy has proven resilient overall, the impact on high contact service sectors and low-skill workers is significant.	Keep monetary policy accommodative; reintroduce support measures, targeting the most vulnerable sectors.
Disorderly transformations. Covid-19 triggers structural transformations, but the reallocation of resources is impeded by labor market rigidities, debt overhangs, and inadequate bankruptcy resolution frameworks.	**Medium:** A faster shift towards high-tech sector exacerbates the skill mismatch and the shekel appreciation pressures.	**Medium:** Reduced opportunities for low-skill workers, while high tech firms face hiring difficulties. Domestic wage pressures and shekel appreciation lead to external rebalancing.	Scope to use ALMPs, particularly training; address long-term education reforms.
De-anchoring of inflation expectations in the U.S. leads to rising core yields and risk premia. A fast recovery in demand combined with Covid-19-related supply constraints leads to sustained above-target inflation and de-anchoring of expectations; leading to a tightening of financial conditions and higher risk premia.	**Medium.** Higher interest rates in the U.S. results in capital outflows from Israel, a stock market fall and tighter financial conditions.	**Low:** public debt has long duration and bank funding is largely domestic. A decline in high-tech IPOs may slow growth in the sector and reduce fiscal revenues. Outflows from a strong external position are also likely.	Keep monitoring financial conditions. FXI if outflows result in disorderly market conditions
Widespread social discontent and political instability. Social tensions erupt as a pandemic resurgence and inadequate policy response exacerbates inequalities and leads to political polarization, weakening policy-making and confidence.	**Medium.** Exacerbated inequalities lead to social tensions and weaken the government coalition.	**High.** Damage to confidence could exacerbate precautionary behavior and slow down the recovery, increasing poverty and inequality.	Provide targeted support to vulnerable groups, including through ALMPs.
Intensified geopolitical tensions and security risks. Cause socio-economic and political disruption.	**High.** Adverse developments could damage confidence and demand	**High.** The recovery could be derailed, while higher defense spending would further limit fiscal space to address long term challenges.	Allow temporary deviations of defense spending. Rebuild structural and contingent buffers for geopolitical risks.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low is meant to indicate a probability below 10 percent," "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent).

Annex IV. Public DSA

With a strong recovery from the pandemic, fiscal support was withdrawn faster than envisaged in the last Article IV. As a result, the increase in government debt and gross financing needs was more modest, mitigating vulnerabilities to potential shocks. In the medium term, spending restraint is expected to improve the primary balance and place debt on a downward path. Furthermore, a tax reform could rebuild fiscal buffers faster, allowing a return to pre-crisis debt ratios in about 10 years.

1. Under staff's baseline scenario, the government debt to GDP ratio is projected to continue declining after peaking at 72 percent of GDP in 2020. Government debt declined in 2021 due to buoyant revenues and the withdrawal of fiscal support amidst rapid economic recovery. Going forward, debt is expected to decline gradually as economic growth remains strong, and spending is contained. Nonetheless, debt to GDP will remain well above pre-crisis levels. Gross financing needs decline sharply in 2021 and are expected to remain broadly stable in the medium term.

- Real GDP growth is projected to decline towards 3½ percent—in line with potential—as the output gap has largely closed, and recent revisions in the historic national accounts suggest a slightly higher productivity growth.
- CPI Inflation is projected to remain close to the mid-point of the central bank target range.
- About 94 percent of the increase in the primary deficit was rolled back in 2021, due to the withdrawal of fiscal support measures and strong one-off tax revenues. The general government primary deficit is projected to fall below pre-crisis levels in 2022, with further declines in the medium term as a result of spending restraint.
- The effective interest rate is projected to decline, reflecting a smaller share of private placements with pension funds.[1]

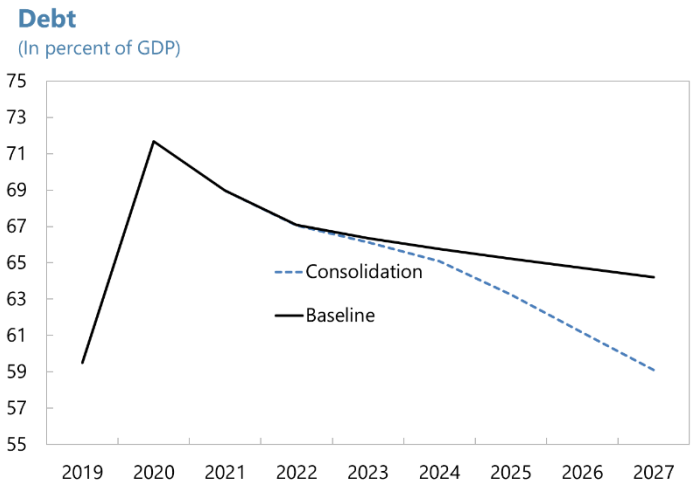
2. Financing and contingent liability risks are low and well-managed.

- Risks related to short-term, foreign-currency, and foreign-held debt remain low. The average term to maturity has increased further, reaching 9.2 years at 2021Q3. Foreign currency-denominated debt are at about 11 percent of GDP. Government debt creditors are mostly domestic institutional investors.
- Risks associated with pandemic-related government guaranteed programs are also low and amount to about 0.4 percent of GDP.

[1] The currently high effective interest rate reflects a long-standing arrangement between the government and the pension funds, providing them non-tradable bonds—with a return of 4.8 percent in real terms—equivalent to 30 percent of their asset portfolio. As of 2023, the government will not issue such bonds, replacing them with a guarantee ensuring a 5.1 percent real return (over 5 years) on 30 percent of the pension funds' portfolios. This will gradually reduce the cost of debt but will generate a contingent liability, for which the government plans to create a reserve.

3. A range of common stress tests indicate that risks to debt sustainability are manageable. These shocks would not increase debt above 74 percent of GDP. Under most scenarios, debt would still be on a downward trajectory after the temporary shocks dissipate, with debt declining at a similar pace as in the baseline. Only the combined macro-fiscal shock would put more stress on debt sustainability. A consolidation scenario illustrates how buffers could be rebuilt at a faster pace than envisaged in the baseline.

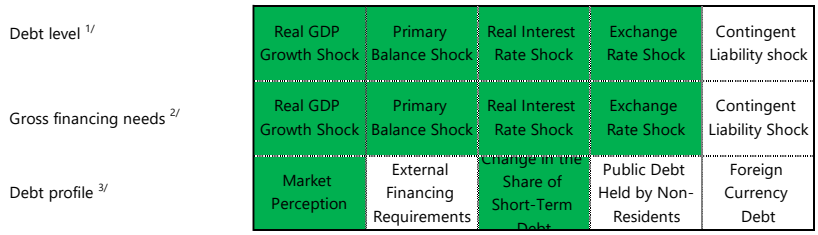
- **Growth shock**. Lower real GDP (by one standard deviation for two years starting in 2022) would increase debt to about 74 percent, but debt will decline after the shock dissipates. Gross financing needs would increase by about 1½ percentage points of GDP but would decline to around 10 percent of GDP.
- **Interest rate shock**. A geopolitical shock or tighter global financing conditions could push up borrowing costs by 350 basis points, given the current negative real rates. Debt would be increasing but would remain below 67 percent of GDP by 2027, while pushing gross financing needs up by about 1 percent of GDP.
- **Combined macro-fiscal shock**. A shock that combines exchange rate depreciation, an expansion of the primary deficit, an increase in interest rates, and a decline in real GDP, would raise debt to around 75 percent of GDP by 2025—and with a slightly increasing trend. Gross financing needs would peak below 12 percent of GDP in 2024 but decline afterwards.
- **Consolidation scenario.** Broadly in line with the authorities' medium-term fiscal objectives, this scenario illustrates the impact of an additional fiscal adjustment of 1½ percent spread over 2023-25, which would bring the primary fiscal position to a surplus of about 0.9 percent of GDP by 2025. Debt would decline to about 59 percent—in line with pre-crisis levels—by 2027 (compared to 64 percent in the baseline).



Sources: CBS, MoF and staff projections

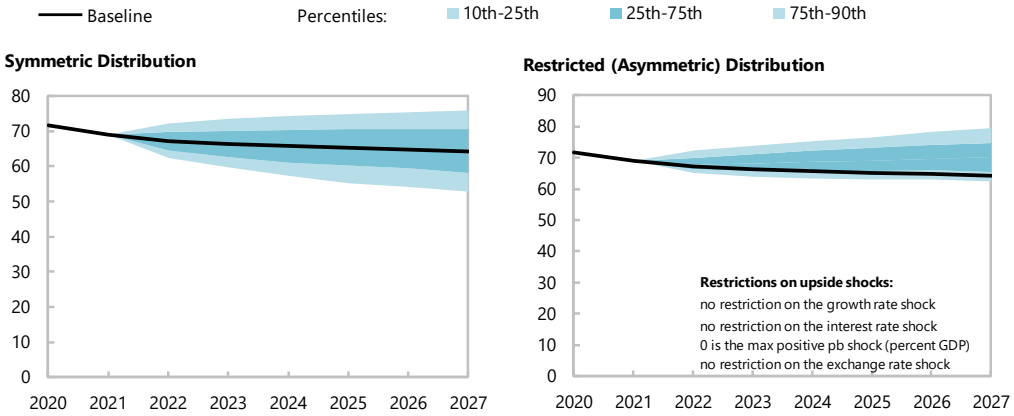
Annex IV. Figure 1. Israel: Public DSA Risk Assessment

Heat Map



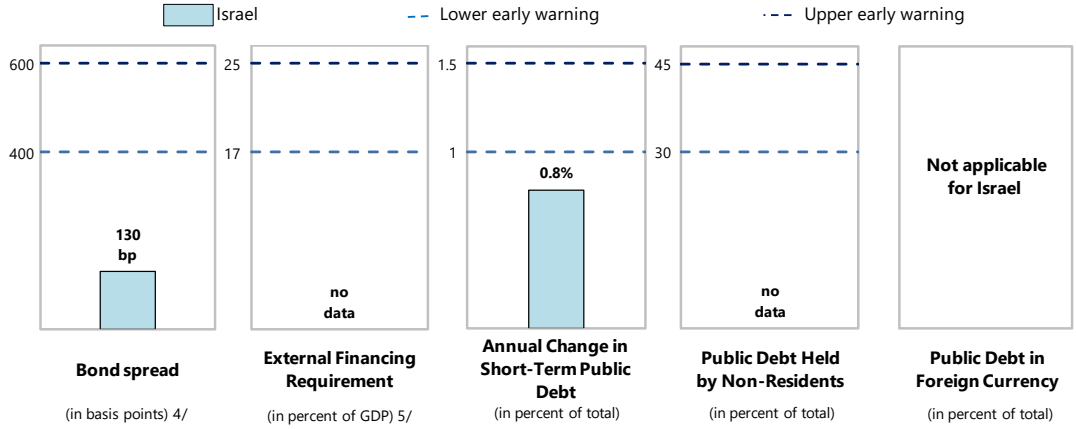
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2021)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 85% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 20% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over German bonds, an average over the last 3 months, 11-Nov-21 through 09-Feb-22.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Annex IV. Figure 2. Israel: Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

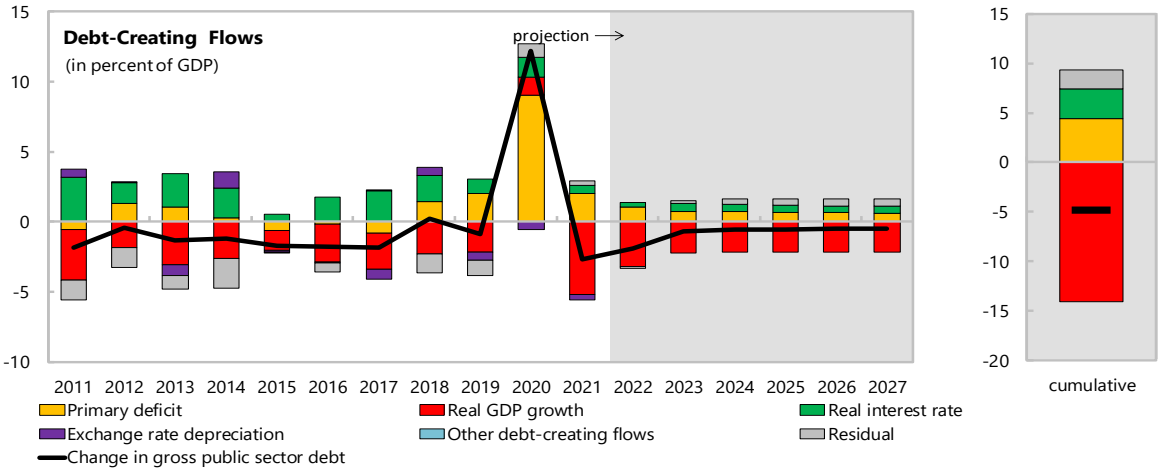
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2011-2019 [2/]	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	63.9	71.7	69.0	67.1	66.3	65.8	65.2	64.7	64.2
Public gross financing needs	9.4	18.0	10.0	8.9	9.2	8.5	8.6	9.1	8.9
Net public debt									
Real GDP growth (in percent)	4.0	-2.2	8.1	5.0	3.6	3.5	3.5	3.5	3.5
Inflation (GDP deflator, in percent)	1.4	1.0	2.6	3.1	2.5	2.3	2.2	2.1	2.1
Nominal GDP growth (in percent)	5.5	-1.2	10.9	8.3	6.1	5.9	5.7	5.7	5.7
Effective interest rate (in percent) [4/]	4.4	3.3	3.8	3.8	3.5	3.3	3.1	3.0	3.1

As of February 09, 2022		
Sovereign Spreads		
EMBIG (bp) 3/	147	
5Y CDS (bp)	57	
Ratings	Foreign	Local
Moody's	A1	A1
S&Ps	AA-	AA-
Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	-1.2	12.2	-2.7	-1.9	-0.7	-0.6	-0.5	-0.5	-0.5	-4.8	-1.6
Identified debt-creating flows	-0.2	11.2	-3.0	-1.8	-0.9	-0.9	-1.0	-1.0	-1.0	-6.7	
Primary deficit	0.4	9.0	2.0	1.0	0.7	0.7	0.6	0.6	0.6	4.4	
Primary (noninterest) revenue and gr	35.9	34.3	36.9	34.9	34.8	34.6	34.6	34.6	34.6	208.1	
Primary (noninterest) expenditure	36.4	43.4	38.9	35.9	35.5	35.3	35.3	35.3	35.2	212.5	
Automatic debt dynamics [5/]	-0.7	2.2	-5.0	-2.8	-1.7	-1.7	-1.6	-1.7	-1.6	-11.1	
Interest rate/growth differential [6/]	-0.6	2.7	-4.6	-2.8	-1.7	-1.7	-1.6	-1.7	-1.6	-11.1	
Of which: real interest rate	1.8	1.4	0.6	0.3	0.6	0.5	0.6	0.5	0.5	3.0	
Of which: real GDP growth	-2.5	1.3	-5.2	-3.2	-2.3	-2.2	-2.2	-2.2	-2.1	-14.1	
Exchange rate depreciation [7/]	0.0	-0.5	-0.4	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0 (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Domestic Arrears	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	-1.0	1.0	0.3	-0.1	0.2	0.4	0.4	0.5	0.5	1.9	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

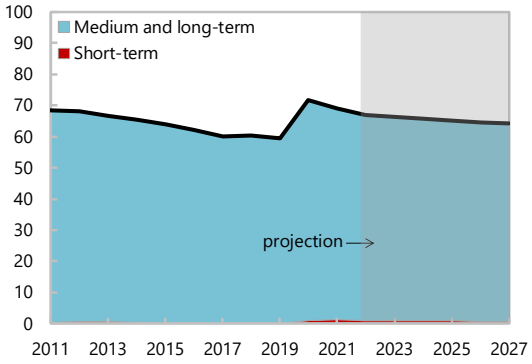
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Annex IV. Figure 3. Israel: Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

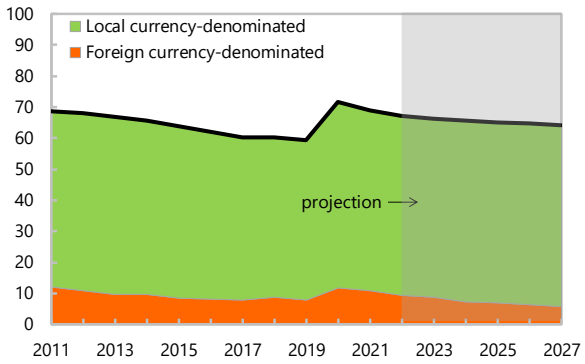
By Maturity

(in percent of GDP)

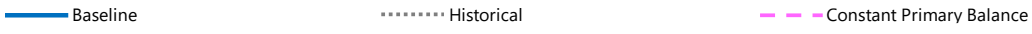


By Currency

(in percent of GDP)

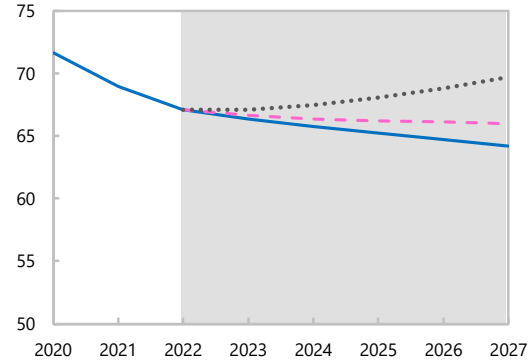


Alternative Scenarios



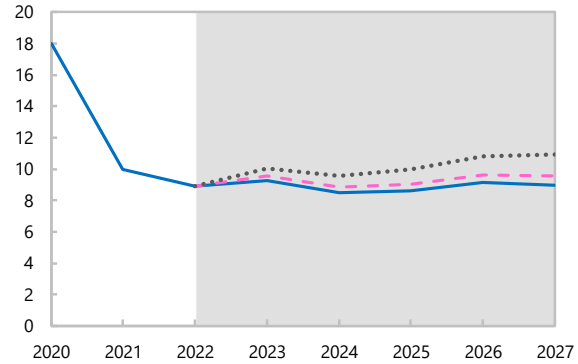
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

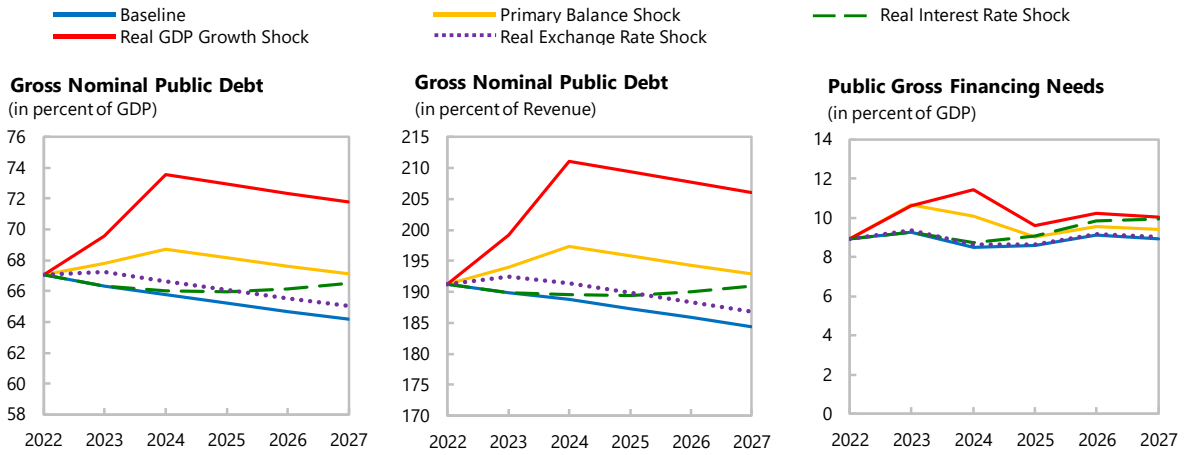
Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	5.0	3.6	3.5	3.5	3.5	3.5
Inflation	3.1	2.5	2.3	2.2	2.1	2.1
Primary Balance	-1.0	-0.7	-0.7	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.3	3.1	3.0	3.1
Constant Primary Balance Scenario						
Real GDP growth	5.0	3.6	3.5	3.5	3.5	3.5
Inflation	3.1	2.5	2.3	2.2	2.1	2.1
Primary Balance	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Effective interest rate	3.8	3.5	3.3	3.1	3.0	3.1

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	5.0	3.7	3.7	3.7	3.7	3.7
Inflation	3.1	2.5	2.3	2.2	2.1	2.1
Primary Balance	-1.0	-1.6	-1.6	-1.6	-1.6	-1.6
Effective interest rate	3.8	3.5	3.5	3.6	3.6	3.9

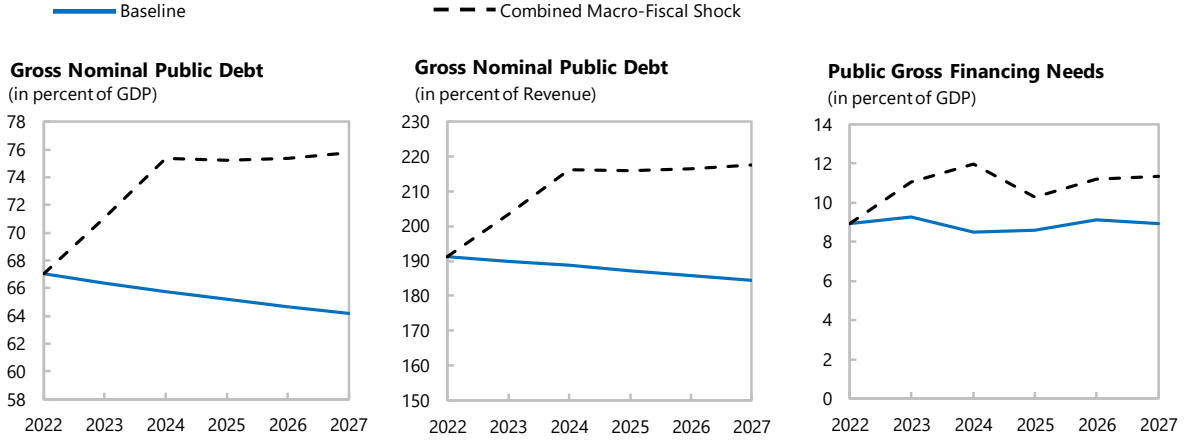
Source: IMF staff.

Annex IV. Figure 4. Israel: Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

Primary Balance Shock	2022	2023	2024	2025	2026	2027
Real GDP growth	5.0	3.6	3.5	3.5	3.5	3.5
Inflation	3.1	2.5	2.3	2.2	2.1	2.1
Primary balance	-1.0	-2.2	-2.1	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.3	3.2	3.1	3.1
Real Interest Rate Shock						
Real GDP growth	5.0	3.6	3.5	3.5	3.5	3.5
Inflation	3.1	2.5	2.3	2.2	2.1	2.1
Primary balance	-1.0	-0.7	-0.7	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.7	3.9	4.1	4.4
Combined Shock						
Real GDP growth	5.0	1.0	0.9	3.5	3.5	3.5
Inflation	3.1	1.8	1.7	2.2	2.1	2.1
Primary balance	-1.0	-2.2	-3.0	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.7	3.9	4.1	4.4

Real GDP Growth Shock	2022	2023	2024	2025	2026	2027
Real GDP growth	5.0	1.0	0.9	3.5	3.5	3.5
Inflation	3.1	1.8	1.7	2.2	2.1	2.1
Primary balance	-1.0	-1.9	-3.0	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.3	3.2	3.1	3.1
Real Exchange Rate Shock						
Real GDP growth	5.0	3.6	3.5	3.5	3.5	3.5
Inflation	3.1	2.9	2.3	2.2	2.1	2.1
Primary balance	-1.0	-0.7	-0.7	-0.6	-0.6	-0.6
Effective interest rate	3.8	3.5	3.3	3.1	3.0	3.0

Source: IMF staff.

Annex V. Israel's Fiscal Framework

a) Israel's experience with fiscal rules has been mixed…

1. The fiscal framework has three components: (i) a multiannual target for the central government deficit, (ii) an expenditure rule, and (iii) a rule on expenditure commitments. The framework requires the adoption of a two-year budget. Along with the budget, to ensure policy continuity, parliament approves a 3-year deficit target, which can be revised during subsequent budgets. The real expenditure growth limit has been set at a 10-year historical average of real GDP growth, adjusted by the ratio between 60 and the actual central government debt in percent of GDP. The commitment rule introduced in 2016 limits the government's ability to introduce spending commitments without identifying new funding.

2. The framework has proven to be very rigid:

- The expenditure rule has demanded significant medium-term expenditure restraint. Since measures are not identified ahead of time when the medium-term plan is developed, they have to be identified quickly at the time of budget preparation. This leads to suboptimal decisions to cut investment or overrun the previously planned expenditure ceilings. In the past, the expenditure limit was also frequently circumvented by presenting expenditures as temporary. This has undermined the achievement of the deficit targets, which have been reset frequently (see IMF Country Report No 17/75).

- The rules provide little flexibility over the cycle due to the absence of structural and cyclical adjustments, and the lack of an escape clause constrains the response to large, unexpected shocks. The two-year budget requirement makes planning very challenging during periods of high uncertainty.

3. There may be a benefit to establishing a fiscal council. The BoI provides independent macro-fiscal projections and fiscal advice to the government. The BoI's capacity has proven very valuable during the pandemic in designing fiscal support measures. The State Comptroller conducts ex-post assessments of fiscal policies and audited financial statements. However, no single independent body conducts ex-ante and ex-post assessment of the realism and implementation of the fiscal targets vis-à-vis the fiscal rules.

b) *… and the pandemic exposed limitations in the fiscal framework.*

4. In the absence of a 2020 budget, an extra-budgetary allocation for COVID-related fiscal support allowed a transparent and prompt fiscal response to the pandemic. Parliament had not approved a budget since March 2018 when it adopted the 2019 budget. When the pandemic started in 2020, the government provided COVID-related support through an extrabudgetary fund (EBF). While this was fast, effective, and transparent, a comprehensive budgetary process would have—in principle—allowed for larger scope to reallocate resources from lower priority areas to fight the pandemic. The EBF was managed by the Ministry of Finance and

used only funds allocated by parliament. It bypassed the budgetary process at a time when political uncertainty had stalled it, and a continuation budget constrained an adequate fiscal response to the pandemic. The EBF spending was not subject to the fiscal rules, effectively working as an escape clause. At end-2021, about 1½ percent of GDP of support measures remained unspent, and additional 0.7 percent of GDP was approved by parliament in January 2022.

5. Almost two years after the start of the pandemic, the need to maintain the COVID-19 EBF has diminished. The exceptional circumstances of the pandemic and the rigidity of the fiscal framework justified the use of the EBF, but with the economy recovering rapidly, a normalization of budgetary practices, including contingency planning, is warranted. This will avoid fragmenting the budgetary process and institutionalizing a practice that should be reserved only for exceptional circumstances. The authorities should leverage on their good transparency practices and the experience with the COVID-related EBF to ensure that future emergency spending and other impacts of the pandemic on the fiscal accounts (e.g., contingent liabilities and risks) are well documented and disclosed.[1] However, the need to add an escape clause in case another large shock materializes has been made more evident.

[1] The authorities publish monthly budget execution reports (link), the execution of pandemic-related measures (link), public procurement tenders (link), the State Comptroller's report assessing Covid-related policy responses (link), and the government's audited financial statements (link).

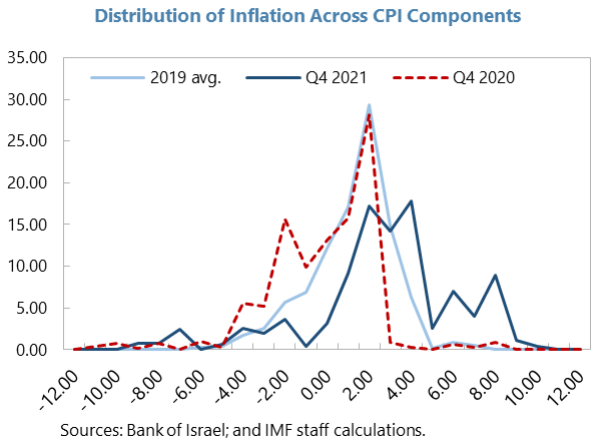
Annex VI. Inflation and the Monetary Policy Stance[1]

Inflation has risen fast and has marginally breached the upper bound of the BoI's target range. The output gap is positive, and the labor market has tightened. Inflation expectations are still anchored but rising, too, with expectations at the nearer policy relevant horizon having a large adaptive component. A weak relationship between the real interest rate and future inflation points to the importance of having a good measure of the neutral rate of interest to correctly assess the monetary policy stance. While staff's estimates suggest that the neutral rate may be very low, the current policy stance is highly expansionary. Conditions are in place for the BoI to commence a data-driven tightining cycle.

Inflation, Underlying Pressures, and Inflation Expectations

1. Inflation in Israel has surged. After nearly one year of falling prices, headline inflation turned positive in March 2021, crossed firmly into the BoI's target range (1–3 percent), and reached 3.1 percent in January 2022. The surge was triggered by global factors and base effects. Supply bottlenecks and a rebound in the price of energy and other tradable goods, which had fallen in 2020, were initially the main drivers of the rebound in inflation.

2. Strong domestic demand has amplified the surge. Since May 2021, higher inflation has reflected rising prices across most main categories of Israel's CPI, with non-tradable inflation rising steeply and fast. Housing is an important factor. Housing prices have continued to rise almost uninterruptedly through the pandemic and have been a pull factor on real estate service prices and house maintenance and renovation costs, all of which have shown an impact on inflation. Furthermore, the confluence of supply disruptions and spur to domestic demand has driven an increasingly broad-based rise in prices, with fewer components of the CPI showing falling prices. The distribution of price changes across all components of the CPI has moved to the right, showing relatively high year-on-year inflation for an increasing set of components.



Sources: Bank of Israel; and IMF staff calculations.

[1] Prepared by Shakill Hassan.

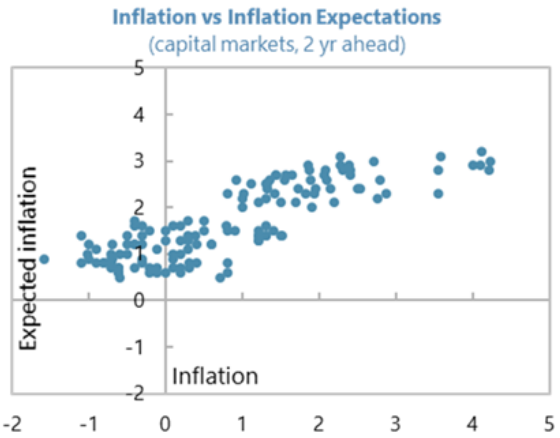
Annex V. Figure 1. Israel: Base Effects on Inflation

Sources: Haver Analytics.

3. And underlying inflationary pressures have become more evident. At 3.7 percent in January 2022, the unemployment rate has fallen to the NAIRU, which staff also estimate at 3.7 percent. The ratio of vacancies to unemployed and capacity utilization are at their highest in nearly a decade, and the output gap moved into positive territory in the last quarter of 2021 (Figure 3). Nonetheless, there are mitigating factors. The highest wage increases are in the—export-oriented—high-tech sectors, while the recently signed minimum wage agreement prescribes relatively contained wage growth in the next 4 years (cumulative increase of 13.5 percent in

2022–25).[2] The long period of shekel appreciation, which has increased steadily in value since end-2018—appreciating by approximately 3 percent against the US dollar year-on-year in January 2022, with an estimated average passthrough to inflation of 25 percent in six months—also exerts downward pressure on inflation.

4. Inflation expectations have also risen, with a significant adaptive element. Inflation expectations one-to-two years ahead (the policy relevant horizon) reacted quickly to increases in observed inflation—consistent with evidence of significant responsiveness of expectations to past inflation.[3] Longer horizon expectations are also catching up quickly. Should global factors turn out to be more persistent, rising expectations could become embedded in actual prices, even if underlying pressures cool down. And as inflation and inflation expectations rise, the time between price adjustments may shorten.[4]



Sources: Haver and IMF staff calculation

Monetary Policy Tools During the Pandemic

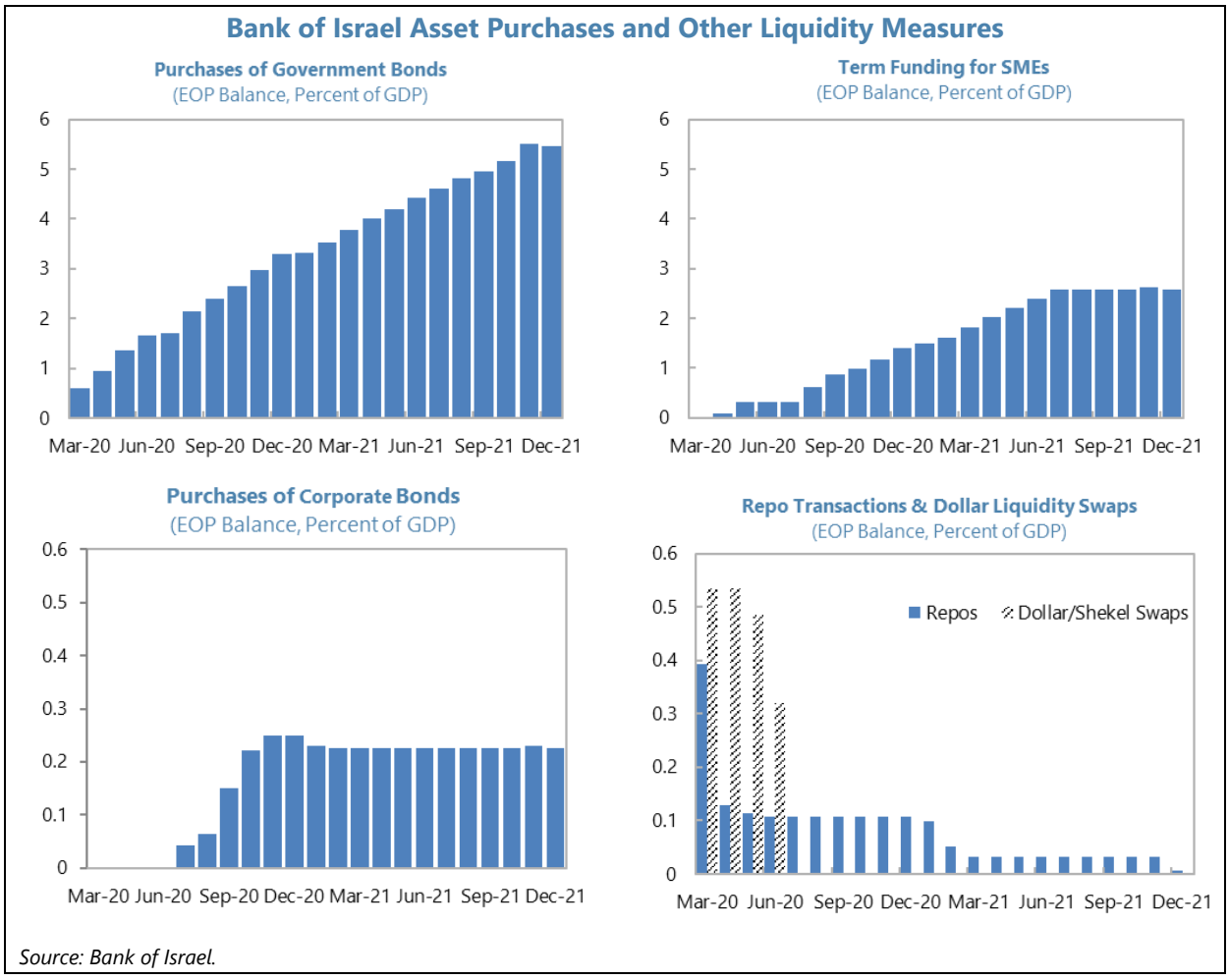
5. The BoI's main policy tool is the policy (discount) rate. It has never been lower than 0.1, the nadir it first reached in early 2015 when inflation was substantially below the target band. The BoI regards 0.1 percent as the effective lower bound.

6. During the pandemic, the BoI boosted its monetary policy arsenal with a batch of liquidity support measures. It purchased government bonds, across the term structure but predominantly bonds with maturities longer than 5 years; bought (non-bank) corporate bonds; provided medium-term loans for banks to extend credit to small companies; provided shekel liquidity through repo operations; expanded the set of acceptable collateral for repos to include corporate bonds; and provided dollar liquidity through currency swaps (Annex 1 Table 2). These quantitative measures targeted specific liquidity constrained segments of the market. The two key tools were purchases of government bonds, and provision of long-term loans to on-lend to SMEs at negative interest rates. All asset purchases ended at end-December 2021.

[2] Israel's decentralized collective bargaining, which takes place at the company or sectoral level, is a further mitigating factor. Trade union density is at 25 percent and collective bargaining coverage is at 26 percent (see OECD, 2021, Israel: Main Indicators and Characteristics of Collective Bargaining).

[3] See Ribon, S. 2021. Inflation and Monetary Policy. In Ben-Bassat, A., R. Gronau and A. Zussman (eds), The Israeli Economy, 1995-2017. Cambridge, Cambridge Univ Press; Coibion, O., Y. Gorodnichenko, and R. Kamdar. 2018. "The Formation of Expectations, Inflation, and the Phillips Curve." Journal of Economic Literature, 56 (4): 1447–91; and Mankiw, G., R. Reis, and J. Wolfers. 2004. Disagreement About Inflation Expectations. NBER Macro Annual. Cambridge, Mass., MIT Press.

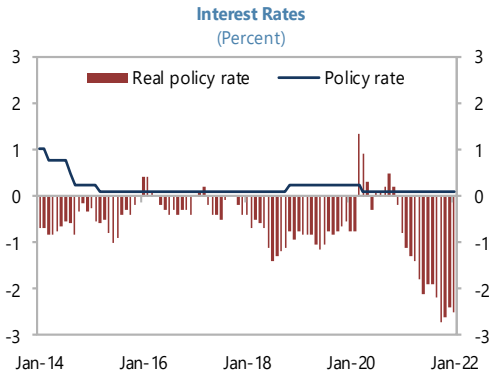
[4] Ribon, S., and D. Sayag. 2013. Price Setting Behavior in Israel: An Empirical Analysis Using Microdata. Discussion Paper, 2013–07. Jerusalem, Bank of Israel.



Source: Bank of Israel.

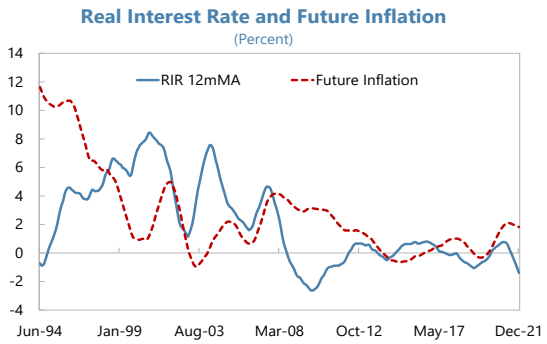
The Neutral Interest Rate and Monetary Policy Stance

7. The real policy rate has dropped substantially since the onset of the pandemic. The policy rate has been kept at 0.1 percent since April 2020, when expected inflation one year ahead was -0.8 percent. Since then, expected inflation one year ahead has increased by 3.7 percentage points, pushing the ex-ante real interest rate (RIR) to -2.8 percent (January 2022), while actual inflation has now risen by over 3 percentage points. This represents significant further loosening of the monetary policy stance, relative to the stance at the onset of the pandemic, especially in view of the robust recovery of the economy in 2021.



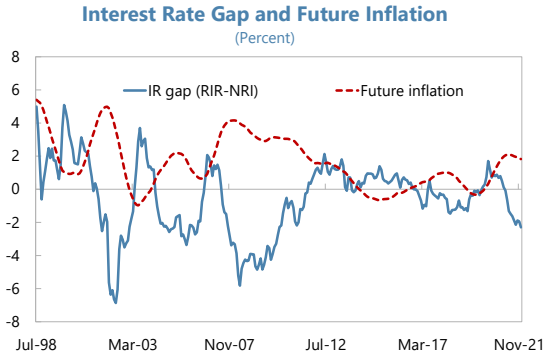
Sources: Bank of Israel; IMF staff calculations
Real policy rate is the nominal policy rate minus expected inflation one year ahead.

8. The absolute value of the real interest rate is however a poor measure of the monetary policy stance. It should not be used as an indicator of future pressures on demand and inflation. In fact, both the RIR and the inflation rate have declined significantly over the last two decades. The correlation between the real policy rate and future inflation (either eighteen months or four-to-eight quarters ahead) is positive, equal to approximately 0.2.



Sources: Haver.
Notes: Real interest rate is the difference between the policy rate and expected infation one year ahead. Future inflation is average inflation 18 months ahead.

9. The interest rate gap, an indicator of the policy stance, is negative and falling. The short-term neutral rate is the rate of interest consistent with a closed output gap and stable inflation over the policy relevant horizon for the central bank. We use the rolling five-year mean of the real policy rate as a first approximation to the (short-term) neutral real rate, and construct an indicator of the monetary policy stance as the difference between the real policy rate and this proxy.[5] From a practical viewpoint, a key property of the proxy for the (unobservable) neutral rate is for it to be such that, when the policy rate is above (respectively, below) neutral, the stance is exerting downward (respectively, upward) pressure on aggregate demand and future inflation. Despite its simplicity, the indicator behaves reasonably well under this criterion: the correlation between the interest rate gap and average inflation eighteen months ahead is -0.43.



Sources: Haver.
Notes: Interest rate gap is distance between real policy rate and neutral real rate of interest. Future inflation is average inflation 18 months ahead.

10. The neutral rate implied by a Taylor-type rule is very low. As an alternative, a Taylor-type rule gives us the neutral level for the rate of interest implied by the current policy rate. We assume that rate setting by the BoI satisfies the Taylor principle. It responds to (sustained) deviations of expected inflation from the inflation target (the BoI's 2023 inflation forecast) by moving the interest rate more than one-to-one. Depending on the BoI's responsiveness to the output gap (for coefficients between zero and 0.5), this approach implies a neutral rate between -1.9 and -1.6, from the following specification:

$$i_t = r_t^* + E_t\pi_{t+1} + \eta E_t\left(\pi_{t+1} - \pi^*\right) + \theta E_t\left(y_{t+1} - y^*\right),$$

where *i* is the policy interest rate, r* is the neutral real interest rate, Eπ is the expected inflation rate, π* is the inflation target (mid-point), y is output growth, and y* is potential growth. The reaction function is one where the central bank changes the interest rate according to its forecast of the

[5] The applicability to Israel of standard models of the neutral rate of interest is limited due to a weak relationship between long-term or steady state growth and real interest rates. When inflation is relatively stable or the policy rate does not deviate persistently from neutral, a simple statistical measure may serve as a first approximation to the neutral rate.

inflation gap (relative to target) over the policy-relevant horizon, and the current or near-term output gap.

11. Asset pricing models give substantially higher estimates of the long-term equilibrium rate. We use a standard consumption-based asset pricing model for an estimate of the long-run equilibrium rate of interest. From the first-order condition for the standard intertemporal investment-consumption problem, assuming power utility and a log-normal stochastic discount factor (or aggregate consumption), the equilibrium risk-free rate is given by[6]:

$$r_t^* = -\log\delta + \gamma E_t \Delta c_{t+1} - \left(\gamma^2 \sigma_c^2\right)/2.$$

The equilibrium rate is determined by aggregate time preference (impatience), risk aversion, expected consumption growth, and uncertainty over future consumption. The first term is the preference for current rather than future consumption, with higher aggregate impatience leading to a higher equilibrium interest rate. The second term, which is the product of the coefficient of risk aversion and the expected future consumption, is the desire to borrow today if future consumption is expected to be high to smooth consumption over time. The third term, a factor of risk aversion and consumption variability, reflects demand for precautionary saving, or hedging against adverse consumption realizations in the future (consumption smoothing over states of the economy). The negative quadratic term captures this precautionary motive to save. Using estimates for the long-run rate of growth in per capita income in Argov and Tsur (2019), [7] the consumption model gives an equilibrium rate in the 1-3 percent range. Using an adjustment for habit persistence lowers the rate to a 0-2 percent range.

12. The current policy rate indicates a continued expansionary stance. The methods above indicate that the real policy interest rate, which is now around -3 percent, is substantially below neutral, stimulating aggregate demand and exerting upward pressure on inflation. The expiration of the BoI's liquidity support programs in December 2021 was thus appropriate. Reducing the degree of policy accommodation by raising interest rates, in combination with the effect of shekel appreciation, and the winding down of base effects should keep the rate of inflation within the target band in 2022.

13. Given high inflation uncertainty, a data driven approach remains appropriate. If inflation and inflation expectations continue to rise, or underlying pressures continue to strengthen, further policy tightening will be necessary. In this scenario, the BoI also has the option of winding down its portfolio of government bonds, undoing the effect of asset purchases on the yield curve and allowing the term structure of interest rates to reflect only market forces.

14. Flexibility in the sequencing of monetary policy tightening is advisable. Evidence on monetary policy transmission in Israel shows that the effect of the policy rate on aggregate demand

[6] Campbell, J. 2003. Consumption-Based Asset Pricing. In G. Constantinides, M. Harris, & R. Stulz, Handbook of the Economics of Finance, Volume 1B (pp. 803–887). Amsterdam: Elsevier.

[7] Argov, E., and S. Tsur. 2019. "A Long-Run Growth Model for Israel," Bank of Israel Working Papers 2019.04, Jerusalem, Bank of Israel.

is low and slow (Ribon, 2021). Complementing increases in the policy rate with a limited release of the effect of asset purchases on longer yields may strengthen the transmission mechanism.[8] It may also allow a more gradual increase in the policy rate. And a blend of long- and short-term rate hikes may be more effective in cooling the housing market. Such an approach would have to consider the effective functioning of bond markets, the maturity structure of BoI's corporate and government bond portfolios, the signaling impact of different monetary policy tools, the strength of the transmission mechanism, the impact on the yield curve, and any risks to BoI's policy credibility.

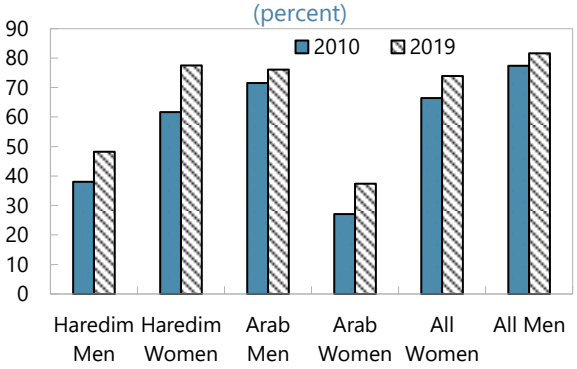
[8] Indeed, some studies point to the possibility that changes in long-term rates can have much stronger effects on activity than changes in short-term rates of equal magnitude. See Rudebusch, G. 2010. "The Fed's exit strategy for monetary policy." FRBSF Economic Letter, Federal Reserve Bank of San Francisco, Issue Jun 14.

Annex VII. Post-Covid Labor Market Reallocation: Policies for a Smooth Transition[1]

Pre-Pandemic Labor Market Trends

1. Significant labor market gains were achieved in the pre-COVID period, but challenges remain. Labor participation and employment rates increased significantly, driven by gains in female labor participation and rising employment rates among minority groups. Unemployment rates declined substantially to levels below their historical average and job vacancy rates steadily increased, particularly in the ICT, construction, and accommodation sectors. Employment rates of Haredi men and Arab women increased but remain significantly below rates for the rest of the population. Furthermore, there is still a significant education employment gap with employment rates for workers with tertiary education above 80 percent, compared to an employment rate of 50 percent among lower educated workers. While the gender employment gap has narrowed significantly, the gender wage gap, at 23 percent, remains one of the largest among OECD countries. This is largely explained by the low number of working hours of Arab and Haredi women, mainly due to their choice of education field and a lack of access to affordable quality childcare.

Employment rates by community and age
(percent)

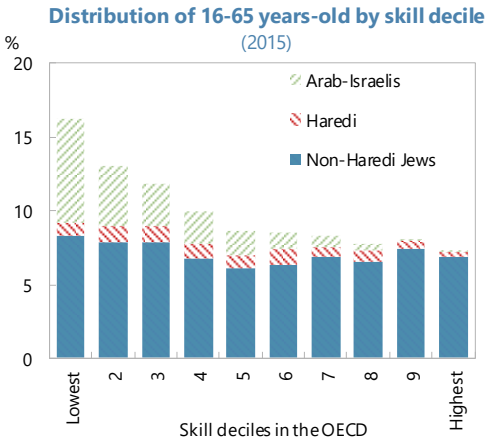


Source: OECD employment database, Israel Economic Survey 2020

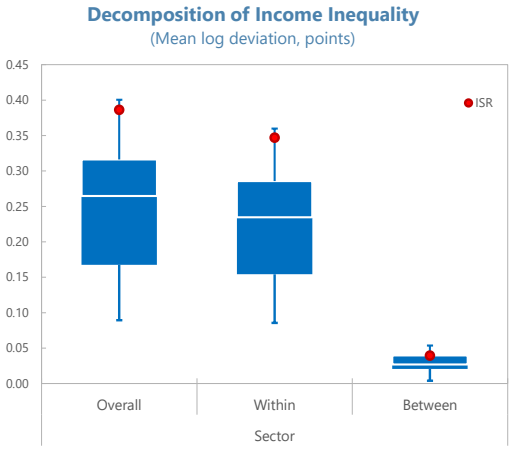
2. A wide dispersion of skills among Israeli workers has created a dual labor market and contributed to high income inequality. Skill variability is the highest among OECD countries, with a low share of high-skilled adults and a relatively large share of lower-skilled adults compared to other OECD countries. More than 40 percent of the Israeli labor force falls within the 3 lowest skill deciles, mostly concentrated in the Arab and Haredi communities. Skill requirement data across sectors in Israel reveal that, on average, workers in contact-intensive sectors, such as accommodation and food service, are at the lower end of the skill distribution. Skill gaps have contributed to significant income inequality among the labor force and largely explains the high prevalence of inequality within sectors. This has contributed to one of the highest shares of workers in relative poverty among OECD countries, with rates among lower-skilled Arab-Israelis and Haredim almost twice as high as for non-Haredi Israelis.[2]

[1] Prepared by Karina Garcia, with analytical contributions by Jing Zhou.

[2] OECD Economic Surveys Israel 2020, and IMF Country Report 18/112.



Source: OECD Survey of Adult Skills (PIAAC) Database



Sources: Luxembourg Income Study database, IMF staff calculations.

3. The duality in the labor market is rooted in the very fragmented education system which has hindered skill formation.[3] Socio economic gaps in education outcomes are relatively large in Israel and reflected in lower performance of Arab and Haredim students compared to their peers.[4] For Arab communities, this is largely attributed to disadvantaged socioeconomic conditions; for the Haredim boys the religious focus of their education stream often leads to poor student performance in core subjects. While enrollment rates are high, lack of participation in quality early childhood education among disadvantaged communities also plays a role in the future performance of students. Returns to attending quality early childhood education are particularly high in Israel compared to other OECD countries. [5]

4. Skill gaps have also hindered growth in high-tech sectors. Over the past decade, the share of workers in high-tech sectors has reached around 10 percent of the workforce. A further increase in this share is limited by a rising shortage of skilled high-tech workers (job vacancies in high skilled sectors is at an all-time high -Figure 4-). Mostly non-Haredi Jewish men are employed in the high-tech sectors, while the share of Arab Israelis and Haredim Jews has remained negligible, reflecting existing skill disparities.[6] Similarly, the share of women employed in high tech sectors is low, standing at 8 percent of total female workers by 2021, primarily non-Haredi Jews. A large disparity in digital penetration between low- and high-skilled individuals may have also contributed to skill shortages in this sector, as less than 60 percent of low-skilled workers have access to the internet.[7]

[3] IMF country report 18/112.

[4] OECD 2018 PISA database.

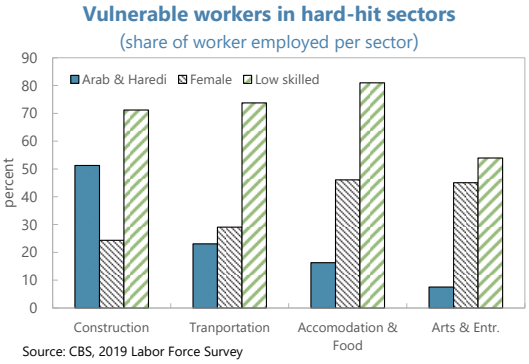
[5] OECD, Israel 2020 Economic Survey.

[6] Israel Labor Market: An Overview. Taub Center for Social Studies in Israel. 2018.

[7] IMF Country Report 2021/20.

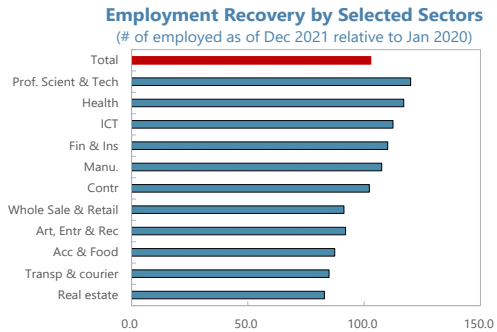
Impact of the Pandemic on the Labor Market

5. The COVID-19 crisis impacted sectors and demographic groups unevenly, reinforcing the underlying long-term trends. Contact-intensive sectors suffered disproportionately large number of job losses, while ICT and other high skilled sectors continued expanding given their faster adaptability to remote working and increased demand for their products. The nature of the crisis meant that already vulnerable workers –low skilled, women and disadvantaged communities—were highly impacted due to their high employment share in heavily hit sectors.



Source: CBS, 2019 Labor Force Survey

6. The labor market has rebounded fast but the recovery has not been felt across all sectors. Employment and labor force participation are already above pre-COVID levels (Figure 4). However, the recovery is led by high-skilled sectors, which have more than compensated for the slower recovery in most low-skilled sectors. The latter suggets that disadvantaged groups are still lagging behind in the recovery.



Source: CBS

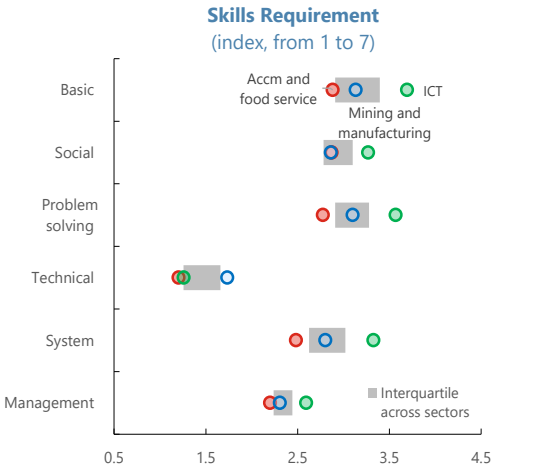
7. Job vacancies across sectors have surged. A sharp increase in vacancy rates of high-skilled sectors suggests that skill gaps and mismatches are becoming more challenging. At the same time, job vacancies also surged in some low-skilled sectors, which may follow from the particular nature of the COVID crisis, as workers may be reluctant to work in high contact sectors at current wages given health concerns, much as in other advanced economies.[8]

[8] Labor Market Tightness in Advanced Economies. IMF 2022, forthcoming.

Prospects for a Post-Pandemic Labor Reallocation

8. Firm-level analysis provides evidence of a persistent sectoral reallocation. Using Israeli firm-level earnings to project future GVA sectoral growth by sectors suggest that the COVID-19 shock to consumer services is likely to be persistent around the world, as company earnings in high-contact service sectors are expected to grow at a slower pace than those in high-tech companies. These estimates can be a good predictor of future sectoral growth as previous studies have found that sectoral earnings are closely correlated with GVA growth.[1] Staff projections indicates a divergence in the recovery across sectors,[2] with output of low-skill contact-intensive sectors—like trade and accommodation—likely to remain subdued over the next 5 years, while output of high-skilled services—like ICT—will continue expanding (¶ 33). Low-skill contact-intensive sectors are likely to lose about 1 percentage point of their employment share in the medium term, while high-skilled services are projected to possibly increase their employment share by about 0.4 percentage points.[3] This suggests that a sizable share of workers in the affected sectors would need to find employment in other activities in the expanding sectors.

9. Skill requirements in the expanding sectors are substantial. The ease with which labor reallocation occurs is closely linked to the skill and knowledge gaps between the shrinking and expanding sectors and differs across demographic groups. High-level ICT skills are becoming increasingly important as more occupations are linked to new technologies. The high knowledge and skill requirements of these sectors could be a challenge for the relatively low-skilled Israeli work force.



Sources: CBS, O*NET, IMF staff calculations.
Average of skill requirement based on Labor Force Survey 2019.

Policy Options for a Smooth Reallocation

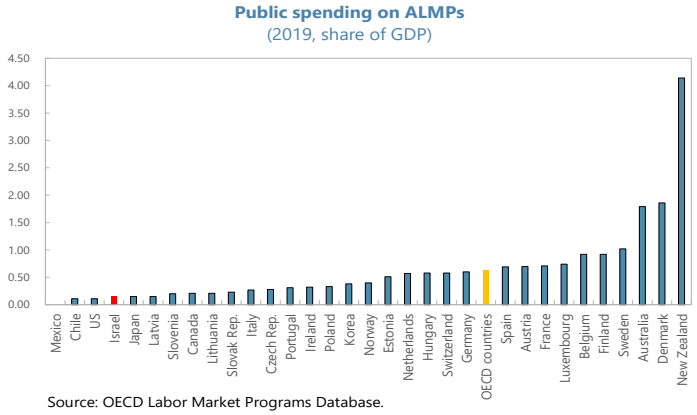
10. Addressing the long-standing labor market challenges requires a multiprong policy approach. Policies should support disadvantaged workers to retrain and upskill and gain better access to jobs, raise the quality of the education system to meet the demands of the labor market, and launch policies that ensure that future generations have the versatility to meet growing education and skill needs.

[1] See EUR REO October 2021, Online Annex 3.1.

[2] Projection of accommodation/food service sector growth uses restaurants and hotels spending and international tourism receipts projections from Fitch solutions. Projection of ICT real GVA growth uses software sales projections from Fitch Solutions.

[3] Based on country and sector-specific estimates of the relationship between output and employment of 29 European countries. Regional Economic Outlook, Europe, Ch. 3. IMF. October 2021.

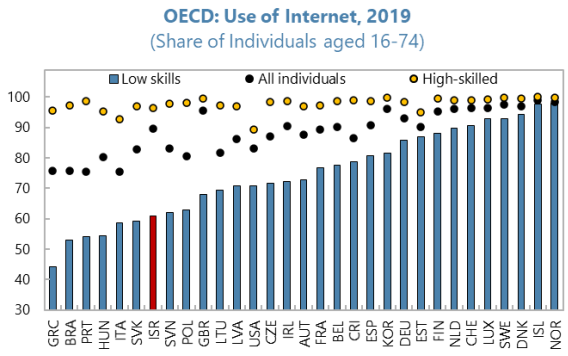
- **Strengthening active labor market policies**. Better funded vocational training and mentorship programs should offer a greater selection of programs targeted at disadvantaged adults who lack marketable skills (e.g., Haredi men). Encouraging the private sector to support additional training programs (e.g., apprenticeships) and providing hiring and training subsidies to companies could improve the quality and market relevance of training programs.



Source: OECD Labor Market Programs Database.

- **Reducing skill gaps.** A greater adaptation of education systems will be needed to help align student qualifications with increasingly digitalized-labor market needs. Ongoing efforts to attract more students to tech-related programs is a step in the right direction to enhancing digital skills. Further efforts to improve the quality of and access to education should aim at reducing the difference between the educational streams of Israeli minorities. This will require an improvement of the core curriculum of Haredi students, increasing the Hebrew courses of Arab students, and improving teacher quality in disadvantaged schools.

- **Increasing digital penetration.** Improving the access of low-skilled workers to online government services would support their training and labor reallocation needs, increase take-up of targeted labor and social programs, and could foster entrepreneurship among disadvantaged groups.[4]



Sources: OECD; IMF Staff calculations.

- **Improving access to childcare/early childhood education.** Access to quality childcare and early childhood learning has significant long-term benefits, as it improves future education and skill achievement among youth and fosters current labor force participation, especially among women. Access to publicly provided early childhood education should be significantly strengthened in disadvantaged regions, as Arab-Israeli and Haredi children tend to have much lower participation in quality early childhood programs than other ethnic groups.

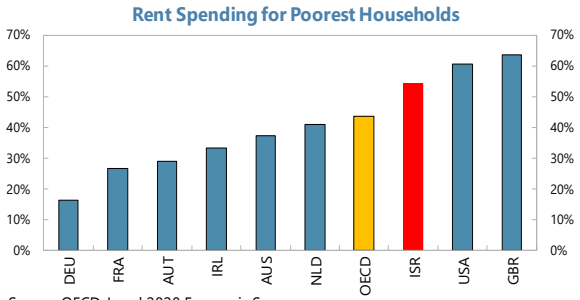
[4] IMF Country Report 2021/20.

Building public childcare centers and improving the hours and quality of existing ones would further promote female labor participation among Arab and Haredi women.

- **Improving the supply of affordable housing.** Promoting public housing closer to economic centers, targeted to disadvantaged groups (e.g., using the mixed neighborhood models of the UK and US) would allow low-income workers better proximity to available jobs. This would require addressing the existing severe housing supply shortages. The government's 2022–25 plan to increase the stock of available housing, which envisages additional 1.2 percent of GDP in spending, is a step in the right direction. It includes support for new schools, sewage, and other related infrastructure. However, strengthening municipal incentives to issue permits for residential housing also requires tax and land reforms, and potentially, a municipal reform. Less costly options to provide affordable housing farther away from economic centers carry trade-offs with the cost of better transport and digital infrastructure to ensure physical and digital accessibility to the available jobs.

Housing Affordability

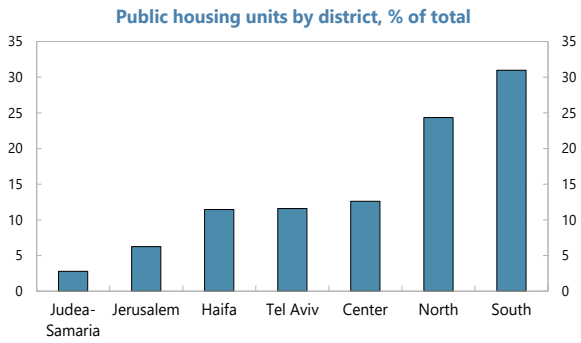
Rents are a high share of poor households' income….



Source: OECD, Israel 2020 Economic Survey

Share of population in the bottom quintile of the income distribution spending more than 40% ofdisposable income on rent, in percent, 2015 or latest year available.

…and a small share of affordable homes is near jobs….



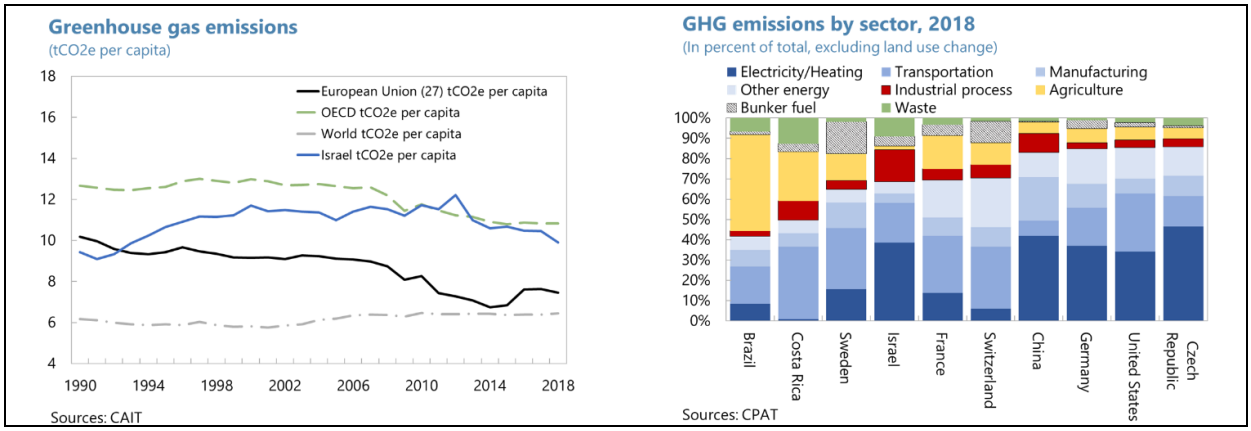
Source: OECD Economic Survey 2020; Ministry of Construction and Housing.

Annex VIII. Addressing the Challenge of Reducing Greenhouse Gas Emissions[1]

The Israeli authorities have joined the global effort to reduce greenhouse gas emissions, recently committing to ambitious goals. Their national action plan to address climate change includes important policy actions aiming to achieve the targets. We use a carbon pricing tool to assess some of the key proposals and to propose additional policy options that could bring outcomes closer to the authorities' goals. Our initial findings suggest that there is a need for further significant efforts to meet the targeted reduction in greenhouse gas emission.

Taking Stock of the Current Situation and Challenges

1. Israel's per capita greenhouse gas emissions levels are comparable to those of other advanced economies. Being a small country, Israel's total greenhouse gas emissions (GHG) stand around 79 MtCo2e emission—only 0.2 percent of total global emissions. However, in per capita terms, emission levels are similar to those in other advanced economies. Israel's emissions are mainly due to the generation of electricity, transportation, and industrial processes.



2. There has been significant progress in reducing GHG emissions per capita in the electricity sector. Israel has been successful in reducing GHG emissions per capita. In a decade, it achieved a decline of about 1½ tCo2e in per capita emissions. The decline—about 14 percent—has been similar to that in Europe and the United States. A more than 30-percent decline in GHG emissions of the electricity sector has been the driving force, as the country has transitioned generation out of coal and into natural gas.

[1] Prepared by Enrique Flores.

Emmissions, tCO2e per capita

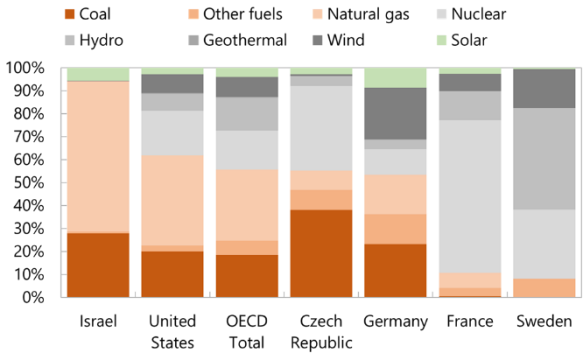
	2008			2018		
	Israel	EU27 (mean)	United States	Israel	EU27 (mean)	United States
Electricity	6.0	3.4	8.9	4.0	2.5	6.4
Transport	2.2	2.4	5.6	2.0	2.1	5.4
Industrial processes	1.4	0.6	0.7	1.7	0.4	0.7
Rest	2.0	2.8	5.2	2.2	2.9	5.2
TOTAL	**11.5**	**9.1**	**20.5**	**9.9**	**7.9**	**17.7**

Source: CAIT

3. However, Israel's transition to renewable sources of electricity generation will be challenging. Israel relies heavily on coal and natural gas. The recent shift from coal to natural gas has contributed to a large decline in GHG emissions and—as in OECD countries—there is still scope for further reductions by phasing out coal. However, Israel does not have favorable conditions for hydro-or wind-power generation. The shift to renewables has relied largely on investment in solar (photovoltaic) generation. Israel has not invested in nuclear energy generation, and the 2022-26 National Action Plan on Climate Change does not envisage such an option.[2]

4. Other sectors also face significant difficulties reducing GHG emissions. Progress to reduce emissions per capita in other sectors has been limited, just as has been the case in other countries. Israel has seen a booming demand for motor vehicles, fostered by its high population growth rate. Infrastructure has not been able to keep up, and congestion has increased. Moreover, excises on gasoline and diesel are high by international standards, and further increases could be politically difficult in the absence of investment to facilitate public transportation and promote zero emission vehicles. Industrial processes face competitions from some countries that have not adopted carbon taxes and could consider higher carbon pricing as unfair competition to their sector.

Electricity generation by source, 2019
(In percent of total)



Source: OECD

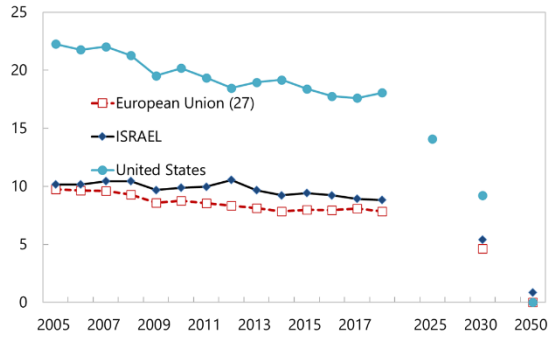
Emission Reduction Goals and the Authorities' Plans

5. Israel's commitment to address climate change has a long history. The country adopted the 1992 climate change convention and was part of the Kyoto Protocol and the Paris Agreement. Climate change has important implications for Israel: higher temperatures would increase heat waves, lower precipitation would increase the frequency of forest fires and reduce water supply,

[2] Nuclear energy is non-renewable but has lower GHG emissions than coal and natural gas, and in the past, Israel has considered investing in nuclear electricity generation. The pros and cons of pursuing such an option in the context of ensuring energy security continue to be explored (see forthcoming BoI 2021 Annual report, Chapter 7).

rising sea levels could damage the coastal infrastructure and ports, and more extreme weather events could worsen flooding and soil erosion. The authorities have thus set more ambitious goals in their 2021 National Determined Contribution (NDC) compared to goals set in 2015. Relative to 2015 emission levels, the new goals seek a 27 percent reduction by 2030, and a 85 percent reduction by 2050. Sectoral targets focus on electricity, industry and waste for reaching the 2030 overall target.[3]

6. A National Action Plan on Climate Change 2022–26 defines policies aiming to achieve the authorities' climate goals. The plan, unveiled ahead of the Glasgow climate change conference (COP26),includes taxes to increase the price of carbon emissions, shifting electricity generation towards renewables, and more than 100 measures to reduce emissions from electricity, transportation, industry, buildings and waste.



Sources: UN NDC registry, CBS, UN World Population prospects, and staff estimates.

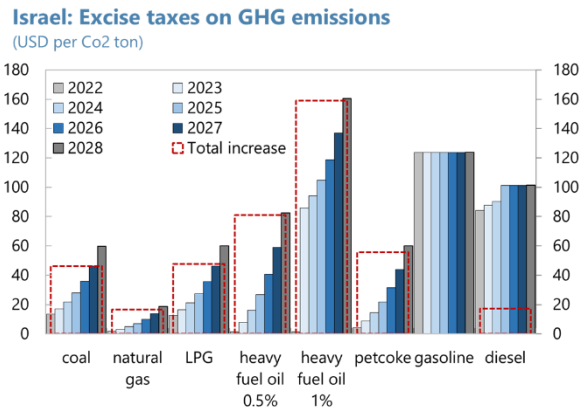
Israel's NDC

Emission levels and targets (in MtCo2e)

	Actual		Targets		Targeted decline (from 2015)	
	2015	2019	2030	2050	2030	2050
Total	**79**	**79**	**58**	**12**	-27%	-85%
Electricity	37.6	32.6	26.3	5.6	-30%	-83%
Transport	17.6	18.7	18.2	0.7	3%	-96%
Industry	12.0	12.4	8.4	5.34	-30%	-57%
Waste	5.5	5.6	2.9	0.4	-47%	-93%
Other	6.3	9.7	6.3	6.3	0%	-35%
Sum	**79**	**79**	**62.1**	**18.3**	-21%	-77%

Source: Gallo (forthcoming)

7. Fuel excise increases envisaged in the plan aim to increase taxation of carbon emissions. The plan is to gradually phase the increases 2023–28.[4] The current excises on fuels imply different taxation of their emissions.[5] Heavy fuel oil, petcoke and natural gas are taxed at very low rates, while gasoline is taxed at over US$120 per Co2 ton. The envisaged increases are thus also heterogenous based on the fuels' GHG emissions. The increases—and impact on prices—for coal and heavy fuel are relatively large, the increases on natural gas and diesel are more modest, while taxes on gasoline will not change.



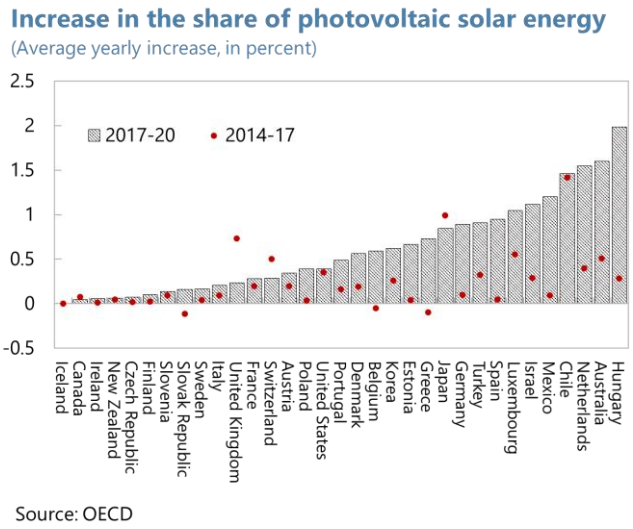
Sources: Ministry of Finance

[3] At COP26 in November, PM Bennet also announced that Israel will seek net zero emissions by 2050. So far, such commitment has not been reflected in an amended NDC.

[4] The increase is envisaged in a government decision (No. 286) taken on August 1, 2021. It still needs to be approved by parliament.

[5] Taxing carbon emissions is, of course, not the only rationale for fuel excises.

8. The plan also fosters the transition of the electricity sector from coal to natural gas to solar generation. It envisages phasing out coal power generation by 2025, shifting to natural gas and renewables. The national plan calls for lifting the share of renewables to 30 percent of total generation by 2030. With renewables at only 6 percent, and photovoltaic solar generation the expected main driver of the increase, this requires a much faster pace of adoption than has been Israel's experience in the last few years. The authorities are also seeking to improve energy efficiency, targeting improvements of 1.3 percent annually. They are also seeking international cooperation for projects that would allow them to import green energy. [6]



9. The plan envisages a long set of additional policies. The plan envisages measures to reduce emissions from transportation and encourage the use of public transportation, including mass public infrastructure.[7] It also seeks to increase the use of zero emission vehicles by providing grants for public transportation vehicles and, by 2030, issuing regulation discontinuing the sales of new vehicles with combustion engines. To reduce industry emissions, policies aim to encourage (i) energy efficiency, (ii) emission reduction efforts, (iii) resource efficiency, (iv) transition to green refrigerants, and (iv) adoption of international standards for the certification of green infrastructure. There are also measures to reduce emissions from buildings and waste management. In total, the plan envisages over 100 measures, and the authorities are still working on mapping their impact on GHG emissions.

Assessing the Impact of Policies to Reduce Greenhouse Gases

10. To assess some of the key components of the authorities' plan, we use the carbon pricing assessment tool developed by the IMF and World Bank staff. The spreadsheet model provides projections of fossil fuels, emissions, and an assessment of economic and fiscal impacts of carbon pricing and other mitigation policies.[8] We assess the impact by 2030 of the envisaged increase in excises and phasing out of coal power plants. Additional policies are not quantified since the scale up of photovoltaic generation is capped at the pace shown in recent history. We do not

[6] In November 2021, Israel, Jordan, and UAE signed a declaration of intent for a project that would build 600Mw of solar generating capacity in Jordan. The electricity would be exported to Israel, contingent upon Israel providing desalinated water in exchange.

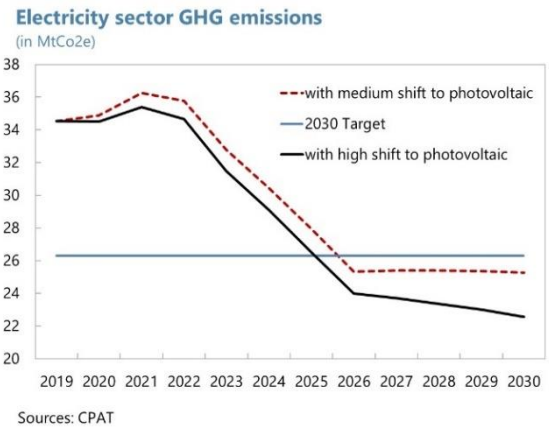
[7] The construction of a subway system for the Tel-Aviv metropolitan area is expected to start around 2026, with operations commencing around 2032.

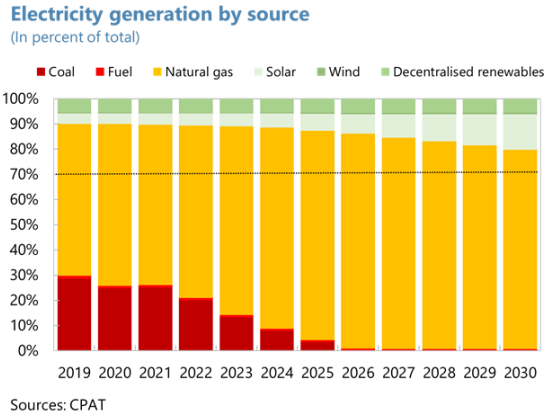
[8] See Fiscal policies for Paris climate Strategies—from Principle to Practice. International Monetary Fund, 2019 for a basic description of the model.

assess efficiency-enhancing measures, as the model already assumes autonomous improvements in efficiency.[9] [10]

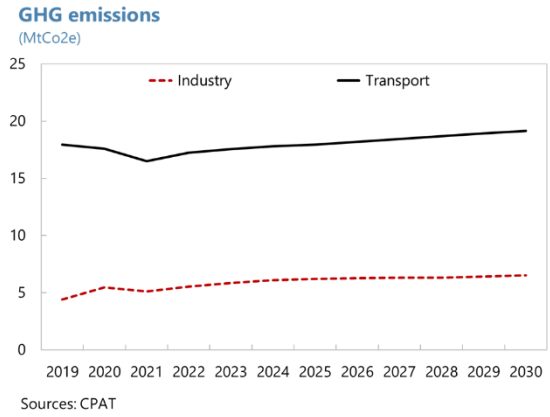
11. The measures included in the national plan will likely not be sufficient to achieve the 2030 emission reduction goal. The model results suggest that the overall emission target will not be met. Electricity emissions will be reduced significantly, but without reductions in other sectors, the overall target appears to be out of reach.

- **The 2030 electricity sector target is feasible.** Coal generation entails significantly more emissions than natural gas and solar, so the phasing out of coal plants is expected to have a sizeable impact that would result in reaching the 2030 electricity sector target by 2026. However, achieving a 30 percent share of renewable energy would require a significant acceleration in the scaling up of photovoltaic generation. In the face of growing energy demand, such an acceleration is needed to put emissions from electricity on a downward path in view of the larger reductions targeted for 2050.[11]





- **But the envisaged excises are not enough to reduce emissions in other sectors.** Industrial processes rely on natural gas, while transport uses gasoline and diesel. The hike in these excises is not large enough to discourage to use of gasoline and diesel. With a vibrant economy and population growth, even with reasonable assumptions for efficiency improvements, the emissions of these sectors will likely continue to grow.

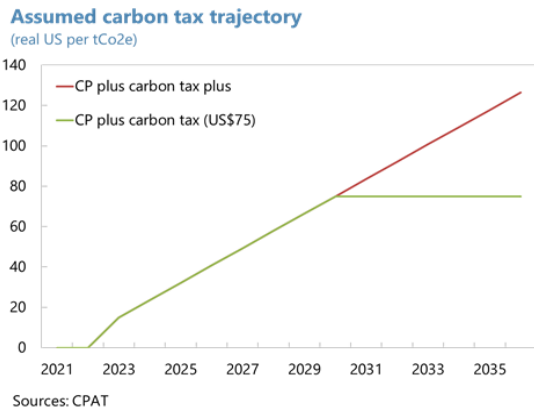


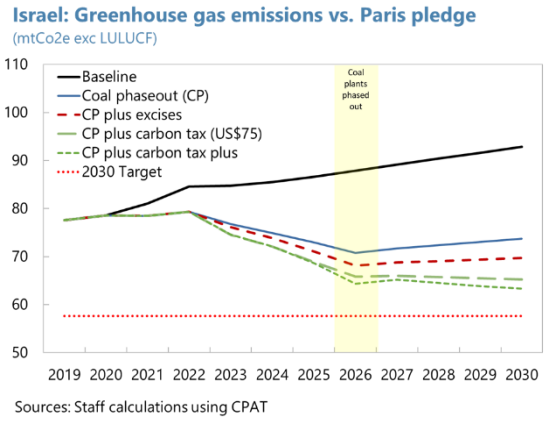
[9] These assumptions are consistent with continued improvements in efficiency at all levels.

[10] The zero emission vehicles efforts are not modeled but the main policy—discontinuing sales of vehicles with combustion engines—will not take place until 2030.

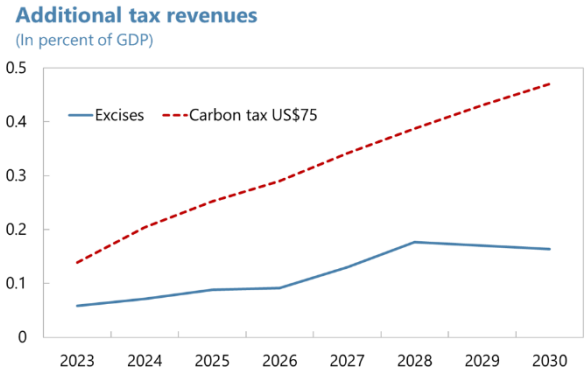
[11] With the 2050 goal in mind, reconsidering the role of nuclear energy generation could be an additional option.

12. Additional policies will likely be needed to reach the authorities' targets. A more ambitious carbon pricing policy could help get closer to the targets. Below we compare the emissions that would result from the envisaged coal phased-out, the hike in excise taxes, and two alternative carbon tax options[12]—one option gradually increases carbon taxes to US$75 by 2030 while the other considers additional increases, at a constant pace, afterwards. However, even more ambitious carbon pricing would not be sufficient to achieve the overall 2030 target. This highlights that further efforts—and funding—are needed, including to support research and development in green technologies, accelerate the improvement in transportation infrastructure, and facilitate a faster shift out of natural gas and into low-emission energy generation.





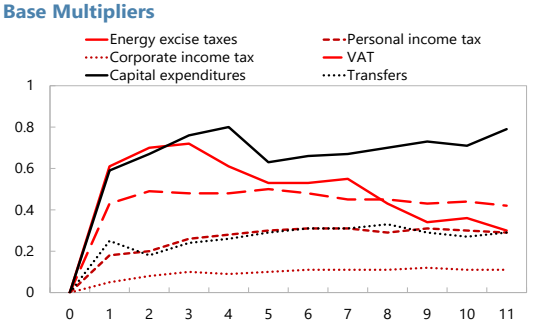
13. A carbon tax would produce more revenues and provide an opportunity to support additional policies. Relative to the envisaged hike in excises, a US$75 carbon tax would more than double new revenues. These could be used to fund complementary policies strengthening the climate action plan and transfers alleviating the impact on the most vulnerable sectors.



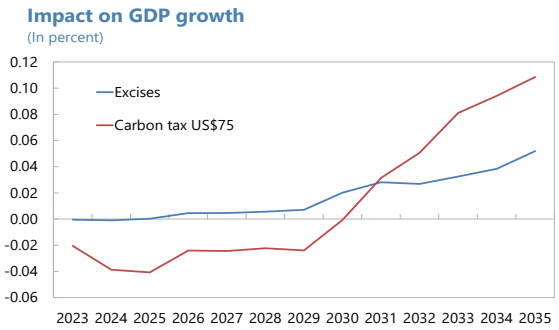
14. The model suggest that carbon taxes would have a small negative impact on GDP in the short-run but could boost GDP in the long-run. Any tax increases should be expected to lead to a reduction in activity. However, in a fiscally neutral context, the fiscal impact would depend on how revenues are used. The model provides some guidance based on assumed multipliers for different policy alternatives. The multiplier of energy excises is assumed to be relatively large in the short run and smaller in the long

[12] These carbon tax scenarios assume no change in existing excises. Parry et al (2021), "Proposal for an International Carbon Price Floor Among Large Emitters", Staff Climate Note 2021/001 proposes a carbon tax of at least $75 for advance economies that are large emitters.

run. Funding could be used for infrastructure, which has a similar multiplier in the short-run but much higher in the long-run. We compare the impact of excises with that of a carbon tax. For excises we assume that all newly generated revenue is used to increase capital expenditure[13], while for carbon taxes we assume that 35 percent of the new revenues are used for social transfers and the rest for capital expenditure. Overall, in the short-run excises would not have a negative impact on GDP and may appear to be a better option than large carbon taxes.[14]However, in the long-run carbon taxes provide more resources for capital expenditures and thus contribute to policies that yield higher long-term growth.[15]



Sources: CPAT
Note: multipliers are expressed as % change in GDP for a permanent 1% GDP decrease in taxes or increase in expenditures after the year of implementation



Sources: CPAT
Note: Excises assumes 100% of funds are used for investment. Carbon tax assumes 65% are used for invesment, and 35% in social transfers.

[13] Given their size, excises will have a smaller impact on the most vulnerable. We assume no transfers to highlight the most favorable case for excises in terms of their impact on GDP. Discussions on possible schemes to protect the most vulnerable segments are ongoing.

[14] A logical result given that carbon taxes are larger, and the carbon tax scenario assumes some use of the funding for social transfers—for which the model assumes a smaller multiplier.

[15] The model estimates the impact based on assumed broad multipliers. Results should be interpreted with caution as the specific spending choices would determine the actual impact.

INTERNATIONAL MONETARY FUND

ISRAEL

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

March 3, 2022

Prepared By European Department

CONTENTS

FUND RELATIONS

(As of January 31, 2022)

Membership Status: Israel became a member of the Fund on July 12, 1954.[1]

General Resources Account:

	SDR Million	Percent Quota
Quota	1,920.90	100.00
Fund Holdings of Currency (Holdings Rate)	1,406.92	73.24
Reserve Tranche Position	513.99	26.75
Lending to the Fund		
New Arrangements to Borrow	7.91	…

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocations	2,724.48	100.00
Holdings	2,774.52	101.84

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	Oct 20, 1976	Oct 19, 1977	29.25	12.00
Stand-By	Feb 14, 1975	Feb 13, 1976	32.50	32.50
Stand-By	Nov 08, 1974	Feb 14, 1975	32.50	32.50

Overdue Obligations and Projected Payments to Fund[2]
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal					
Charges/Interest	0.05	0.05	0.05	0.05	0.05
Total	0.05	0.05	0.05	0.05	0.05

[1] For purposes of Fund relations, the West Bank and Gaza (WBG) fall under Israeli jurisdiction in accordance with Article XXXI, Section 2(g) of the Articles of Agreement.

[2] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Rate Arrangement:

The *de jure* exchange rate arrangement is classified as "free floating" and the *de facto* exchange rate arrangement is classified as "floating".

Israel accepted the obligations of Article VIII, Sections 2, 3, and 4 on September 21, 1993. Israel maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions, with the exception of measures introduced for security reasons pursuant to Decision No. 144-(52/51). Israel subscribes to the SDDS and is in full observance of the SDDS's prescriptions for data coverage, periodicity and timeliness, and for the dissemination of advance release calendars.

Article IV Consultation:

The last Article IV consultation was concluded on January 19, 2021. Israel is on the standard 12-month consultation cycle.

ROSCs:

- Financial System Stability Assessment was conducted in 2000 issued in August 2001.
- Fiscal Transparency ROSC was conducted in 2003, issued in April 2004.
- Monetary and Financial Policy Transparency was conducted in 2003, issued as IMF Country Report No. 03/76 in March 2003.
- AML/CFT ROSC was conducted in 2003, issued in June 2005.
- Data Module ROSC was conducted in 2005, and issued as IMF Country Report No. 06/125 in March 2006.
- Financial System Stability Assessment Update was conducted in 2011, issued in April 2012.

Technical Assistance:

Conforming the commitments under the Oslo Accords, the Fund has been providing policy advice and technical assistance (TA) to the Palestinian Authority (PA) since 1994, and presently has a resident representative based in Jerusalem. Staff missions to the West Bank and Gaza (WBG) have been assisting the PA in designing and implementing its macroeconomic and fiscal framework, and reforms aimed to strengthen economic institutions. The most recent progress report was presented at the Ad-Hoc Liaison Committee (AHLC) meeting of donors held in New York on September 27, 2018. The Fund has also provided TA for capacity development, particularly in the areas of Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT), banking supervision and regulation, public financial management, revenue administration, and macroeconomic statistics.

Recent technical assistance to Israel covered issues on income tax reform, macroeconomic forecasting, systemic risk assessment and stress testing, fiscal regime for mining, a medium-term budget framework, sthrenghtening banking supervision processes and tools, and the implementation of IFRS.

Resident Representative:

The office of the IMF Resident Representative for the WBG was established in July 1995.

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance	
General: Macroeconomic statistics are of generally high quality and broadly adequate for surveillance, although there are few shortcomings particularly in monetary and government finance statistics. A Report on the Observance of Standards and Codes—Data Module, a Detailed Assessments Using the Data Quality Assessment Framework (DQAF), and a Response by the Authorities were published on the IMF website on March 24, 2006 (*IMF Country Report No. 06/125*).	
National Accounts: No issues to report.	
Price Statistics: No issues to report.	
Government Finance Statistics: The annual data on the overall annual fiscal balance submitted by the Central Bureau of Statistics (CBS covers all the General Government units) are compiled according to the *GFSM2014* methodology. This follows the implementation of the accrual basis of recording for the interest expense series. Quarterly data for the consolidated budgetary central government and social security fund submitted by the CBS are accrual-based and broadly follow the *GFSM2014* format. However, for financial assets and liabilities, only transaction data are currently submitted, although a financial balance sheet (stocks of financial assets and liabilities) is under preparation. In-year monthly reports on central government operations—compiled by the MOF on a cash basis—cover only the main aggregates of budgetary government accounts and net accounts of the social security fund, not broken down by components.	
Monetary Statistics: Monthly monetary and financial statistics in IMF's Standardized Reporting Format (SRF) for the central bank, other deposit takers, and other financial corporations are reported to the IMF. Israel reports data on some key series and indicators of the Financial Access Survey (FAS), including the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).	
Financial sector surveillance: Data on financial soundness indicators (FSIs) are compiled and reported to IMF on a quarterly basis and cover deposit takers, other financial corporations, nonfinancial corporations and households.	
Balance of Payments: Balance of payments and international investment position data are compiled on a quarterly basis and follow the sixth edition of the *Balance of Payments Manual.* External sector data were not examined in the Report on the Observance of Standards and Codes. Country participates in Coordinated Direct Investment Survey and in Coordinated Portfolio Investment Survey.	
II. Data Standards and Quality	
Participant in the Special Data Dissemination System (SDDS) since April 1996, and in full	Data ROSC published on March 24, 2006.

observance of the SDDS's prescriptions for data coverage, periodicity and timeliness, and for the dissemination of advance release calendars.	
III. Reporting to STA (Optional)	
Data are regularly reported for publication in the *Government Finance Statistics Yearbook* and in the *IFS*.	

Table 1. Israel: Common Indicators Required for Surveillance
(As January 31, 2022)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	Same day	Same day	D and M	D and M	D and M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Jan-22	Feb-22	M	M	M
Reserve/Base Money	Jan-22	Feb-22	M	M	M
Broad Money	Jan-22	Feb-22	M	M	M
Central Bank Balance Sheet	Jan-22	Feb-22	M	M	M
Consolidated Balance Sheet of the Banking System	Sep-21	Dec-21	M	M	M
Interest Rates[2]	Same day	Same day	D	D	D
Consumer Price Index	Jan-22	Feb-22	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2020	Sep-21	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	Jan-22	Feb-22	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Q3-21	Dec-21	Q	Q	Q
External Current Account Balance	Q3-21	Dec-21	Q	Q	Q
Exports and Imports of Goods and Services	Q3-21	Dec-21	Q	Q	Q
GDP/GNP	Q4-21	Feb-22	Q	Q	Q
Gross External Debt	Q3-21	Dec-21	Q	Q	Q
International Investment Position[6]	Q3-21	Dec-21	Q	Q	Q

[1] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary, extra budgetary, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

INTERNATIONAL MONETARY FUND

ISRAEL

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION

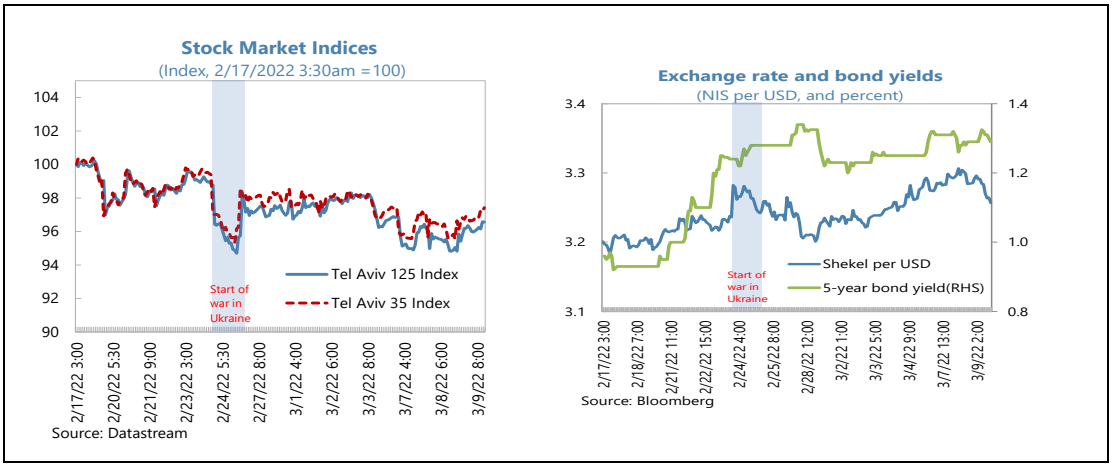
March 14, 2022

Prepared By European Department

This statement provides information that has become available since the staff report was issued to the Executive Board on March 4, 2022.

1. Data released in March confirms Israel's strong performance in 2021 and sustained momentum into the first quarter of 2022. The second estimate of the 2021 national accounts showed a slight upward revision of 2021 growth from 8.1 percent to 8.2 percent. The 17.6-percent annualized qoq growth in the last quarter—with solid performance across all GDP components—implies a significant carry-over of 4.8 percent for 2022. Fiscal revenues for February and the labor force survey for the first half of February suggest the economy has been resilient during the Omicron wave, which has continued to dissipate.

2. The war in Ukraine has had a limited impact on Israeli capital markets thus far. The aggregate value of listed shares in the Tel Aviv Stock Exchange fell by approximately 3 percent on February 24 but subsequently stabilized and recovered the losses. After an initial depreciation, the shekel has also recovered, with no intervention by the Bank of Israel. The war in Ukraine has had no discernable effect on Israeli bond yields.



3. The mild market response so far reflects Israel's low direct exposure to Ukraine and Russia. Exports to Russia (a diversified basket) and Ukraine (mainly pesticides) account for a total of 2 percent of Israel's merchandise exports (less than 0.4 percent of GDP). Imports have a similarly low weight in Israel's merchandise imports, although about half of Israel's imported wheat is supplied by Russia or Ukraine. Israeli banks have no significant cross-border exposures to Russia or Ukraine.

4. Nonetheless, Israel's economic outlook remains subject to significant uncertainty. While the direct exposure to Russia and Ukraine seems limited, spillovers from weaker global outlook could affect the Israeli economy. The impact will likely stem from higher energy and wheat prices and lower external demand. Israel's own production of natural gas would mitigate the energy shock, but higher prices will put additional pressure on headline inflation. They may also have an impact on domestic demand, buffered somewhat by households' savings accumulated during the pandemic. The impact on net exports and the current account is also uncertain, but likely mitigated by the resilience of the high-tech sector.

5. The thrust of the staff appraisal remains unchanged.