

The Effects of the War On the Israeli Economy and Necessary Policy Measures

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Special Policy Paper

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Abstract

On October 7, 2023, Israel was subjected to a murderous terror attack, perpetrated by thousands of terrorists belonging to the Hamas organization which rules the Gaza Strip. In response, Israel went to war with the aim of returning those kidnapped by Hamas and destroying its offensive capabilities. The aftermath of the massacre and the destruction caused by the attack, alongside the ongoing war, have a significant economic impact on the Israeli economy; it involves a widescale deployment of military reserves which encompasses some 250,000 reservists, the evacuation of around 200,000 residents from communities in the Gaza Envelope area and along the northern border, restrictions imposed by the Homefront Command and disruptions in the school system, a general decline in personal safety, and decreased consumption of goods and services. At the same time, expenditure has risen significantly due to the defense expenses required to maintain the war effort; the payment of compensation for property damages; the allocation of civilian emergency budgets including financial relief for evacuees and additional funds for the healthcare, education, and welfare systems; financial support for businesses and for furloughed employees; and the reconstruction of communities destroyed by the attack.

This paper aims to present an economic analysis of the effects of the war on the Israeli economy, and to propose economic policies which are currently necessary. Any economic estimate of the economic effects of the war is subject to great uncertainty, as it is not clear how the war will further develop in terms of intensity, duration, and outcomes, and whether it will expand to additional fronts. To estimate the impact of the war on the national economy, we assume two scenarios: a reference scenario and an extreme scenario. These scenarios were devised by a team of researchers in Mind Israel Ltd., headed by Amos Yadlin and Giora Eiland. Based on a scenario which assumes fighting in the Gaza front along with targeted military activity along the northern border and in the West Bank – as we have seen unfolding in recent weeks – the forecast made by Aaron Institute predicts that GDP growth in 2023 will be 1.5%, significantly lower than the forecast issued by the Bank of Israel (BoI) on the eve of the war, which was 3.0%, and lower still than the growth of the Israeli economy between 2017 and 2022, which had been 4.2%. As for 2024, our forecast is that the economy will grow at a rate of just 0-1 percent, meaning a decrease of around 1%-2% in GDP per capita. **In a scenario which assumes escalating warfare on the northern border in the first quarter of 2024, Aaron Institute's forecast predicts a GDP growth of minus 2% in 2024. This scenario depicts a**

northern campaign lasting around a month, which would include a widespread offensive by the IDF against Hezbollah, followed by massive rocket fire on Israel's northern communities. Given the ongoing fighting, and the uncertainty surrounding it and its possible outcomes, **the government's responsibility is to reduce the damage to the economy and to support its readiness to resume full economic activity once the war ends. The economic strength of the national economy is essential to maintaining Israel's independence and national security.** We propose several policy measures for immediate implementation, primarily improving the government's executive capabilities, establishing an economic inner cabinet, and designing a new state budget for 2024 which would be adapted to the new economic reality. Carrying out a responsible fiscal policy is imperative to maintain the trust of financial markets, credit rating agencies and high-tech investors in the economic robustness of the Israeli economy.

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1. Macroeconomic Assessments Based on War Scenarios

The economic repercussions of the Irons Swords war on the Israeli economy depend, of course, on the further development of the fighting and its outcomes. The economic analyses presented below are based on war scenarios formulated by a team of researchers in Mind Israel Ltd. These scenarios describe the development and intensity of fighting in the various fronts, facilitating projections regarding the scope of reserves deployment and defense expenditure, the evacuation of communities, the home-front situation, potential damages to property and infrastructures, and the overall damage to the economy as manifested in decreasing employment rates.

Our analysis examines the expected damage in terms of GDP, tax revenue, and additional expenditure required for maintaining the war effort and providing emergency budget to support evacuees, casualties, and economic activity across the economy (furloughed employees and relief for businesses).¹ Taking all these factors into account, we calculated the projections for the national deficit and the debt-to-GDP ratio. We would like to stress that this work has began on October 9, and has been regularly updated according to current developments and data published by official government agencies.

The damage to the GDP is analyzed through the damage suffered by the labor market. This damage stems from the absence of many workers, some of whom have been drafted for military reserve duty while others are absent from their workplace due to various other reasons – evacuation of residents, economic blow to business activity, and school system disruptions forcing many parents, mainly women, to be absent from work. According to the production approach, we translate the absence from the labor market of these workers to GDP damage in accordance with the sectoral level of GDP per worker, according to the sectors impacted – mainly agriculture, construction, retail, and tourism.² With regard to military reserves deployment, our methodological approach in this analysis is “diversion” of workers from the business sector to the public sector.³ That is, the business output (GDP per worker) of enlisted reservists is converted to public sector output, since in terms of national accounting, the salary of reserve soldiers is paid out of the defense budget, and is expressed

¹ The elasticity of tax revenue to GDP is unitary. We assume that the Ministry of Finance will continue providing economic support to businesses while the intensive fighting continues, although at the time of writing this plan has not yet been approved for the first quarter of 2024.

² We have factored in the presence of volunteers in the agriculture sector, and the evacuation of residents from impacted communities to hotels.

³ We have factored in the fact that some of the reserve soldiers drafted are students with part-time employment, or young adults who are unemployed.

in increased expenditure of the public sector in return to the production of public security. Therefore, in our analysis, the damage to GDP due to reserves deployment is expressed in the difference in product per worker.⁴ Based on the projected damage to the GDP, we estimate the reduction in the state's tax revenue, which in turn is the basis for the estimated deficit and debt-to-GDP ratio. In these calculations, we stack the additional expenses related to the war, mostly based on our estimates, and deduct relevant budgetary sources, such as the Property Tax Fund which contained ILS 18 billion on the eve of the war, and is designated to fund property damages and the relief plan for businesses whose activity has been impaired due to the war; and the US aid expected to be received in 2024, its budgetary restrictions notwithstanding.⁵ We also assumed professional budgetary conduct, and adoption of the recommendations made by the professional echelon in the Ministry of Finance (The Budgets Department) for budget reallocations amounting to ILS 14 billion.⁶

1.1 Macroeconomic Assessments for the Base Scenario

The base scenario assumes high-intensity fighting in Gaza, and military tension with sporadic, targeted military action on the northern front, until the end of 2023. This situation is accompanied by disruptions in economic activity on the home front due to rocket fire, evacuation of communities, irregular activity of the school system, and continuing decline in civilians' sense of personal safety. Starting at the first quarter of 2024, reserve soldiers are gradually discharged while the home-front situation enables economic activity to resume, and evacuees to return to their homes or to temporary residences until their homes are reconstructed. This trend is reflected in the gradual return to work of workers who had been temporarily absent. These trends are presented in Table 1.

⁴ The product per worker in the high-tech sector is ILS 600,000 per year; in the other employment sectors within the business sector, it is ILS 370,000 per year; the product per worker in the public sector is ILS 177,000 per year.

⁵ Aid from the US comes with stipulations regarding the manner and purpose of its spending.

⁶ The volumes of budget funds identified by the Budgets Department were ILS 6 billion in 2023 and ILS 10 billion in 2024. Of these amounts, only ILS 4 billion were reallocated for the purposes of the war in 2023.

Table 1: Reference Scenario

Reserve Soldiers in Active Duty and Temporarily Absent Workers, Thousands, Q4 of 2023 and 2024

	2023	2024			
	Q4	Q1	Q2	Q3	Q4
Home Front Situation	Red	Orange/Yellow	Gradual return	Green	
Active Reserve Soldiers	220	140	40	40	Full
(% of Employed)	(5%)	(3.2%)	(0.9%)	(0.9%)	Discharge
Temporarily Absent from Work	310	125	50	25	Full
(% of Employed)	(7%)	(2.8%)	(1.15%)	(0.6%)	Activity

According to the war scenario depicted in Table 1, the estimated cost of the additional expenditure due to the war by the end of the last quarter of 2023, including revenue decline, is ILS 70 billion.⁷ This amount comprises ILS 20 billion of defense expenditure, ILS 23 billion for the cost of the economic plan and furlough payments,⁸ ILS 3 billion for relief of property damage, and additional ILS 13 billion for civilian expenses which include evacuation of residents and expenses on healthcare, education, and welfare. Consequently, and due to the temporary absence from work of more than half a million workers (caused by reserves deployment and temporary absence on the home front), with around 10% of absentees employed in the high-tech sector, we estimate that the last quarter of 2023 will conclude in a negative growth of 10% (compared to the third quarter).⁹ Thus, overall growth in 2023 is expected to reach just 1.5%, rather than 3% as predicted just prior to the war. Based on this relatively low growth rate, we predict a loss of tax revenue amounting to ILS 11 billion. Therefore, our forecast is that even after utilization of Property Tax Fund resources (ILS 6 billion)¹⁰ and the ratified budget optimization amounting to ILS 4 billion (budget reallocations and distributive funds), we estimate that by the end of 2023 the national deficit will reach around 5.5%, and the debt-to-GDP ratio will increase up to around 63.9%.¹¹

Under the reference scenario, 2024 will see a gradual return of the economy to regular activity. The estimated cost of the additional expenditure due to the war by the end of 2024,

⁷ Fund flow due to this expenditure is lower than the costs, since some of the expenses will be incurred in 2023.

⁸ In practice, furlough payments will manifest in a reduction in state revenue from National Insurance.

⁹ Quarterly loss of GDP due to the transition of reserve soldiers, most of whom are employed in the business sector, to the public sector, based on wage differences per worker – ILS 10 billion.

¹⁰ Total quarterly fund flow; the remainder of the cost will be paid out of the Fund in 2024.

¹¹ S&P projections for the deficit and the debt-to-GDP ratio in 2023 are 5.3% and 64%, respectively. Bank of Israel projections are 3.7% and 63%, respectively.

including revenue decline, is ILS 73 billion. This amount comprises ILS 22 billion of defense expenditure, ILS 22 billion for the cost of the economic plan and furlough payments, ILS 6 billion for reconstruction and property damages, and ILS 3 billion for civilian expenses excluding healthcare and welfare expenses. Based on the scope of deployed reservists and of workers who are temporarily absent from their workplace along the year, we forecast a GDP growth of 1% in 2024.¹² Hence, the loss of revenue is expected to reach ILS 20 billion. Assuming the provision of US military aid (ILS 20 billion¹³) and utilization of the remaining funds in the Property Tax Fund (ILS 12 billion), and assuming that the budget reallocations and distributive funds identified by the professional echelon will indeed be diverted to finance the costs of war – we estimate that the deficit¹⁴ by the end of 2024 will be around 5.4%, and the debt-to-GDP ratio will be around 69.2%.¹⁵

1.2 Macroeconomic Assessments for a Scenario of Escalation with Extensive War in the North

Another scenario we analyzed for the purposes of economic assessment includes the development of intensive fighting on the northern border. This scenario depicts a northern campaign lasting around a month, during the first quarter of 2024, which would include a widespread offensive by the IDF against Hezbollah, followed by massive rocket fire on Israel's northern communities. Economically, we assume a month-long shutdown of most economic activity in the northern region from the border down to (and including) Haifa, including the Haifa ports. This shutdown will manifest in the subtraction of 70% of the workers in the Haifa and Northern Districts (1.1 million employees, around a quarter of all employees across the economy) – that is, around 780,000 employees, according to the sectoral distribution in these districts¹⁶ – for one month. We assume that this campaign will involve non-severe damage to power grids, roads, and industrial zones. Therefore – due to the possible damages to workplaces, transport routes, and production and employment capacities – the return of residents in the Haifa and Northern Districts, which would commence once the fighting concludes at the end of the first quarter of 2024, will be gradual and continue through the

¹² Quarterly loss of GDP due to the transition of reserve soldiers, most of whom are employed in the business sector, to the public sector, based on wage differences per worker – ILS 10 billion.

¹³ Based on Budgets Department assessments.

¹⁴ Fund flow is higher since it includes deferred cost of ILS 19 billion from 2023.

¹⁵ S&P projections for the deficit and the debt-to-GDP ratio in 2024 are 5.3% and 67%, respectively. Bank of Israel projections are 5% and 66%, respectively.

¹⁶ According to data from workforce surveys conducted by the Central Bureau of Statistics.

second quarter of 2024. We assume a gradual decrease in the deployment of reserve forces, with some remaining in active duty following the end of the fighting (2nd to 4th quarters) to assist in the recovery of the home front and the reconstruction of infrastructures.

Table 2: Severe Scenario – Escalated War in the North

Reserve Soldiers in Active Duty and Temporarily Absent Workers, Thousands, Q4 of 2023 and 2024

	2023	2024			
	Q4	Q1	Q2	Q3	Q4
Home Front Situation	Red	Red	Orange	Yellow	Yellow/Gree
Active Reserve Soldiers (% of Employed)	220 (5%)	220 (5%)	120 (2.8%)	60 (1.4%)	30 (0.7%)
Temporarily Absent from Work (% of Employed)	310 (7%)	400 (9%)	100 (2.3%)	50 (1.15%)	25 (0.57%)

Since under this scenario Israel only attacks Hezbollah in the first quarter of 2024, the economic analysis for the 4th quarter of 2023 and the projections for 2023 as a whole are the same as in the base scenario described in Section 3.1. Under the current scenario, which includes a northern campaign as well, the Aaron Institute forecast for the growth of the national economy in 2024 is **a negative growth of 2%**. As stated above, the loss of GDP stems from the subtraction of temporarily absent workers and the extensive deployment of reserve forces, particularly in the first quarter. According to our analysis, the annual loss of GDP in 2024, due to the transition of reserve soldiers from the business sector to the public sector, will amount to ILS 20 billion.

Under the severe scenario, the estimated cost of the additional expenditure due to the war by the end of 2024, including revenue decline, is ILS 111 billion. This amount comprises ILS 28 billion of defense expenditure, ILS 37 billion for the cost of the economic plan and furlough payments, ILS 13 billion for relief and reconstruction of property damage, and ILS 3 billion for civilian expenses, excluding healthcare and welfare expenses. Estimated revenue loss will be ILS 30 billion. Assuming the provision of US military aid (ILS 20 billion) and utilization of the remaining funds in the Property Tax Fund (ILS 12 billion), and assuming that the budget reallocations and distributive funds identified by the professional echelon (ILS 10 billion) will be diverted to finance the costs of war – our deficit forecast for 2024 under the northern front

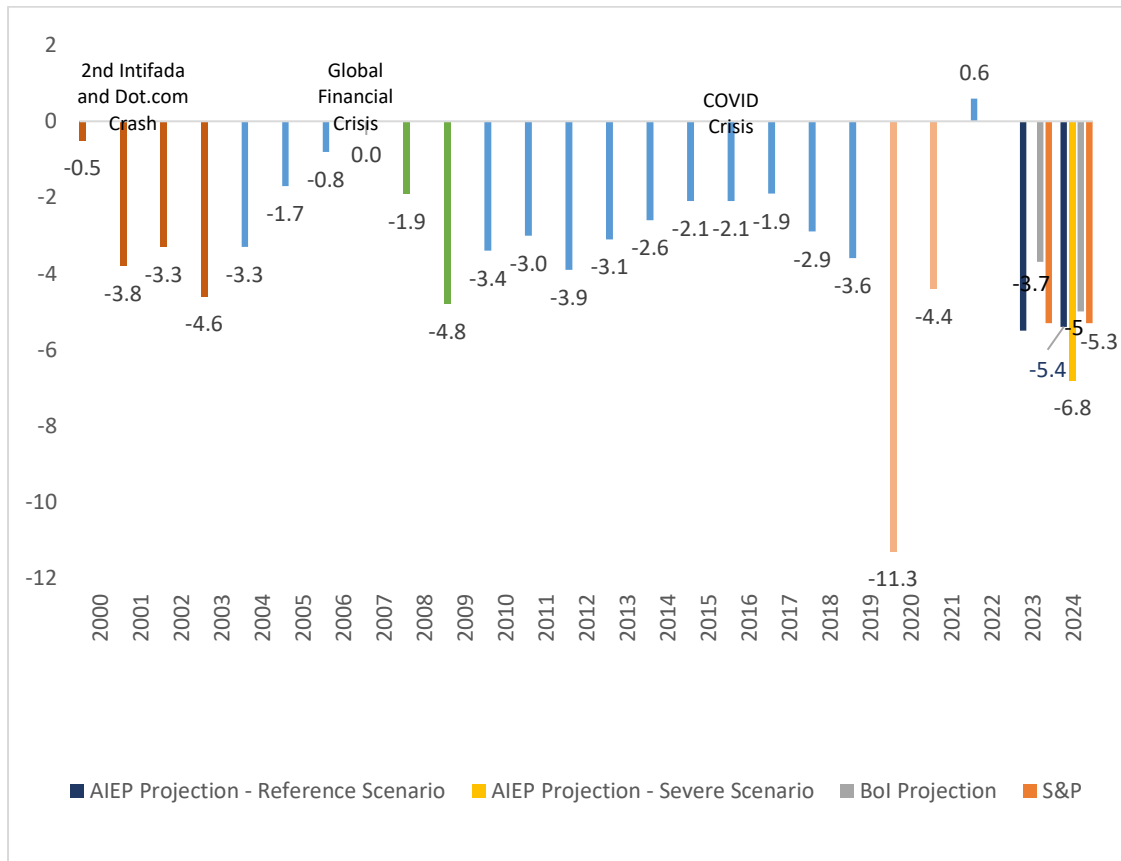
scenario is around 6.8%, which means that the debt-to-GDP ratio at the end of 2024 will be around 71.6%.¹⁷

2. An Economic Policy Adapted to A New Macroeconomic Framework

The previous chapter presented Aaron Institute's economic forecasts for 2023 and 2024. These forecasts are published alongside forecasts made by other research institutions, who estimated the effects of the war on GDP growth and on the increase in the national deficit and the debt-to-GDP ratio. There are variations among the different forecasts, stemming for the most part from different assumptions regarding the development of the war, the scope of economic activity during the time of emergency, and the predicted recovery of the economy (Figures 2-3). However, there is one common theme shared by all these forecasts – they all reflect a significant change in Israel's macroeconomic framework, with low growth rates and a substantial increase in the national deficit and the debt-to-GDP ratio. We would stress that the Israeli economy is characterized by a responsible budgetary policy which has resulted in a sustainable trajectory of debt in relation to the GDP, hence despite the sharp increase during the COVID-19 crisis, by the end of 2022 the debt-to-GDP ratio dropped as low as 60.8% (Figure 3). This trajectory is the result of many years of fiscal responsibility, which has been manifested in debt reduction during years of growth along with expansion to support the demands of the economy during years of crisis. Overall, these data reflect a fiscal situation which is stable and reliable for investors, as indeed expressed in the CDS premiums referencing the Israeli government debt, which were historically low at the end of 2022 – around 40 basis points.

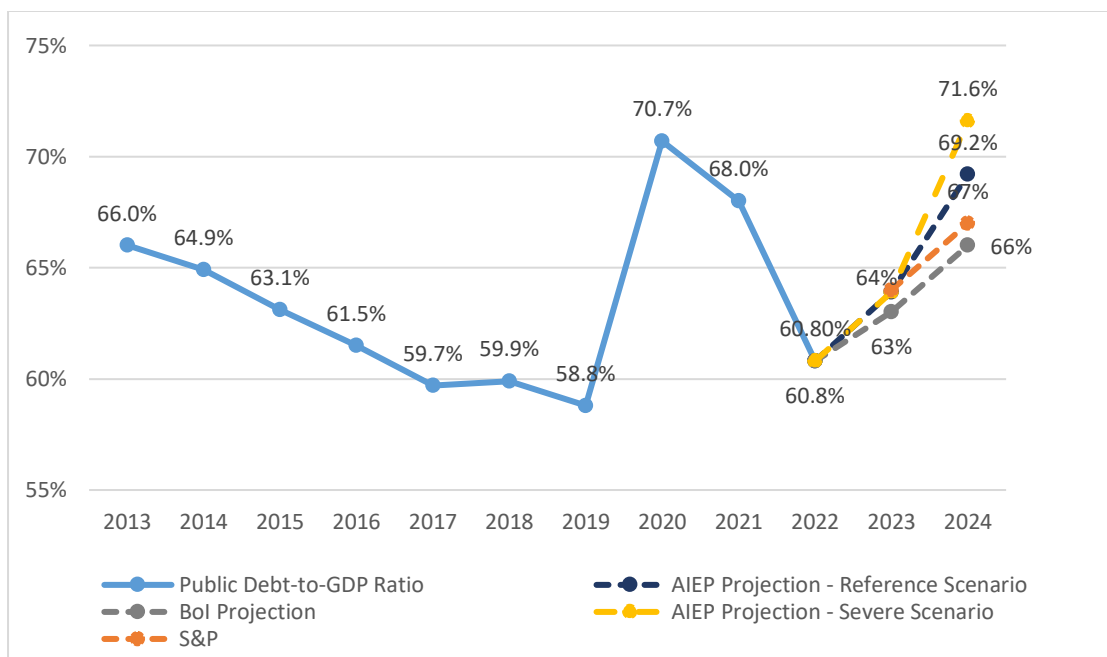
¹⁷ To the best of our knowledge, other economic research institutions have not analyzed a scenario for the development of fighting on the northern front. Estimates made by Bank of Israel and S&P are based on the assumption of a single front in Gaza – similar to the base scenario in this paper. Therefore, their forecasts are presented in relation to the previous section (footnote no. 15).

Figure 2: Government Deficit, 2000-2024 (Projected), in Percentages of GDP



Source: Bank of Israel data and projections by research institutions

Figure 3: Debt-to-GDP Ratio, 2013-2024 (Projected), in Percentages of GDP



Source: Bank of Israel data and projections by research institutions

2.1 Budgetary Responsibility as a Key to the Economy's Recovery

Given the new economic reality in Israel, policymakers – most notably, the Prime Minister and the Minister of Finance – must strive relentlessly to minimize the economic damage to the economy and to prime it for optimal recovery from the crisis. So far, eight weeks into the war and on the eve of the third reading to approve modifications which can still be made in the 2023 budget, it appears that this is not the policy which the PM and the Finance Minister have adhered to. Our forecast, as well as those made by other institutions, clearly show that the deficit is expected to increase by over 10% in 2023 and 2024. Our reference scenario is considered optimistic by all defense specialists. This scenario is also optimistic in the sense that it implies responsible conduct by the Finance Minister, the ratification of a new state budget for 2024 and specifically compliance with the professional echelon's recommendation to cut ILS 10 billion from the 2024 budget, and a professional, determined effort to locate additional areas for potential budget optimization (amounting in total to at least ILS 15 billion).¹⁸ So far, despite the pressing emergency, the attitude of the Finance Minister does not reflect the responsibility and professionalism required at this time.

It should be noted that the current crisis does not resemble the COVID-19 crisis in 2020, which was followed by rapid economic recovery – a return of the economy to a high growth trajectory along with reduction of the deficit and the debt-to-GDP ratio in 2021-2022. There are several differences which suggest that the recovery of the economy from the current crisis will be more challenging. First, the swift exit from the COVID-19 crisis had been made possible thanks to the provision of vaccines, whereas the outcomes of the war are shrouded in great uncertainty, and the recovery of civilians' sense of security and of full economic activity across the economy is expected to be a gradual process. A second point concerns the situation in the high-tech sector, which is fundamentally different during the current war than it had been at the time of the COVID-19 crisis. The COVID-19 crisis had accelerated investments in digitalization around the world, and the local high-tech sector had enjoyed an inflow of investments and an increase in activity. However, the current global slump in the high-tech sector, combined with the ongoing war, are driving away investors. Already, the first three quarters of 2023 reflect a decline in the volume of investments, reverting back to their levels of 2017-2019. A substantial blow to the local high-tech sector might severely impair Israel's economic growth, as this sector represents 18% of the GDP. Another difference is the interest

¹⁸ As previously stated, estimates for 2024 assume supplementary aid from the US toward the costs of the war, amounting to ILS 20 billion.

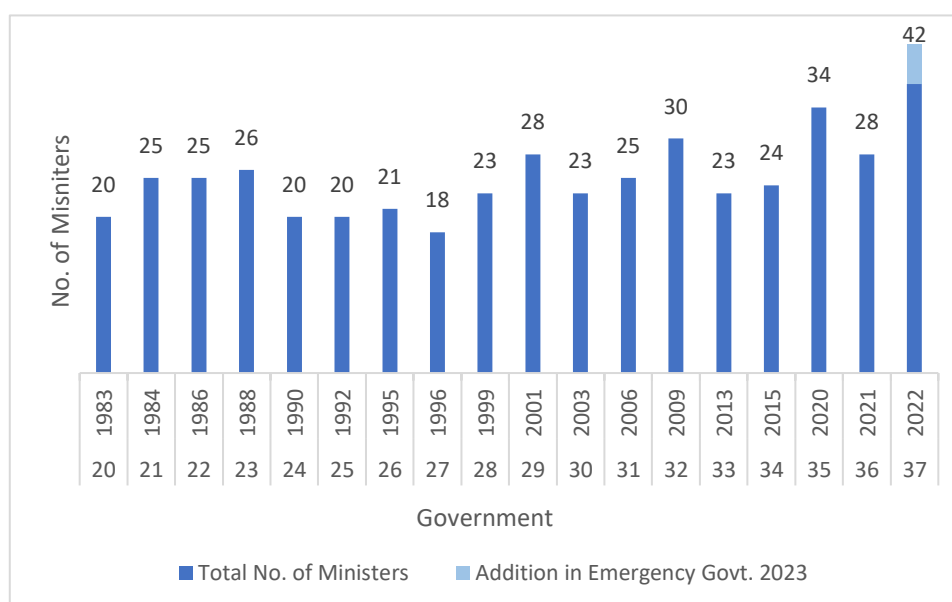
rate environment, which is significantly higher today than it had been in 2020, hence the costs of financing a new debt incurred today will be higher. Israel's risk premium in the markets has already been rising. Increased deficits and irresponsible economic policies may result in a credit rating downgrade, higher costs of debt financing, and high interest expenses which would supplant other important government expenditures and investments.

The current war is a local security event which has a significant impact on the Israeli economy. Therefore, credit rating agencies as well as investors in the capital market and the high-tech sector are monitoring the developments on the battlefield and the conduct of policymakers. Any volume of budget allocations which are not grounded in professional reasons, but in political and sectoral interests, may cause significant harm to the evaluation of credit rating agencies regarding Israel's budgetary discipline and responsibility, and thereby its ability to repay debts. The return of the economy to a growth trajectory after the war also depends on the sense of personal safety among civilians. Achieving the objectives of the war – eliminating the military capabilities of Hamas, and particularly releasing the kidnapped hostages – would restore civilians' sense of personal safety and facilitate their rapid return to economic activity. It is crucial that the economic policy would be professional and responsible during the war, while also preparing for its aftermath. Top priority should be given to maintaining budgetary responsibility and increasing the government's executive capacity, while promoting growth-enhancing reforms in order to position the economy, upon the end of the war, in an optimal starting point to resuming its growth trajectory.

2.2 Increasing the Government's Executive Capacity and Streamlining the Public Sector's Performance

Alongside the budgetary responsibility required in the state budget, it should also reflect an increase in the executive capacity of the government, through a change in the structure of government ministries – scrapping unnecessary ministries and streamlining government personnel. The 37th government of Israel comprised 34 ministries and 37 ministers at the day of its inauguration. Due to the war, an emergency government was established on October 18, 2023, adding five more ministers without portfolios and resulting in the largest government in the history of Israel (Figure 4). Even prior to the establishment of the emergency government, this bloated government structure was exceedingly exceptional in comparison to developed Western countries. On top of the direct costs involved in its maintenance, this structure complicates decision-making processes, creates friction and bureaucracy within the government, and reduces the efficiency of its work.

Figure 4: Number of Ministers in Israeli Governments, 1983-2022



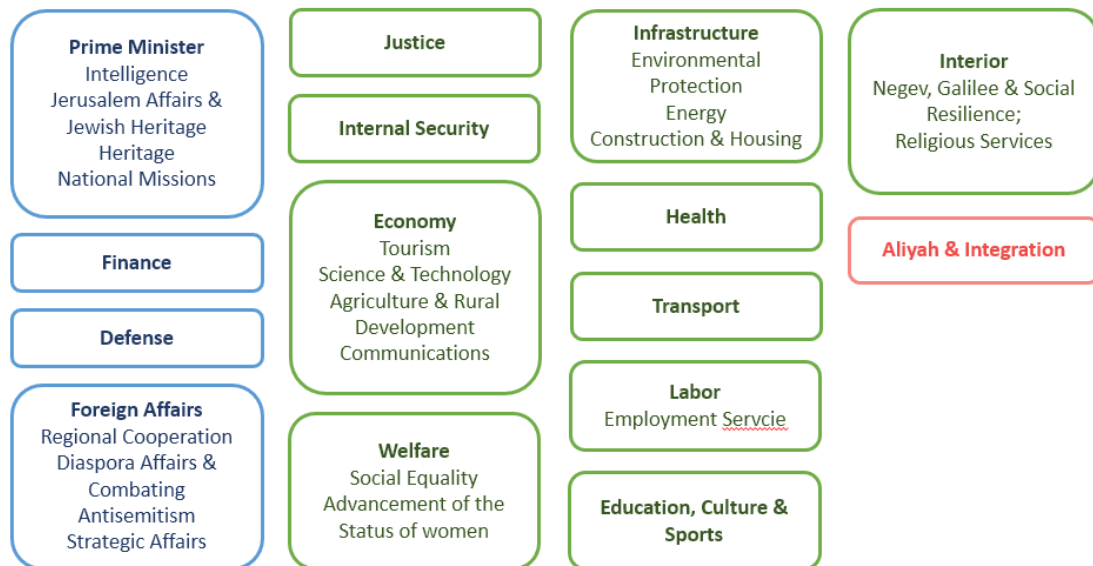
Source: Knesset website

These difficulties have led to the creation of several work teams and committees whose purpose was to examine this issue. We call for the immediate adoption of the recommendations made by the Inter-Ministerial Team for the Implementation of Adaptations in the Government Structure (2018),¹⁹ and the enactment of its proposal while downsizing even further, to a government structure comprising 15 ministries (Figure 5): four core ministries and 11 additional ministries. All other ministries related to the current government will be consolidated within the primary ministries, as subsidiaries. We would emphasize that the proposed structure has been adapted to the existing government structure. However, we posit that many ministries have no viability under normal circumstances, let alone during the current emergency, and should be duly canceled. These ministries are: Intelligence, Jerusalem Affairs and Jewish Heritage, Heritage, Settlements and National Missions, Advancement of the Status of women, Regional Cooperation, Diaspora Affairs, Strategic Affairs, and Information – eight ministries whose direct cost in 2023-24 has been around ILS 360 million.²⁰

Figure 5: Proposal for A Government Structure Comprising 15 Ministries

¹⁹ Prime Minister’s Office (2018). Report by the Inter-Ministerial Team for the Implementation of Adaptations in the Government Structure.

²⁰ This conservative estimate is based on data from the Budget Key website, and estimates made by the Inter-Ministerial Team for the Implementation of Adaptations in the Government Structure.



(Blue – core ministries; green – globally common ministries; red – unique to Israel)

Source: Aaron Institute’s proposal for the government’s structure, based on the Report by the Inter-Ministerial Team for the Implementation of Adaptations in the Government Structure, 2018.

Downsizing the government’s structure has some obvious advantages, primarily:

1. Streamlining government activity due to the expected reduction in intra-governmental bureaucracy, while also improving decision-making processes as a result of a broad perspective of the needs and effects of policy measures, alongside a clearer focus on essential issues which are crucial for the activity of the economy.
2. Budget savings due to downsizing of administrative positions and reducing the need for inter-ministerial teams to coordinate government activities, as well as the benefits of an economy of scale which would streamline processes such as acquisition and personnel recruitment.
3. Formulating and implementing government policies which are efficient for the long term, due to reducing friction points between the different ministries and avoiding redundancy in the design and implementation of policies.

In addition to this important change, it is imperative to ensure that the ranks of senior management of government ministries have adequate skills for the job. Professional appointment of key positions in the public sector is vital for the functioning of the government and the economy in regular times, and particularly crucial for the government’s functioning in times of crisis. A professional management echelon is key to optimizing the public sector and plays a substantial role in maintaining national resilience. Modifying the state budget, along with significant streamlining of the bloated government structure, will help restoring the

public's faith in the government and strengthening the sense of social cohesion, thanks to the saving of public funds and the increased responsibility assigned to members of the government.

2.3 Reforms Supporting Growth

Our recommendations are guided by the principle of implementing reforms that enhance labor productivity and promote quality employment, recognizing them as key drivers of economic growth. While many of the suggested reforms do not necessitate substantial budgets, their effective implementation holds the potential to significantly contribute to economic growth.²¹ Our research indicates that the implementation of a professional economic policy, emphasizing quality employment, targeted investments in human capital aligned with demand, reduction of the public capital stock gap, and removal of barriers to private capital investments, is essential for sustaining robust growth in Israel both in the immediate post-war years and in the medium to long term.²²

The per capita public capital stock in Israel is 65% lower than that of benchmark countries, resulting in a considerable lag in transportation accessibility compared to leading European countries. To address this, we propose setting ambitious transportation accessibility goals, including a 30% reduction in travel time by public transportation during peak hours and public transportation usage increase from 20% to 40%. This necessitates a comprehensive elimination of all barriers to planning and execution.²³ Furthermore, to elevate ICT public capital, currently 19% lower than that of indicator countries, an annual investment of 0.34 percent of GDP is recommended – notably lower than the required investment in physical public capital. However, it carries substantial potential to significantly enhance the efficiency of the public sector.²⁴ We recommend the implementation of a cross-sectional program to digitize all government ministries' and regulators' interfaces, particularly inter-ministerial interfaces, and those with the business sector. The execution of such a plan will promptly enhance overall efficiency within the public sector. It will establish databases of inputs and outputs, enabling a thorough assessment of effectiveness and facilitating data-driven

²¹ For the full analysis, see: Eckstein, Menachem-Carmi and Sumkin (2022), "Public Investment Policy and Structural Reforms to Increase Productivity and Growth in the Economy", Aaron Institute for Economic Policy.

²² Eckstein, Menachem-Carmi, Sumkin and Kalisher (2023), "The Challenges Facing the Israeli economy in Turbulent Times", Aaron Institute for Economic Policy.

²³ For the full plan and the economic impact on growth, see Ziv, S. and Shapir, A. (2023), "Quality Transportation for 2040: Planning, Investments and Benefits", Aaron Institute for Economic Policy.

²⁴ On the relationship between the digitization of the economy and economic growth, see: Axelard, H., Sumkin, S. and Chaver, S. (2022), "Strategy for the Promotion of Digital Use (ICT) in Israel: Establishing Priorities", Aharon Institute for Economic Policy.

decision-making. The plan will also streamline interfaces between the public and business sectors, improve regulatory mechanisms and reduce bureaucracy for both businesses and citizens. This initiative would generate positive external effects on digitization and labor productivity throughout the entire economy.

Private capital stock in Israel is 46% lower than that of benchmark countries (\$110 per working hour compared to \$203 per working hour in benchmark countries). To exhaust the economy's growth potential, regulatory improvements, reduction of bureaucratic burdens, and increased openness to trade are imperative. Specifically, efforts should persist in enhancing the effectiveness of the regulatory authority established in 2022, focusing on reducing bureaucracy through systematic, professional, and controlled measurement of compliance costs and setting reduction goals.²⁵ Additionally, the removal of import barriers for consumption goods, investment goods, and raw materials is crucial. This will foster a competitive local environment, enhance labor productivity, and significantly reduce the cost of living.

Despite the post-COVID employment recovery, employment rates among ultra-Orthodox men and Arab women remain extremely low. These groups, along with Arab men, represent the primary potential for increased employment, given that their current rates are significantly below the 2030 goals.²⁶

Table 3: Employment rates by population groups, ages 25-64

	2012	2022
Non-ultra-Orthodox Jewish men	85.0	87.5
Ultra-Orthodox Jewish men	45.9	54.9
Arab men	74.1	77.2
Non-ultra-orthodox Jewish women	78.2	84.3
Ultra-Orthodox Jewish women	65.0	80.3
Arab women	29.3	42.4

Source: The authors' processing of the personnel survey data, the CBS

These demographic groups exhibit low labor productivity, particularly among those lacking academic education. For young Arab men, the employment rate is even lower, with this

²⁵ The SCM model (Standard Cost Model) is the most common model for measuring the cost of bureaucracy, which has been adopted as a uniform methodology by the OECD and the European Union. The model is based on breaking down the legislation into information obligations, and measuring the time and cost required for each obligation's fulfillment. For more information and a review on the subject, see: Sumkin, S. (2020) "Policy for measuring and reducing the cost of bureaucracy", Aaron Institute for Economic Policy. On our recommendations for the activities of the Regulatory Authority, see: Menachem-Carmi and Eilat (2022), "The Regulatory Authority: Objectives, Tools and Working Framework", Aaron Institute for Economic Policy.

²⁶ Employment rate targets for 2030: Arab men - 83%, ultra-orthodox men - 70%/65%, Arab women - 53% (Ministry of Labor, Welfare and Social Services, 2020).

subgroup experiencing high levels of inactivity, as noted by Tekhawkho, Larom, and Jabali-Sirhan in 2023.²⁷ The ambitious employment targets set by the Committee for the Advancement of the Employment towards 2030, accepted by the Government of Israel, necessitate focused efforts to enhance human capital within these populations. This involves adapting employment skills and occupations,²⁸ providing incentives to stimulate employment, and eliminating disincentives such as allowances which are not conditioned with employment or maximized earning capacity. Furthermore, enhancing the quality of post-secondary professional and technological training is imperative. This improvement involves aligning the curriculum with market demand, ensuring relevance to industry needs, and eliminating specific barriers that may hinder access for diverse populations. By doing so, these training programs can serve as a central mechanism for enhancing productivity and wages, particularly among individuals who do not pursue traditional academic studies.

²⁷ For the research on the subject, see: Tekhawkho, Larom, and Jabali-Sirhan, S. (2023), "Policy to promote quality employment among young people in Arab society", Aaron Institute for Economic Policy.

²⁸ Regarding high-tech skills, see: Hashai, Sumkin, and Nir (2022), "What are the skills required of high-tech workers", Aaron Institute for Economic Policy. Regarding language barriers among workers in the Arab society, see: Tekhawkho and Kalisher (2023), "Hebrew Language Literacy in the Arab Society: Standards Measures & Assessment", Aaron Institute for Economic Policy.

3. Policy Recommendations

Given the economic threats posed by the ongoing conflict, it is crucial for the government to exhibit responsible and professional conduct. This conduct should transcend political or sectoral considerations, actively fostering economic and social cohesion. The primary objectives are to minimize adverse economic impacts and to restore the sense of personal security among the citizens of Israel. **Aaron Institute's recommendations:**

1. Given the alterations in the macroeconomic landscape and the deceleration of economic growth, coupled with necessary war-related expenditures, it is imperative to exercise fiscal responsibility. Specifically, adhering to a deficit framework of 5% of GDP is crucial to sustain the debt-to-GDP ratio at a level that safeguards against a credit rating reduction. The augmented spending should be financed through maximizing the utilization of distributive funds and budget diversions, notably optimizing the 2024 budget by diverting a minimum of NIS 15 billion. It is advised not to raise taxes in 2024, except for the cancellation of tax benefits that do not incentivize employment.
2. There is an immediate need to reconstruct the 2024 budget to effectively address the evolving demands of the economy, encompassing areas such as security, internal security, health, and welfare. The defense budget should incorporate necessary measures to sustain the operational readiness of the military. This involves a thorough examination of the required force structure and potential considerations for a sustained increase. Additionally, allocating a budget to support victims and evacuees is paramount, aiming to facilitate their return to a semblance of normalcy in their daily lives.²⁹
3. Maintaining public investment in infrastructure, particularly in transportation infrastructure, is crucial considering the significant disparity in the stock of public capital between Israel and benchmark countries. This is especially important given the substantial positive impact that such investments have on economic growth. Prioritizing projects in the infrastructure sector with the highest growth potential is necessary. Additionally, a comprehensive plan for infrastructure investments should be developed, aiming to narrow the gaps with benchmark countries by 2040.

²⁹ The budget should encompass essential household expenses, including housing, property, education, and mental care. These allocations should be determined by assessing the expense structure of a "representative family," considering the age of the head of the household. To address the varied needs of households, we recommend categorizing them into four age groups based on the head of the household: 20-29, 30-44, 45-64, and 65 and over.

- The ongoing war has underscored the importance of another category of public investment aimed at fortifying Israel's resilience. This includes initiatives such as tunneling for vital infrastructures and safeguarding educational buildings. These projects should be incorporated into planning frameworks through collaborative efforts involving the Ministry of Defense, planning authorities, and relevant entities.
- 4. The focus of the year 2024 should be dedicated to the formulation of actionable work plans addressing critical areas for enhancing labor productivity and fostering growth. This includes strategic initiatives such as the digitization of the public sector, comprehensive planning for transportation infrastructure over the next two decades, the elimination of barriers to competition and investments in the business sector, and the enhancement of professional training programs. Special emphasis should be placed on elevating the skills of individuals not pursuing academic or professional education. Further details on these initiatives are outlined in section 4.3.
- 5. In addition to upholding budgetary responsibility, the 2024 budget should incorporate substantial measures aimed at enhancing the government's execution capabilities. This involves fostering collaboration with local authorities and instigating organizational changes within the government, specifically focusing on the reduction and elimination of offices. The current composition of the government (the 37th government) comprises 34 ministries and 42 ministers. Such an expanded structure deviates significantly from the norm in advanced Western countries. In addition to the direct financial costs associated with its existence, this overgrown structure complicates decision-making processes, introduces points of friction and bureaucracy, and diminishes overall governmental efficiency.
- To address these challenges, we propose **the immediate adoption of recommendations put forth by the inter-ministerial team for implementing adjustments in the government structure (2018), under further reduction, of the government structure to include 15 ministries in the 2024 budget.** Our recommendations for eliminating redundant ministries and optimizing the workforce are estimated to yield immediate savings of approximately NIS 360 million.
- 6. Efforts should be directed towards enhancing the government's execution capabilities through strategic professional appointments within government entities and their execution mechanisms. It is imperative to ensure that the senior management avenue in government ministries is staffed with individuals possessing the requisite qualifications for their positions. Senior professional appointments play a crucial role

in the day-to-day functioning of the government sector and are especially vital for its effective operation during times of crises.

7. It is essential to create incentives and a supportive environment to encourage the return to pre-war employment levels; and to ensure that aid programs for businesses and employees do not create negative incentives for returning to work.
8. Since the war's onset, employment among prime working-age Arab men (25-64) has been disproportionately affected compared to other demographic groups.³⁰ Some of the Arab workers are currently absent due to war-induced tensions (stemming from concerns about personal safety or the lack of employers' or coworkers' willingness for them to work among them). We recommend proactive efforts to reintegrate them into employment, emphasizing the removal of barriers to absence, including for a targeted focus on enhancing the sense of belonging and cohesion within Arab society.
9. The war has become a pivotal moment for ultra-Orthodox society, showcasing a distinctive voluntarism unprecedented in previous events. This voluntarism presents an opportunity to enhance the economic and social integration of the ultra-Orthodox community, especially given their reduced reluctance to engage in heterogenic workplaces. Exploring avenues for voluntary integration, both into the military service and civilian roles that offer economic benefits for individuals and the broader economy, is essential. Particular attention should be given to tailoring programs to accommodate their lifestyle, including the possibility of combining military or civilian service with Yeshiva studies. Unemployed individuals, both men and women, should be directed towards available positions, with a focus on filling roles left vacant by those recruited into reserves, and including subsidizing short professional training programs. Equipping individuals with the necessary knowledge and skills for the labor market is essential, including of incorporating math and English studies for the younger population.³¹
10. To promote the integration of diverse populations, including those from Arab and ultra-Orthodox communities, into high-quality employment, we propose **enhancing the quality of post-secondary professional and technological training** to align with benchmarks set by advanced countries. This involves adapting subject offered to meet

³⁰ For the full analysis and policy recommendations, see: Tekhawkho, Leventhal, and Partush (2023), "The Effects of War on Arab Society and the Required Policy Measures", Aaron Institute for Economic Policy.

³¹ For an analysis on the subject, see: Axelred and Trachtengut (2023), "The Ultra-Orthodox Society during the Iron Swords War", Aaron Institute for Economic Policy.

market demands and collaborating with employers to design study programs and specializations that guarantee the acquisition of necessary and foundational skills such as languages and mathematics.

11. the absence of foreign and Palestinian workers³² in Israel's construction and agricultural sectors has become evident, with foreign workers returning to their home countries and the security blockade affecting Palestinian workers. Regarding Palestinian workers, given the challenges of an immediate and complete separation between Israel's economy and the Palestinian Authority, and considering the undesirability of exacerbating economic conditions in territories with potential security repercussions for Israel, it is imperative to implement measures to mitigate security risks associated with the employment of Palestinians in Israel. These measures align with the recommendations of the 2011 Eckstein Committee:³³

- Daily employment of Palestinian workers in Israel, with no stays in Israeli territories after work hours, and the employer assuming responsibility for worker transportation to and from the worksite.
- Implementation of a digital tracking system to monitor the stay of Palestinian workers in Israel, recording entry and exit details, and daily reporting to relevant authorities (immigration, police, general security agency) with immediate notifications in case of non-compliance with permit conditions.
- Regulation of wage payments through bank transfers (rather than in cash), encompassing social benefits. Strengthening enforcement of employment conditions specified in permits, enhancing coordination among enforcement bodies, and implementing sanctions against violators.
- It is important to note that while relying on foreign and Palestinian workers helps address labor shortages, particularly in construction and agriculture, a significant portion of these workers possesses lower skill levels. Consequently, their employment hinders the assimilation of advanced technologies in these sectors, as these low-wage workers serve as substitutes for capital investments. Therefore, economic policy should prioritize measures that enhance competitiveness, fostering productivity improvements in these industries.

³² As of September 2023, data from the Population and Immigration Authority indicates that 150,000 foreign workers were employed in Israel, excluding Palestinians. The National Security Council reports that on the eve of the war, approximately 160,000 Palestinians with permits entered Israel.

³³ The Report of the Committee for Regulation, Supervision and Enforcement in the Employment of Palestinian Workers in Israel (2011).

12. Given the shortage of workers in the construction industry and the low productivity levels, we propose an immediate initiative to eliminate barriers for entry of foreign companies, as indicated by the STRI index of the OECD.³⁴ Enabling the participation of foreign construction firms will facilitate the introduction of advanced construction technologies and management practices into Israel. The swift removal of entry barriers is crucial, accompanied by encouragement for the employment and training of local workers by these foreign companies.
13. The shortage of workers in the agricultural sector has underscored Israel's challenge in ensuring food security solely through local agriculture. Consequently, we recommend the removal of import barriers, encompassing both tariff and regulatory impediments. This action is anticipated to improve the availability and diversity of agricultural products in Israel, addressing the current seasonality associated with locally produced goods.

³⁴ The STRI (Services Trade Restrictiveness Index) assesses the level of openness in 22 branches of commerce and services to the entry and operation of foreign companies. A score of 0 signifies a fully open economy, while a score of 1 indicates a completely closed economy. Israel is classified as a country with substantial entry barriers, evident in its total index score of 0.309, placing it fourth from the bottom, following Iceland, Mexico, and Korea. The combined score of the benchmark countries stands at 0.205. In the construction industry, Israel's index score is 0.304, positioning it second from the bottom, surpassed only by Iceland. The index score for the construction sector in benchmark countries is 0.189.