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# Aaron Institute for Economic Policy In the name of Aaron Dovrat z"l

The vision of the Aaron Institute for Economic Policy is to sustain economic growth and social strength in Israel, by researching, modelling and developing modern, innovative and up to date strategies and policy tools for the Israeli economy, based on up-to-date global knowledge.

All modern economies aim for economic growth, achieved through employment increase and a rise in workers' productivity. The Aaron Institute conducts economic research that yields proposals for innovative policy tools and reforms for promoting growth, employment and productivity. The goal of policy research is to influence monetary and fiscal policy, as well as to formulate long-term plans for economic and social issues and contribute to the narrowing of social gaps. The institute aims to affect professional discourse, spur discussion based on credible information and socio-economic research, which will ultimately provide tools that will support a growth path and create social resilience in Israel.

The main aim of the Aaron Institute for Economic Policy at the Tiomkin School of Economics is to develop policy strategies that eliminate weaknesses and empower the strengths of the Israeli economy. We propose broad reforms as well as policy changes to particular industry sectors. In this framework Israel's relative advantages in technologic innovation and advances in the public and services sectors can be maximized. At the Aaron Institute, we crucially define quantitative goals while involving some of the countries' best economists in research and policy paper discussion meetings.

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## Investment Policy Strategy and Reforms for Enhanced Productivity and Growth

Summary data for 2020 reveal the economic damage wrought on Israel as a result of the worldwide COVID-19 outbreak in March 2020, showing a 2.4% decline in the GDP. This drop in GDP was driven by a sharp decrease of 9.4% in private consumption. This decrease was mainly caused by restrictions imposed on businesses as well as the general public in order to curb the spread of the pandemic. The business sector divisions whose activity was most severely disrupted are retail trade (G); food and hospitality services (I); art, entertainment, and leisure (R); and transportation (H). These sectors suffered a hard blow in terms of demands and revenue; some of them - mainly incoming tourism, the entertainment industry, and non-essential commerce - had been completely shut down. The slump in demands sustained by these sectors, which are mainly oriented towards the local market and less exposed to international trade, has been translated to a decline in private consumption. Consequently, a high proportion of these businesses had placed their workers on furlough. The relative share of these sectors in employment (in terms of employees and working hours) is higher than their share in the GDP; therefore, while the damage to these sectors caused a severe drop in employment rates, the decrease in the GDP was more moderate.

Although an upswing in productivity and in the real average wage was recorded in 2020, this rise is artificial and does not reflect an actual improvement in labor productivity. This is because the damage caused by the crisis has been disproportionate, and many of the unemployed and furloughed workers in the commerce and services sectors belong to a younger population with lower employability skills, whose salaries had been lower than average, as well as workers from Arab and Haredi (ultra-Orthodox) societies. The exclusion of these workers from the labor market, and from the relevant data, led to an increase in both labor productivity and the average wage, but as previously noted that increase does not reflect an improvement, but a severe employment crisis among low-income workers. Employment policies enacted during the crisis included prolonged payments of unemployment benefits, in a manner which created incentives to remain out of employment. We assert that sustainable advancement of workers below the median income should be generated through the rate and quality of employment (labor productivity), driven by guidance, training, and placement in order to support reintegration into a changing labor market, and not through transfer payments.

Even if the employment program we propose in this paper is implemented, and employment rates in Israel return to pre-COVID levels, this growth engine is about to be exhausted. Hence, the crisis has not changed the main growth barrier facing the Israeli economy – low labor productivity – which is the main reason for Israel's failure to bridge the gap in living standards, as measured by GDP per capita, vis-á-vis the benchmark countries. These benchmark countries are similar to Israel in terms of population size, and in the sources of their economic growth which relies heavily on human capital, however they are marked by higher rates of GDP per capita and labor productivity, and by lower poverty rates. Countries included in this group are Austria, Denmark, Finland, Ireland, Sweden, and The Netherlands. They all share GDP per capita levels which are higher than OECD average, and low poverty rates. In 2019, the GDP per capita in Israel was 37,800 USD, lower by 26% than the average GDP per capita in benchmark countries – 51,300 USD (OECD data, constant 2015 USD, PPP).<sup>1</sup> An analysis of the trends in the level of the factors of production in the Israeli economy, along with the demographic characteristics of the population and its growth rate, unequivocally indicates that without government attention to the issue of labor productivity, the productivity gaps in Israel vis-á-vis leading countries will continue to expand. Our main recommendation for addressing productivity gaps at the present is to increase both public and private investment in the economy. This paper presents the need for increased investment which exists in the economy; the necessary policy in regard to public investment; a proposed policy for encouraging private investment, and the funding aspects of government investment.

<sup>&</sup>lt;sup>1</sup> Average without Ireland. The average GDP per capita in all benchmark countries, including Ireland, is 56,700 USD.

The GDP per hour worked in Israel is 40.9 USD, compared to 66.2 USD in the benchmark countries - a gap of 25.3 USD per hour worked.<sup>2</sup> In order to set priorities for the government's consideration, we conducted a macroeconomic analysis which delineates the relative role of each factor of production in determining the gap in GDP per hour worked visá-vis benchmark countries. A comparison of the data on the various factors of production indicates that the stock of public capital per capita accounts for 27.5% of the productivity gap, which amounts to 6.9 USD per hour worked. The stock of public capital in Israel, which consists primarily of transportation infrastructures (75%), is lower than the average of the benchmark countries by 65%, and is in fact the lowest among OECD countries, apart from Latvia. The stock of public ICT capital in Israel is lower by 37% compared to benchmark countries, and this gap accounts for 2.1% of the productivity gap in Israel, which amounts to 0.5 USD per hour worked. The stock of private capital per hour worked in Israel accounts for 34.8% of the productivity gap, which means a gap of 8.8 USD in the productivity per hour worked. The data on the stock of private capital in Israeli firms shows insufficient investment in capital: the level of private capital in Israel is 88 USD per hour worked, whereas the level of private capital in benchmark countries is 199 USD per hour worked. That is, the cumulative investment of the business sector in machinery, equipment, and innovation is 56% lower than in the benchmark countries, even though the national economies share similar structure. The gap in human capital quality, as reflected in workforce competencies, accounts for 24.2% of the productivity gap, representing a gap of 6.1 USD per hour worked.

Table 1: Components of the Labor Productivity Gap between Israel and Benchmark

Countries

Gap per Hour Worked	25.3\$	100%
Public Capital per Capita	6.9\$	27.5%
Public ICT Capital per Capita	0.53\$	2.1%
Private Capital	8.8\$	34.8%
Human Capital	6.12\$	24.2%
Total Factor Productivity (TFP)	2.8\$	11.3%

Source: Aaron Institute calculations based on IMF and OECD data.

<sup>2</sup> Across all economic sectors, OECD data and Aaron Institute calculations, average value for the years 2016-2019.

Public investment data show that Israel has suffered from under-investment in public capital for decades. The lack of sufficient investment over such a long period of time has now emerged as a barrier to economic growth. Therefore, the policy we recommend is substantial expansion of projects which enhance inclusive growth and improve productivity, reiterating that the government has a vital, major role in creating such projects. Such a policy will both create demands in the short term and support overall growth in the longer term. Our proposed government investments meet the following criteria: significant reforms which accelerate economic recovery from the crisis and focus on bridging the gaps vis-á-vis benchmark countries in terms of public, private, and human capital, thus stimulating growth in the longer term. Precedence should be given to plans which have broad support, and those which are ready for implementation. We would like to stress that we do not advocate an indiscriminate expansion of government expenditure, certainly not as a goal in itself or as a means to increase demands; our recommendation is to increase government expenditure only inasmuch as it is directed to investments which enhance growth, productivity, and employment, as part of the crisis recovery process as well as in the long run.

#### Policy for Reducing the Public Capital Gap

Our main recommendation is to raise public investment by some 2% of the GDP, up to around 6%, amounting to an additional investment of around NIS 29 billion per year. Our analysis indicates that government investment should be maintained at a level of around 6% of the GDP at least until the year 2030, in order to gradually reduce the existing gaps in all types of public capital, particularly public transport, environmentally clean energy, and digital technologies (ICT), while the population grows at a rate of about 2% annually. This additional investment will be funded by debt in the next few years, as debt raising costs for the government are at an all-time low. For several years now, Israel's long-term interest rate (10 years) has been similar to or even lower than that of the United States, and it is historically low despite forecasts for an increase in debt, as is the market insurance premium on government bonds (CDS). Never before had Israel enjoyed such a low risk assessment in the capital markets, on par with large, stable European countries such as Poland and the Czech Republic. We expect interest rates to remain at such low levels as long as debt volumes do not exceed 85% of the GDP.

In this paper, we detail the necessary public programs in regard to transportation infrastructures, energy, digitalization, and housing. In cases where investments are held up due to implementation difficulties, funds will be deferred for investment in pursuant years, and will not be used for other public expenditures, particularly not for transfer payments. Our calculations show that, in an optimistic scenario, additional investment of 2% of the GDP every year until 2030 (reaching a total of 4% of the GDP) will increase long-term growth rate by an additional 1%. This investment will also boost employment, provided that an employment promotion policy is enacted as per our proposed outline, so that employment rate returns to 78% by the end of 2022. The volume of public investments we propose will raise the debt-to-GDP ratio to 84% at the end of 2026. Our analysis shows that the debt-to-GDP ratio will start decreasing again in 2027, reaching 77% by 2030, since we are currently at a unique position where it is highly probable that the interest rate will remain significantly lower than the expected growth rate, as long as the additional debt is used for growth-enhancing investments.

We would emphasize that the increased investment we recommend must be accompanied by an orderly budget policy. Over the last year, the state budget has been held hostage to political considerations, and it is imperative to return to a professionally managed budget policy, and to stop using various singular "boxes" and handing out assorted transfer payments which do not yield significant returns in terms of long-term economic growth. The state budget constitutes the government's work plan, hence the operation of government offices is hampered in the absence of a budget, as was the case in the past two years. Therefore, a key objective for the coming year is to return all government offices to full, effective operation, and to arrive at an approved budget which outlines set priorities, while also gauging and considering the alternative cost for each expense.

#### **Policy for Reducing the Private Capital Gap**

Another factor which contributes to increased government and private investments is the issue of import, which is analyzed in this paper. Import data indicate that Israel's import rate is relatively low in international comparison – 28% of the GDP. Examination of trends over time shows that for more than a decade now, Israel has undergone a gradual decline in the share of import in GDP, while other countries exhibit an opposite trend. The openness of the economy is of vital economic importance, as it facilitates expertise and capitalizing on relative advantages.

We argue that the low level of import is a result of the low rates of investment – both public and private – in the Israeli economy. An international comparison of the stock of aggregate capital - public and private - in OECD and benchmark countries highlights that the stock of aggregate capital in Israel is extremely low. Since the majority of investment inputs are imported, the low rates of investments in Israel also induce low import volumes. Examination of the various categories of import reveals that the relative share of the imported inputs has been decreasing since 2007. Import of services to Israel has also declined, and its current level is low. This category of import refers to the activity of foreign firms in Israel. This topic is discussed at length in our paper - Israel has barriers to entry of foreign firms in the commerce and services sectors, as measured by the OECD's Services Trade Restrictiveness Index (STRI). Furthermore, all global rankings and indices, as well as an international comparative analysis conducted at the Aaron Institute and supported by OECD and IMF reports, show that the regulatory and bureaucratic structures in Israel constitute a high tax on investing in Israel. These additional costs discourage private enterprise and investment in Israel, as reflected in the extensive overseas investments made by Israelis.

The prominent role of insufficient investments as a primary cause of Israel's low labor productivity, along with the low level of openness in the economy which hinders its capacity to enjoy the associated relative advantages for the benefit of all citizens, highlight the need for a government policy which supports competition and investment by optimizing and streamlining the regulatory apparatus. In order to encourage private investments, market competitiveness must be improved by lowering barriers to entry and reducing the administrative burden – these measures are crucial to encourage enterprise, innovation, and investments. Digitalization of the interfaces between government offices and the business sector is an important step towards reducing the administrative burden on the business sector. Bridging the gap in public ICT capital stock is expected to raise the GDP by NIS 14 billion per year (around 1% of the GDP). This is an investment on a significantly smaller scale compared to investment in transportation infrastructures, which nevertheless has a major potential impact on government efficiency, the optimization of bureaucracy, and the advancement of the business sector due to the need of some businesses for technological update in order to match the new government interfaces.

We assert that it is not feasible to go on predicating the entire policy response to the issue of exchange rates on the temporary, local remedy of acquiring US dollars, since without an increase in import rates, under current trends, the Israeli Shekel might keep getting stronger thus impairing the export potential of the Israeli economy. In this paper we detail our specific recommendations for reducing the administrative burden, along with a comprehensive, pivotal shift from a government policy which is geared toward encouraging export, to one that aims to boost productivity in the private commerce and services sectors, as well as other local industries.<sup>3</sup>

#### **Policy for Reducing the Human Capital Gap**

The current crisis is characterized by a severe blow to the commerce and services sectors, particularly in regard to the employment of low-skilled workers, who constitute a large proportion of the unemployed. In this context, it is all the more important to adopt and implement the recommendations of the Employment 2030 Committee, which call for raising the rate and quality of employment across all population groups, particularly those whose income is below the median and workers from Arab and Haredi societies. Therefore, our recommendation is to adapt crisis recovery policies to accommodate a return to pre-crisis employment rates (78% for ages 25 to 64) by the end of 2022, along with immediate, forceful enactment of the Employment 2030 Committee's recommendations for vocational training courses which match existing market demands and offer graduates a significant return (6%) in terms of productivity and income, while expanding numbers of trainees. At the same time, the ad-hoc safety nets which were provided during the crisis should be terminated completely; unemployment benefits should return to their usual levels and conditions, including the obligation for in-person attendance in employment centers and participation in employment schemes, and effort should be made to expand the number of participants in such schemes which comprise vocational diagnosis, guidance, and placement.

<sup>2</sup> 

<sup>&</sup>lt;sup>3</sup> These proposals are the main recommendations in the report of The Committee for Economic Advancement of the Commerce and Services Sectors. The committee was co-chaired by Prof. Zvi Eckstein, Head of Aaron Institute, and Ms. Michal Fink, Deputy Director General for Strategy and Policy Planning at the Ministry of Economy and Industry. The committee concluded its work in June 2021, and submitted its final report to the Minister of Economy and Industry in July 2021.

This paper outlines the policy measures which would stimulate private investments, as well as the key reforms and projects which are necessary both to boost employment in the short term, and to enhance productivity in the medium- to long-term. We would like to stress that some of the reforms and investments proposed in this paper were already acknowledged in the Arrangements Law ratified by the government in November 2021, in the structural changes planned for the Ministry of Finance, and in dedicated budgets. These include employment targets for 2030 and vocational training reforms; investments in infrastructures, specifically the construction of the metro; regulatory optimization and reduction of bureaucracy, along with the establishment of a dedicated regulatory authority; encouraging import; advancement of digitalization in government offices; and investment in programs targeted at Israel's Arab society.