SUCCESS STORIES FROM POST WAR RISK MANAGEMENT:
THE CASE OF ISRAEL

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Introduction. Current economic situation in Armenia is controversial in terms of existing risks and opportunities. Further growth depends not only on utilizing local resources but also considering success stories of post-war recovery from other countries. We suggest to pay particular attention to the trends and development in Israel after the war. In the post-war period, the state of Israel faced a number of risks at once. The economy was poor and production was underdeveloped. The area on which the state was created was almost completely devoid of minerals, besides, most of it was deserted. In addition, from the very first days of its existence, Israel had to gradually neutralize serious threats.

Scientific novelty. Compared to other studies, we do not intend neither to exaggerate the positive trends in Israel, nor to underestimate the progress made in this relatively young state. Instead, we attempt to comprehend the threats and challenges for the nation since the first year of its' existence and reveal national competitive advantages that served a solid ground for maintaining proper level of economic security and progress. On the one hand, Israel had to allocate large sums to protect itself from its neighbors, on the other hand, the absorption and integration of many repatriated Jews into the economy required even greater allocations. At first the country did not even have enough food, they were distributed to the population by coupons.

Methodology. Methods used in our study are those tools and approaches used by the scientists who examine the peculiarities of recovery after war, particularly, concerning the recovery and reconstruction of economy in Israel. We mainly focus on issues related to economic growth, competitiveness, facilitating exports, as well as the ways and methods used economic analysis. Comparative analysis of economic indicators with other countries are also used in our study.

Literature review. Many studies examine Israel's economy starting from the foundation of the state. Some researchers analyse the natural resources of the nation such as water, energy, other resources, while the others observe the indicators related to the ability of the state to build and maintain proper level of food security, energy security, demographic security and others [Amer, 2017, 46-49]. Many scholars such as Zafar Adeel, Benno Böer, and Walid Saleh continuously study the trends and economic developments in Israel. Solid resource base of analysis is considered the World Facts Book to
examine relevant data, as well as the U.S. Overseas Loans and Grants (Greenbook), the U.S. State Department, and the Missile Defense Agency. Notes, the USAID Data Services, etc. Comparing data related to the indicators of economic freedom of Israel is characterized by 10 factors: trade policy, state financial resources, state intervention, currency policy, foreign investment and capital flow, financial problems, wages and prices, property rights, laws and the market. We consider different approaches of scholars to develop an objective approach on mentioned topics. According to Walter Block, liberalization of the economy is the absence of state coercion to provide the necessary measures, distribution, distribution and consumption of goods and services to citizens. According to Gwartney and Lawson, liberalization of the economy means that people can work, produce, consume freely, and invest where they can be most productive. We also pay attention to economic liberalization of Israel as a process that leads to the reduction of state control over investments, goods and services, labor, markets, and regulation, mainly through market mechanisms. Also, according to Professor Richard Roll, in order be able to achieve the desired economic growth and prosperity, each of economic factors must have a positive impact. It is also worthy to consider the role of economic advisers in Israel's economic policy [Schiffman, Young, Zelekha, 2017, 7-16]. New approaches and policy recommendations are also considered in line with current global threats and challenges [Greenbaum, Arnon, 2021]

**Analysis.** The Israeli economy faced serious difficulties after the war. Since Palestine did not have rich natural resources, large territory, and good business opportunities, one could not expect the Jews to emigrate for material reasons. Ideological motivations became more important for them. Initially, the economic development of the fledgling state was greatly influenced by the aftermath of the Arab-Israeli war, as well as the problems associated with resettlement and the creation of economic foundations. The creation of relatively normal conditions for recovery took about six years, during which inflation reached 43%. During the first years of Israel's existence, the economy was on the verge of bankruptcy several times, so the state took urgent measures, such as controlling the prices of basic necessities and restricting the use of foreign currency. The population initially supported these measures, but for a long time the state could not effectively apply these restrictions.

The first sector of the economy that stood up was agriculture. The cornerstone of this process was the kibbutzim, agricultural cooperatives, in which practically everything was under the general control of the kibbutzim (there were no internal monetary settlements, there was complete equality, the "communal principle of each according to his ability, to each according to necessity" operated). Oranges were one of the most important commodities, and by selling them abroad, the Jewish state not only earned its first income in foreign currency, but also gained a reputation as an innovative, dynamically
developing society. Due to the sector in the region, today Israel provides about 95% of its food with its own agriculture: This is a major achievement, especially in the context of the global food crisis and high food inflation, which continues in 2022. At the same time, a large number of goods are exported to other countries of the world, despite the fact that only about 3% of the population is engaged in agriculture. In addition, despite the hot climate, Israel has achieved unique results in almost all areas of agriculture, in particular in the field of animal husbandry, Israeli cows are absolute world champions with high milk yield.

As a result of proper risk assessment and targeted management, the defense-military industry began to develop almost in parallel with agriculture in the post-war period. This happened because other countries refused to supply arms to Israel, they had to learn how to defend themselves, to survive, to gradually improve the weapons produced, the ammunition. In fact, the first products of the Israeli military industry were quite primitive, but over the years, the achievements of Israeli scientists began to be incorporated into the country's defense-military industry. Israeli military engineers have practically excelled in the design and production of drones, laser technology, specialized electronics, missile technology, tanks, ammunition, and certain types of small arms. As a result, Israel's defense and military products are in high demand around the world today.

The period from the mid-1950s to the mid-1970s can be described as a period of skilful economic risk management, the accelerated growth of the Israeli economy. During these years, the clear structure of the Israeli economy's GDP was formed, the economic dependence on other countries was reduced, which was one of the main threats to the economy. During that period there was a significant improvement in production assets, hundreds of enterprises were built, new production lines and new equipment were added to the existing ones. Accelerated industrialization - industrialization took place with the direct support of the state.

We are convinced that the main problem of this period that the government of the country was able to solve was the stimulation of the growth rates of consumption.

Among the potential challenges of the post-war period was the crisis that erupted in early 1965, when it became apparent that opportunities for further large-scale economic growth were practically exhausted. First of all, the crisis occurred due to the completion of several large national projects at once. These included the construction of the Pan-Israel Pipeline, which supplied water from north to south, the Negap desert, the port of Ashdod, the Potash mining plant in the Dead Sea, and the completion of a number of other works. All this led to a sharp decline in the activity of the real sector of the economy with the support of the state, a decrease in the volume of public works and jobs.
In addition to objective factors, the slowdown in growth was also influenced by the state's economic policy. At this stage, the government. He feared that a dynamic increase in income, as a result, an increase in demand could lead to a deterioration in the trade balance and inflation [Hanke, Krus, 2013]. Therefore, the government decided to artificially slow down the rapid economic growth with appropriate levers, raising interest rates on loans, reducing public investment and injections. However, already in 1966 it became clear that the controlled economic growth was not achieved, the economy found itself in a deep crisis. The number of unemployed doubled to 10% of the able-bodied population, industrial production fell sharply, and for the first time in that period a negative immigration balance was recorded. Due to the decrease in immigration, the growth and volumes of the construction sector were reduced. Finally, a significant negative factor was the sharp escalation of the political situation in late 1966 and early 1967.

After the war of 1967, the state again took measures to return the economy to the main course of dynamic growth. After the military operations, the military industry became the axis of industry development. During these years, a reorientation began to foreign markets, satisfying the demand abroad.

US financial support played an exceptional role in the establishment of the state of Israel, the development of the economy, and the growth of the competitiveness of the NIS. Below is the amount of US aid since World War II.

Table 1. Total US foreign aid to Israel in 1946-2020. Millions of dollars

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Armed Forces</th>
<th>Economy</th>
<th>Missile Defense</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946-2018</td>
<td>97,907,700</td>
<td>34,326,000</td>
<td>6,411,409</td>
<td>138,645,109</td>
</tr>
<tr>
<td>2019</td>
<td>3,300,000</td>
<td>-</td>
<td>500,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>2020</td>
<td>3,300,000</td>
<td>-</td>
<td>500,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Total</td>
<td>104,507,700</td>
<td>34,326,000</td>
<td>7,411,409</td>
<td>146,245,109</td>
</tr>
</tbody>
</table>

However, a number of complex issues remained unresolved, the main one being the foreign trade deficit, which doubled between 1966 and 1970. At the same time, the state budget deficit increased (it amounted to 12% of GDP in 1972), mainly due to the increase in financing of social needs and defense spending. The growth of real incomes in the country exceeded the growth of labor productivity in the economy. As a result, inflation increased to 14% in 1972. And further, 1973-1974 can be described as a period of transition from the rapid development of the Israeli economy to a more "mature" stage.

Sources: U.S. Overseas Loans and Grants (Greenbook), the U.S. State Department, and the Missile Defense Agency. Notes: The Greenbook figures do not include missile defense funding provided by the Department of Defense. According to USAID Data Services as of March 2020, in constant 2018 U.S. dollars (inflation-adjusted), total U.S. aid to Israel obligated from 1946-2018 is $236 billion.
At the same time, in the early 1970s, the growth of the working capacity of the population was quite limited, firstly, due to the reduction of immigration, secondly, the increase in the number of armed forces, expenditures for that purpose, as well as the increase in military service. These reasons, in turn, led to a significant outflow of labor from the industrial sector. At this stage, the share of those employed in the public administration and other public services increased. In addition, increasing the living standards of the population reduced the wage-productivity ratio. On the other hand, the beginning of the slowdown in economic growth began in 1973, coincided with the growth of gross consumption. Negative trends - the economic risks caused by them increased again with the oil crisis, which occurred in 1973, the country's economy led to a new phase of decline. Inflation in the same year was 20%, and in 1977 it reached 44%, GDP in these years was 3-4%, which is approximately equal to population growth, the volume of capital investment and construction decreased, recording negative trends for the first time. Monetary-monetary systems were not left without negative tendencies. Although the exchange rate was set by the government in those years, however, the trade balance failed to improve; in 1974 it depreciated against the US dollar, from 4.2 to 6 lira. In addition, different exchange rates were set for different areas of activity, including hidden taxes or subsidies, depending on government policy. For example, in 1975 a new "floating exchange rate" policy (Hebrew: "בלי הכסף הממשלתי") was announced, which led to the gradual devaluation of the lira at a slower pace than usual. Later, the Israeli economy underwent monetary reforms to curb inflation. The Israeli "Shekel" currency was replaced by "new shekel", one new shekel was worth a thousand old shekels. This is the third monetary reform in the history of Israel after the Palestinian pound was replaced by the Israeli pound and the Israeli pound by the shekel.

The need for more effective risk management in these conditions led to Ehrlich's famous reforms, which included the long process of currency liberalization from 1977 to 1984. The main goal of the reforms was to manage the existing risks by reducing state regulation and creating a market economy. Liberal economist Milton Friedman believes that Israel was in a unique, extremely dangerous economic situation at that time, when the general state expenditures were approximately equal to the gross national product. Friedman urged the government to cut spending and intervene in all sectors of the economy. Friedman warns Israel of dangers of hyperinflation [Cagan, 1956].

As a result, almost all restrictions on currency transactions were removed, the fixed exchange rate of the lira was eliminated, and from now on it was determined by the balance of supply and demand.

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1 The new government was headed by Menachem Begin, and Simcha Erlich was appointed Minister of Finance, who initiated a large-scale reform called the "Economic Revolution". (הפה ההלללי: הקוספים:).
In addition, a number of indirect taxes were eliminated, such as the foreign travel tax, and VAT was reduced from 8% to 12%. Inflation reached triple digits for the first time in 1979, exceeding 111%, after which Ehrlich was forced to resign. The results were catastrophic. The devaluation of the money entered a phase of hyperinflation, reaching 450% in 1984 and 500% in the first half of 1985. In the summer of 1985, an economic stabilization program was launched, which had two main goals: to reduce the budget deficit and to fight inflation [Schiffman et al., 2017, 7-16]. The main points of the program were:

- Radical reduction of budget expenditure items, first of all all types of subsidies;
- Reduction of real wages on the farm to reduce domestic demand, increase the competitiveness of Israeli exports, reduce unemployment;
- Significant devaluation of the dollar against the dollar; stabilization of the exchange rate as much as possible at a new level; its long-term maintenance;
- Freezing prices for a limited time.

It should be noted that these reforms were significantly facilitated by the broad public consensus on the need to curb inflation, as well as the compromises reached in negotiations with the business sector and trade unions. The main concession by the government was the reversal of the decision to lay off civil servants, and the unions, in turn, agreed to a significant reduction in salaries in the public sector. At the end of 1985, it became clear that the immediate goals of the program had been achieved: the annual inflation was 20%, the budget deficit was significantly reduced, this trend was maintained for the next three years, and the regulations were somewhat weakened. For fiscal reasons, the budgets of 1986-1989 did not fully include the cuts originally planned in fiscal policy. The success was due to external factors: a significant drop in world oil prices, a grant from the United States of one and a half billion dollars. In 1986, a new currency was introduced, the new Israeli shekel, which replaced the shekel. The exchange was made at the rate of one thousand. Despite a significant improvement in a number of indicators, the strategic problem of risk management was not solved, economic growth remained at the level of the crisis of 1965-1967.

After many years of stagnation in the economy, one can single out the positive phenomena of the growth of production by 8% in 1986-1987, as well as the growth of investments by 12%. During these years the country's foreign debt was also reduced. As a result of curbing inflation, it was possible to shift the activities of entrepreneurs from commercial, speculative activities to the real sector. However, the anti-inflation policy led to a slowdown in economic growth. The artificial overvaluation of the shekel exchange rate led to a decline in the activities of both exporters and import substitute producers. Militarization also affected industrial production. But the military industry, in turn, also had an impact on economic production, as there were production lines that
produced goods for both the military and the civilian spheres. These are dual-use products that are getting tighter and tighter [Greenbaum, 2021]. Until the 1980s, high-tech production also developed rapidly. Thus, these decades have become crucial years compared to the previous growth rates. During this time, however, Israel's economy underwent significant reconstruction. At the same time, these years had a negative impact on Israel's foreign relations.

Israel also had good arms exports in the 1980s. However, in the mid-1980s, the highly diversified production of arms for export began to decline. There were several reasons, one of which was the more profitable offers from the West. In the 80s and 90s, the Israeli economy was quite developed in the production of textiles, household goods, as well as production and export, which is considered a traditional branch of diamond processing. Using imported raw materials, Israeli diamond production has taken a leading position in the market. Despite the high indicators of industrial production, agriculture was also experiencing some development. In the 1980s, Israel's fruit and vegetable exports quadrupled to $600 million. It was facilitated by the climatic conditions.

In the first half of the 1990s, the Israeli economy flourished again. This was followed by mass immigration after the collapse of the USSR. It is estimated that more than 700,000 people immigrated to Israel from the USSR, as a result of which the population of Israel increased by 12%. Among them were many highly qualified specialists. After the immigration of the population from the USSR, large-scale construction began in the country, and the labor market was also greatly replenished with highly qualified personnel. This stimulated the growth of high technology. The establishment of relations with other countries and the reduction of the military budget also contributed to the growth of the economy. During these years, Israel was one of the fastest growing economies in the world, among the economic growth indicators of developed countries, the country had a leading position with many indicators of economic growth.

The temporary improvement of the situation in the region, which was connected with the Norwegian agreements in 1993 and the signing of the peace agreement with Jordan in 1994, led to a sharp increase in foreign investments in the country's economy. Later, in 1997, the IMF included Israel in the list of industrialized countries. External relations were of great importance for the development of the country, which enabled the import of modern services and goods, thus modernizing its production assets. Funds received from abroad contributed to the development. With a per capita financial assistance of $148, Israel ranked first in the world. As a result, the country's economic freedom improves, which is characterized by a number of integral indicators.¹, which are

¹ Each year, the Heritage Foundation's Wall Street Journal evaluates the following 10 factors by country: 1. business liberalization, 2. trade liberalization, 3. tax liberalization, 4. State participation, 5. currency liberalization, 6. investment liberalization, 7. financial liberalization, 8.
considered in two ways. The first is the Economic Freedom Index (ECI), which has been
calculated for 179 countries since 1995 by the Heritage Foundation and the Wall Street
Journal. The second version, the World Economic Freedom Index (WTI), has been used
by the Fraser Institute since 1970. Figure 1 summarizes the economic freedom index cal-
culated for Israel for 2017-2021. in terms of:

Today, Israel's scientific achievements have become a real driver of development
in all areas of the economy. The country has become internationally competitive in all
areas of science, high technology, from pharmaceuticals to aviation, mechanical engi-
neering, metalworking, agricultural technology, industrial chemistry, and diamonds. The
world leadership of the Jewish state has achieved impressive results in the number of
scientists, high-tech specialists, scientific publications, registered patents, research and
development costs. As a result, Israel has become one of the largest centers for the de-
velopment of electronics, computer technology, IT technologies, telecommunications
equipment.

Conclusion. Thus, the international experience of risk management has many ins-
tructive aspects, it can be useful for the recovery, stabilization and development of the
Armenian economy in the post-war period. At the same time, when localizing the inter-
national experience, one can take into account the peculiarities of Armenia both in terms
of geopolitical and new challenges in terms of choosing this or that measure of reforms

property rights, 9. labor liberalization, 10. liberation from corruption. According to Professor
Richard Roll, in order for a country to be able to achieve the desired economic growth and
prosperity, each of these 10 factors must have a positive impact. In terms of the index of economic
liberalization, the states are divided into five groups. 1. Free when the average score is 80-100, 2. 
Almost free when the average score is 70-79.9, 3. Balanced free, 60-69.9 average score, 4. Partly
government dependent when 50- The average is 59.9, 5. It depends entirely on the government
when the average is 0-49.9.
in the face of epidemic, domestic economic, political, political problems and trends. In addition, it is possible to take into account the degree of integration of our country in regional and global processes, as well as the current level of competitiveness and realistic opportunities to improve it.

**References:**

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**Success stories from post war risk management: the case of Israel**

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As the history of Israel's economic development shows, the small area, the small population and the lack of rich natural resources are not an obstacle to economic growth, the development of science and technology and the improvement of living standards. It was facilitated by the entrepreneurial inclinations and qualities of the people, the support of foreign countries and the Diaspora, as well as a relatively stable and healthy political system. Despite the difficult conditions, the economy resisted the absorption of many immigrants, ensuring the security of the state, creating a modern economic infrastructure. In particular, in the early 1990s, the number of repatriates arriving in Israel increased sharply, mainly from the former Soviet Union (see Greater Alia). In total, more than 600,000 people arrived between 1990 and 1996. In the short run, the wave of immigration led to a sharp increase in the budget expenditures for their adoption, housing and maintenance at the initial stage, an increase in unemployment, which exceeded 10% of the able-bodied population. However, in the mid-1990s, it became clear that factors such as the emergence of a large number of skilled workers in the labor market and the sharp increase in domestic demand had a positive effect that transcended temporary difficulties.