

Israeli defense economy in conditions of permanent confrontation

Svitlana Lehominova ^{*A}; Tetiana Kochura ^A

^{*}Corresponding author: Doctor of Economics, Associate Professor, Head of the Department of Information and Cyber Security Management, e-mail: chiarasvitlana77@gmail.com, ORCID: 0000-0002-4433-5123

^AState University of Telecommunications, Kyiv, Ukraine

^BMilitary-Diplomatic Academy named after Yevgeny Bereznyak, Kyiv, Ukraine

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Abstract

The strategic directions of the Israeli defense economy development, caused by the permanent state of danger for the country, are revealed. The dynamics of the Israeli military expenditure and the country's ranking on military expenditure among the world's major players are analyzed. The main stages of Israel's militarization and the military industry development are outlined. The significant influence of the state, foreign investments and cooperation with the United States on the development of the defense industry are highlighted, modern ambitious priorities in ensuring national security are identified. The negative trends of the political situation in the Middle East are pushing the Israeli leadership to strengthen the country's military-industrial complex and military cooperation with the United States for the sake of a qualitative advantage of the Israeli army over the armies of other countries in the region.

Key words: defense economy, military expenditure, exports, confrontation, Israel.

Introduction

The specifics of Israeli national security system can be described as the confrontation of various external and internal threats, which leads to the need of formation of flexible guidelines' cooperation with other countries to address their own pressing problems and create a strong military capability to repel the aggressive enemy attacks. Active implementation of new technological

developments in the field of armaments and military equipment to meet the army needs, as well as the production of the bulk of it for export for research and development (R&D) brings the country to the world leadership in creating a model system of protection and up-to-date models of weapons that have passed real tests and proved their functionality and effectiveness.

Analysis of recent research and publications

Issues of development of the military-industrial complex (MIC) of Israel, features of security mechanisms were studied by domestic and foreign scientists, namely: Petrenko A., Epstein A., Netanyahu I., Morozov V., Shuminov M., Sharp D., Broad M., Deger S. and others. Their papers reveal the preconditions and genesis of the Israeli military-industrial complex formation, its constituent elements. At present,

the question of the relationship between the political, economic and security factors, contributed to Israeli defense economy needs is to be clarified.

The purpose of the article is to analyze the directions of the Israeli defense economy development in the interests of the country's national security. Consider using the Israeli experience for Ukraine.

Results and discussion

The basis for the creation of the Israeli strong defense economy is a market, technologically advanced economy of the country with the significant participation of its state. The location of the powerful multinational corporations' branches (TNCs) Intel, Apple, high-tech TNCs – SAP, IBM, Microsoft, Oracle, Dell, Google, Cisco Systems and Motorola shows a comfortable business environment and the ability to generate high profits.

The Israeli exceptionally high level of national security relative to the country's territory and population is the result of the forced need to confront both military and terrorist and extremist threats from Arab countries and settlements. Among the factors that indicate the

high professional level and combat effectiveness of Israeli law enforcement agencies, various special services and the army, the effective military infrastructure with advanced technological capabilities and combat experience, which no country in the world has, dominates (Citovich Ja. V., 2017).

Following the dynamics of changes in Israeli military spending during 2010 – 2019, it should be noted that military spending in relation to the country's GDP varies with a small amplitude – from 5.9 to 5.3% (Table 1). Military expenditures in the structure of public expenditures over the past ten years have increased from 13.2 to 14.8%, which is a fairly large share in total public expenditures (Fig. 1).

Table 1 – Israel's military spending in 2010 – 2019

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Military expenditures on the country's GDP, %	5,9	5,8	5,7	5,6	5,7	5,5	5,5	5,5	5,4	5,3
Military expenditures on government expenditures, %	14,7	14,6	14,1	13,8	14,8	14,6	14,5	14,3	13,5	13,2

The dynamics of Israel's military spending is shown in Fig. 1.

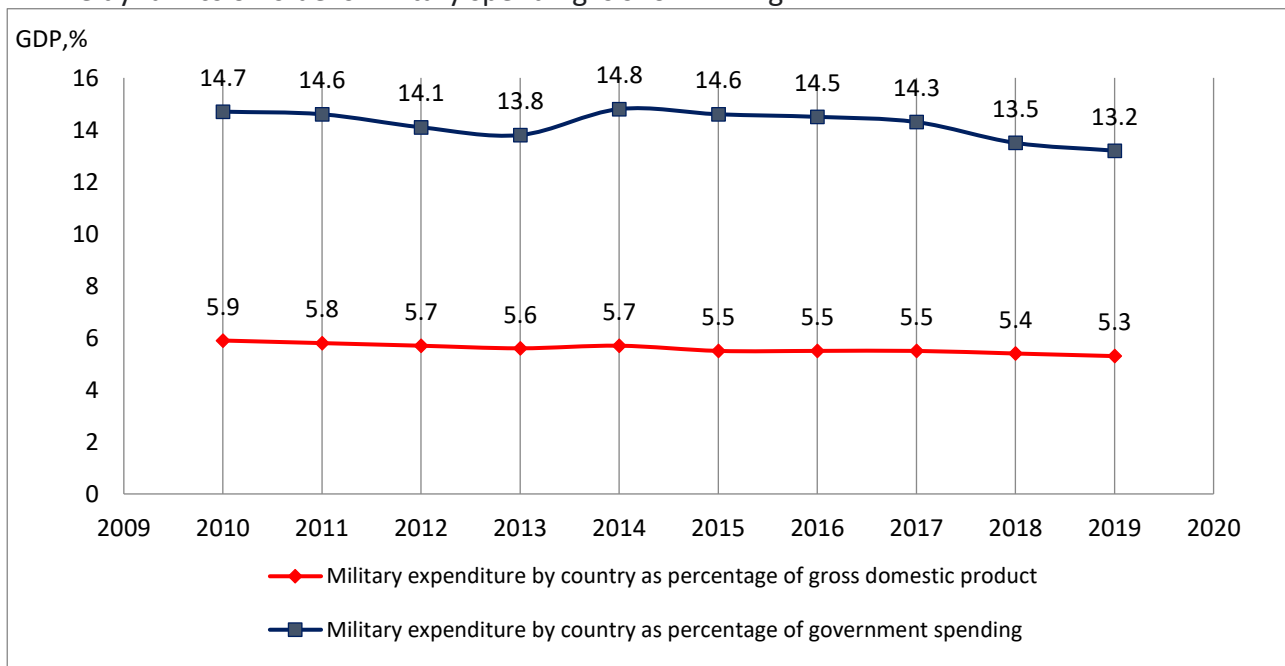


Fig. 1 – Dynamics of military spending in Israel, % (graphs built by the authors based on data (SIPRI))

SIPRI's military expenditures, calculated according to the NATO methodology, include all

current and capital expenditures on the armed forces, including peacekeeping forces; Ministry

of Defense and other government agencies involved in project protection; paramilitary formations, if they are well trained and equipped for military operations; for military and space activities.

In addition, military expenditures include expenditures on military and civilian personnel, on the payment of pensions to servicemen, social services for personnel; operating and maintenance costs; supply; military research and development; military assistance (in the military expenditures of the donor country).

Military expenditures do not include the civil defense expenditures and current expenditures on previous military activities, such as veterans'

benefits, demobilization, recycling and destruction of weapons. This definition cannot be applied to all the countries, as much more detailed information is needed on what is included in the country's military budget and extra-budgetary military expenditures. For example, if the military budget can or cannot cover the civil defense, reserves and support forces, police and paramilitaries, dual-use forces such as military and civilian police, military grants in kind, military pensions and deduction to the funds of social assurance (Izrail'. Zatraty).

Visually, the military expenditures of countries in 2019 are shown in Fig. 2.

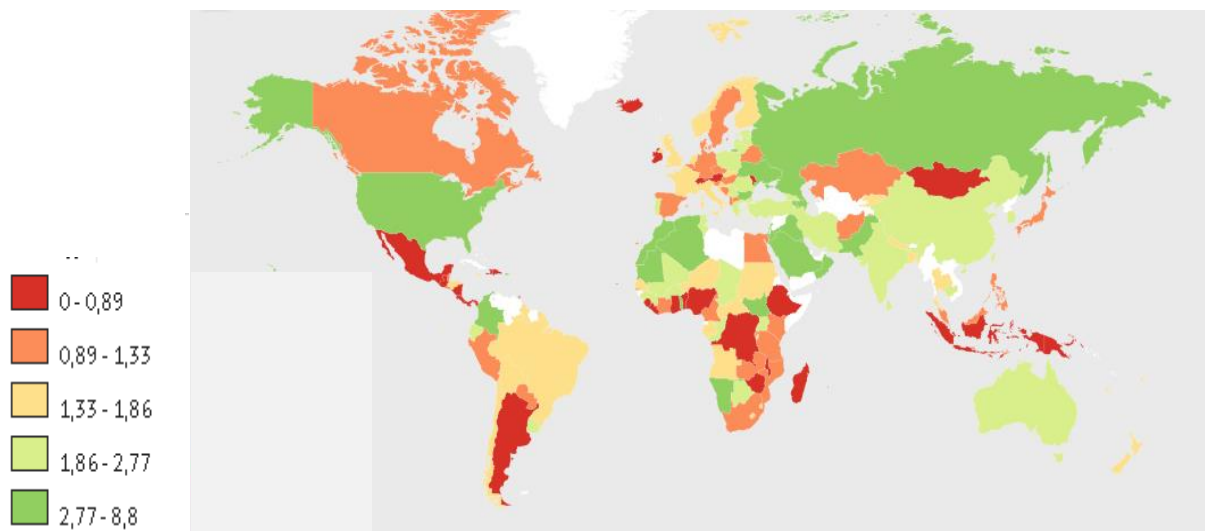


Fig.2 – Military expenditures of countries in 2019, % of GDP

Evaluating the geostrategy of countries, it is important to pay attention to structural changes in the size and composition of military expenditures, which can be used to determine

intentions to change political, economic, security, socio-geographical influences (Table 2; (Izrail'. Zatraty)).

Table 2 – Ranking of countries by military expenditures, %

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Oman	6,26	7,36	12,06	11,11	10,14	10,93	12,03	9,61	9,52	8,76
Saudi Arabia	8,57	7,23	7,68	8,98	10,68	13,33	9,87	10,22	9,51	7,98
Algeria	3,52	4,33	4,46	4,84	5,55	6,27	6,38	6,01	5,51	6,01
Kuwait	3,76	3,50	3,41	3,27	3,59	5,01	5,81	5,63	5,13	5,62
Israel	5,94	5,79	5,67	5,57	5,75	5,50	5,48	5,53	5,34	5,26
Armenia	4,27	3,85	3,82	4,00	3,94	4,24	4,09	3,85	4,90	4,95
Jordan	5,90	5,53	4,76	4,30	4,52	4,30	4,58	4,84	4,71	4,68

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Lebanon	4,13	4,06	3,99	4,17	4,68	4,49	5,06	4,51	4,85	4,24
Azerbaijan	2,79	4,67	4,66	4,54	4,56	5,46	3,69	3,82	3,62	4,00
Pakistan	3,42	3,29	3,48	3,47	3,48	3,55	3,59	3,77	4,05	3,98
Russian Federation	3,58	3,42	3,69	3,85	4,10	4,86	5,45	4,23	3,72	3,88
Bahrain	3,28	3,59	3,84	4,14	4,42	4,63	4,67	4,34	4,06	3,69
Iraq	2,71	2,30	1,90	3,32	2,95	5,41	3,50	3,86	2,87	3,47
United States	4,92	4,84	4,48	4,05	3,70	3,48	3,42	3,31	3,32	3,41

According to the dynamics of military expenditure, we can try to make some predictions about the preconditions for the emergence of centers of confrontation or expectations of extraordinary situations. Thus, Israel is in a state of permanent confrontation with the Arab countries, so military spending's during ten years remain in the range of 5-5.9% to maintain the country's combat readiness at the appropriate level. It can be considered as a scientific assumption that the confrontation between Azerbaijan and Armenia was preceded by a preparatory process to increase funding for military expenditures from 2015 to 2019. Azerbaijan significantly increased its expenditures in 2015 and maintained it at a sufficient level until 2019, as presented by statistics (Table 2), if not to take into account other assumptions. We believe that the increase in military spending was preceded by factors of influence, which should include political, economic, security and socio-geographical aspects.

The Russian Federation began to significantly increase military spending in 2014 due to the treacherous invasion in Ukraine: the level of military spending increased until 2017, but under the international sanctions influence, these costs began to decline: in 2019 they were 3.88% of GDP.

According to the rating for 2019 (Table 2), the leading positions were occupied by such countries as Oman, Saudi Arabia, Algeria, Kuwait, and in fifth place – Israel. The high level of military spending is due to a number of factors. This indicator is a tool for predicting the occurrence of military conflicts in certain regions.

The annual production of the military-industrial

complex of Israel exceeds 5 billion dollars. USA, and most of the products are exported, only 8% of exported weapons remain in the country (Jepshtejn A. D., 2014).

According to the results of the analysis in the structure of industrial production, the bulk of it sets the production of high-tech products with a high share of value added. Israel is a leader in arms exports and high technology.

The state's participation in the development of the military economy is to help enterprises that concentrate their work on research and implementation of innovative technologies. Under conditions of successful market promotion and sales, the Ministry of Industry and Trade, in particular the Office of the Chief Scientist, encourages developers who receive interest deductions from contracts.

Following the results of 2019, Israel closes up the top ten leaders in arms exports (\$ 369 million), United States, Russia, France, China and Germany remain ahead. According the arms imports Israel ranks the 15th place (\$ 507 million). Thus, in absolute terms, imports exceed exports over 138 million dollars. Thus, it can be assumed that part of the armaments that Israel provides for itself is quite significant.

Note that 20% of the budget of the Israeli Ministry of Defense is funded by the United States (SShA – Izrail). Exports of products of the military-industrial complex are the basis for further development of the country's economy as a whole under conditions of diffusion of developed innovative technologies to the civil sectors of the economy.

Table 3 – Strategic guidelines of the Israeli military economy*

The main components	1970	1980	1991-1995	2007	2008	2011	2012	At this time
Enterprises	Concern "TAAS" ("Taasiatsvait"), small arms factory Givatayimi	Enterprise for maintenance and repair of imported aircraft "BEDEK"	–	Concern Elbit Systems Concern IAI (Israeli Aircraft Industries)				More than 200 research institutions, public and private companies, and enterprises with Israeli and American capital
Product	Small arms, light weapons and ammunition	Military products			Military electronics and missiles	Missile and artillery-small arms, armored and aviation equipment, radio-electronic equipment	New weapons, tanks and modifications of jets, high-precision "smart" weapons - microelectronics, missiles "sea – sea", "air – air", unmanned vehicles	
Scientific infrastructure	Separate research body "Emet" at the MoD	–	–	–	A complex formed of research and high-tech manufacturing sectors			
Employment, % of the working population	10 %	25 %	–	–	–	–	–	–
Exports, billion dollars; place in the world	–	–	1,2 10 place	2,8 4 place	3,7 3 place	5,38 11 place	4,5 6 place	3,6 10 place (2019)
US investment, billion dollars	–	–	2001 2,4	2007 2,7	2008-2017 2,9-3,1	2019-2028 38		
Prohibitions, obstacles	Embargo on exports of military products to Israel by France	–	–	–	Cutting defense budgets of Western countries, unfavorable diplomatic situation, restrictions for the supply of weapons to China		–	–
Opposition to Israel's bans and obstacles	Intensification of development of domestic high-tech military industry	–	–	–	–	Export volumes armaments and military equipment decreased	Exports increased by 20%	–
Triggers of cooperation in development and production armament	Development is carried out by engineers and scientists in close cooperation with representatives of the military structures of Israel of advanced weapons and military equipment							
Confrontational signs	War of 1967 (Six Day War)	–	–	–	The effect of the "Arab Spring", the unfavorable diplomatic situation, the reduction of defense budgets of Western countries, restrictions on arms supplies to China		Islamic fundamentalism, the unresolved Palestinian-Israeli conflict, the threat of proliferation of weapons of mass destruction in the region, the threat of an intra-regional arms race. military conflict in Syria, the crisis in relations between Israel and Iran	

* Compiled by the authors based on the sources (Baza dannyh, 2012; Predvaritel'nye, 2015; Broude Marc, Deger Saadet, 2013; Clyde R. Mark., 2006; Sadeh Sh., 2004; Sharp J., 2015; Yaakov Katz; Morozov V. M., Shuminov N. Z., 2018) cited in the references.

However, it should be noted that Israel is dependent on the US capital and needs political and economic assistance and support. In 2016 the United States provided Israel with \$ 38 billion aid (SShA – Izrail) on the terms of targeted spending – exclusively for the purchase of American weapons. According to the terms of the agreement, the financing of Israel's military economy was completely excluded. This assistance can be considered as a guarantee of Israeli political loyalty towards the United States and Iran concerning the nuclear agreement.

Long-term relations between the United States and Israel are characterized by a stable allocation of certain financial assistance at appropriate intervals: 1998-2007 – \$ 2.4 billion per year; 2008-2017 – \$ 2.9-3.1 billion per year (Petrenko A.; SShA – Izrail). Recently, Israel has significantly reduced the technological gap, created its own competitive military-industrial complex, actively stimulates its own innovative technologies, and takes systematic measures to implement the latest

weapons. The United States responded to this change of positions by imposing restrictions on Israel's entry on the world's arms and military equipment market, which slowed down the research and development work. Other important aspects of Israeli strategic doctrine need to solve the national security problem of a country surrounded by numerically superior enemies characterized by the offensive nature of hostilities; transfer of hostilities on the enemy's territory and, if possible, to its deep rear; rapid transfer of troops from front to front; concentration of the maximum number of forces in the places of the main and potential threat; concentrated and coordinated use of the Air Force against enemy ground forces and rear, which, among other things, makes it possible to reduce human losses; the task of preventive strategic and tactical strikes on enemy positions; maximum use for their own purposes of technological achievements of world and domestic military industry (Rassel D., Kon R., 2012).

Conclusions

Increases of the military spending share in the country's GDP that arise suddenly, sharply, or have an upward trend that demonstrates the preparation for a confrontation or the country's strategic military intentions, forcing permanent monitoring for timely preparation in response. Considering the importance of the foreign investment, it is necessary to diversify funding

flows on foreign and domestic for reducing vulnerability and ensuring a more stable state of the country's military economy. The perspectives for further research – the creation of an optimal mechanism for the development of the military economy, which ensures the national security of Ukraine.

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