

**INNOVATION MANAGEMENT  
AS A FORM OF ENSURING  
THE COUNTRY'S ECONOMIC  
SECURITY**

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**The purpose of research:**

to analyze the country's innovation activity, its influence on economic security's level.

**Main tasks of scientific research were:**


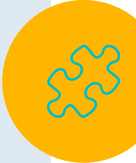
- analyzing the development of Ukrainian's innovation and the countries-leaders of innovations;
- determining the relationship between innovation activity and the level of the economic security;
- developing the conceptual solutions to growth of innovation and economic security of Ukraine





The most the mighty countries of the world are in the process of forming the knowledge society: the innovation type of economy is actively being formed and their transition to the sixth technological mode is taking place.

In Ukraine, the third and fourth technological modes are predominant in most sectors of the economy, while in certain sectors the fifth technological mode is being actively formed, which shows a significant lagging behind of the national economy from the world leading economies



Innovations is new concepts in science, engineering and technologies. Managements scientists identify innovation safety with research-technical or technological security, which is formed as a set of conditions in the scientific and technical areas that ensure the fulfilling of the requirements of economic and, first of all, research-technical security.

Investment security as the economic security sub-system that ensures the level of reliability and safety of innovation processes.

The system of economic security include innovation component. In the system of economic security, innovation activity is manifested in the form of rather complex components of its elements

Innovation security is a state of economic security, which would ensure the competitiveness of R & D results and products manufactured on the national and international markets, the ability of the economy to ensure sustainable development and counteract the negative factors that take place on the global markets



Innovation activity is the whole complex of actions aimed at obtaining the results of scientific-technical researches, developments and their using in solving the following problems: saving resources; reducing financial and labor costs; increasing the volumes of production; improving product quality; population growth; ensuring the preservation of the environment well-being



**Table 1.** Innovation achievers countries: classification of group income, regional and years of achievements

Country	Classification of group economy income	Region	Years of achievements (total
Moldova, Rep.	Lower-middle income	Europe	2018,2017, 2016, 2015, 2014, 2013, 2012, 2011(8)
Viet Nam	Lower-middle income	South East Asia, East Asia, and Oceania	2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011 (8)
India	Lower-middle income	Central and Southern Asia	2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011 (8)
Kenya	Lower-middle income	Sub-Saharan Africa	2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011 (8)
Ukraine	Lower-middle income	Europe	2018,2017, 2016, 2015, 2014, 2012(6)
Mongolia	Lower-middle income	South East Asia, East Asia, and Oceania	2018,2015, 2014, 2013, 2012, 2011 (6)
Malawi	Low income Sub-Saharan	Africa	2018, 2017, 2016, 2015, 2014, 2012 (6)
Mozambique	Low income	Sub-Saharan Africa	2018, 2017, 2016, 2015, 2014, 2012 (6)

Country	Classification of group economy income	Region	Years of achievements (total
Rwanda	Low income	Sub-Saharan Africa	2018, 2017, 2016, 2015, 2014, 2012 (6)
Georgia	Lower-middle income	Northern Africa and Western Asia	2018,2014, 2013, 2012 (4)
Thailand	Upper-middle income	South East Asia, East Asia, and Oceania	2018, 2015, 2014, 2011 (4)
Montenegro	Upper-middle income	Europe	2018, 2015, 2013, 2012 (4)
Bulgaria	Upper-middle income	Europe	2018, 2017,2015 (3)
Madagascar	Low income	Sub-Saharan Africa	2018, 2017, 2016 (3)
Serbia	Upper-middle income	Europe	2018, 2012 (2)
costaRica	Upper-middle income	Latin Americaand the Caribbean	2018, 2013 (2)
South Africa	Upper-middle income	Sub-Saharan Africa	2018 (1)
Tunisia	Lower-middle income	Northern Africa and Western Asia	2018 (1)
Colombia	Upper-middle income	Latin America and the Caribbean	2018 (1)

According to the calculated sub-indices for the countries with lower-middle-income economies, Ukraine was the first in GII rating and the fifth as to the index of introduced innovations (the 75th place in the general rating), the country was the first in the sub-index of issued innovations (the 35th in the general rating) and the first relative to the efficiency coefficient of innovations (the 5th in the general rating) (Table. 2).



**Table 2.** Top 10 economies for Sub-index GII: Lower-middle-income economies (30 in total)

Global Innovation Index	Innovation Input Sub-index	Innovation Output Sub-index	Innovation Efficiency Ratio
<b>Ukraine (43)</b>	Georgia (53)	<b>Ukraine (35)</b>	<b>Ukraine (5)</b>
Viet Nam (45)	India (63)	Moldova, Rep (37)	Moldova, Rep. (6)
Moldova, Rep. (48)	Viet Nam (65)	Viet Nam (41)	Armenia (15)
Mongolia (53)	Mongolia (66)	Mongolia (47)	Viet Nam (16)
India (57)	<b>Ukraine (75)</b>	Armenia (50)	Mongolia (30)
Georgia (59)	Tunisia (77)	India (57)	Kenya (41)
Tunisia (66)	Moldova, Rep. (79)	Georgia (62)	Egypt (45)
Armenia (68)	Philippines (82)	Tunisia (63)	Pakistan (46)
Philippines (73)	Morocco (84)	Kenya (64)	India (49)
Morocco (76)	Kyrgyzstan (85)	Jordan (67)	Jordan (50)



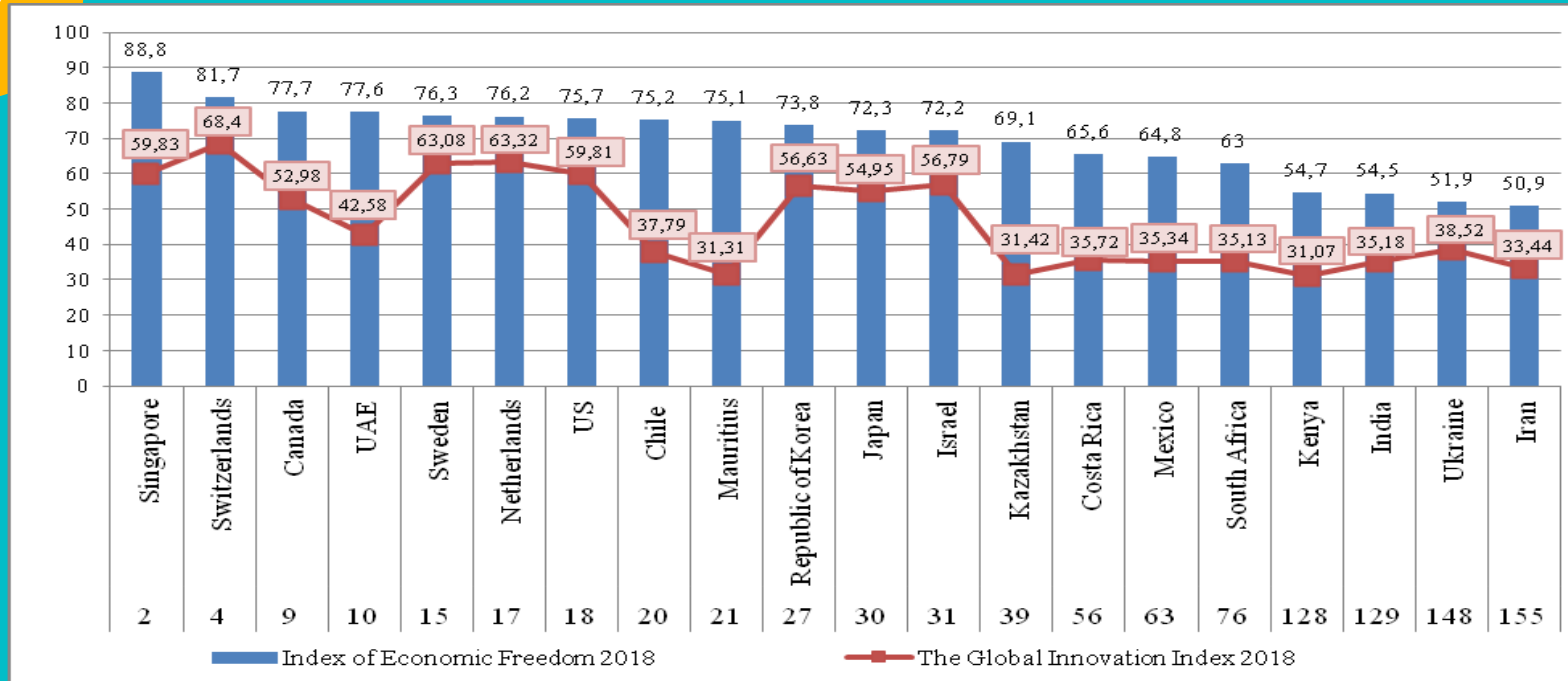
*Global Innovation Index*

*Index of Economic Freedom*

The state's security under the conditions of modern transformation changes is complex multifaceted concept. However, most scholars and practitioners agree that economic, food, technological, social, defense, psychological, military, political and geopolitical security are integral parts of national security. Consequently, like other factors, the level of the GII of the country's economy has a link with other elements of the system of components of national security. It should be noted that the impact on some components is stronger and more obvious, while others are less obvious, but not less significant.

It has been previously established that innovation and innovative security are a form of economic security of the state, the *Global Innovation Index* and the *Index of Economic Freedom* hypothesis of interdependence has been adopted in this study. To this end, the indicators of the most progressive countries conferring to the GII index of different regions are taken for analysis and the Index of Economic Freedom (IoEF) 2018 for these countries is determined (Fig. 1)



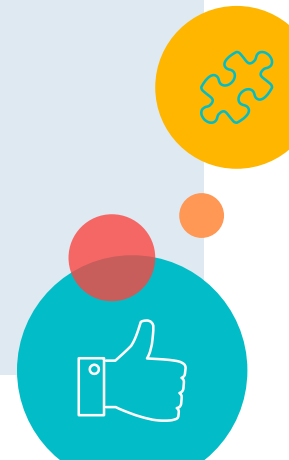
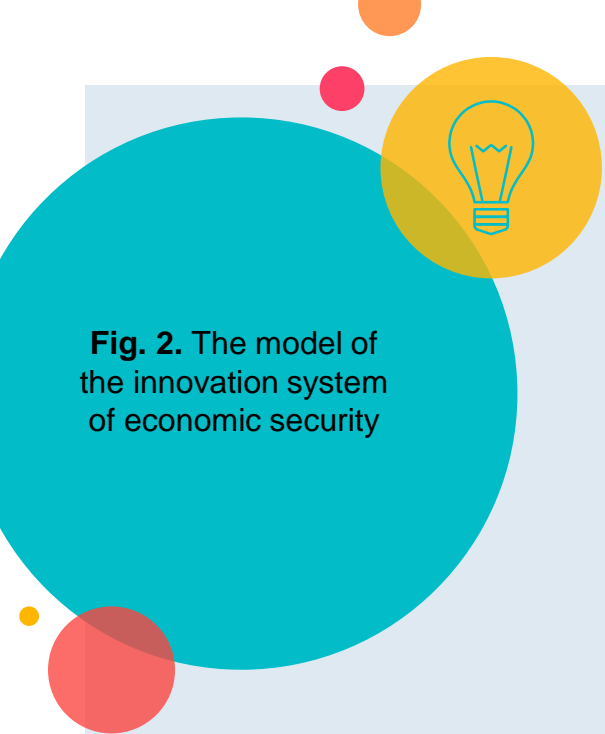
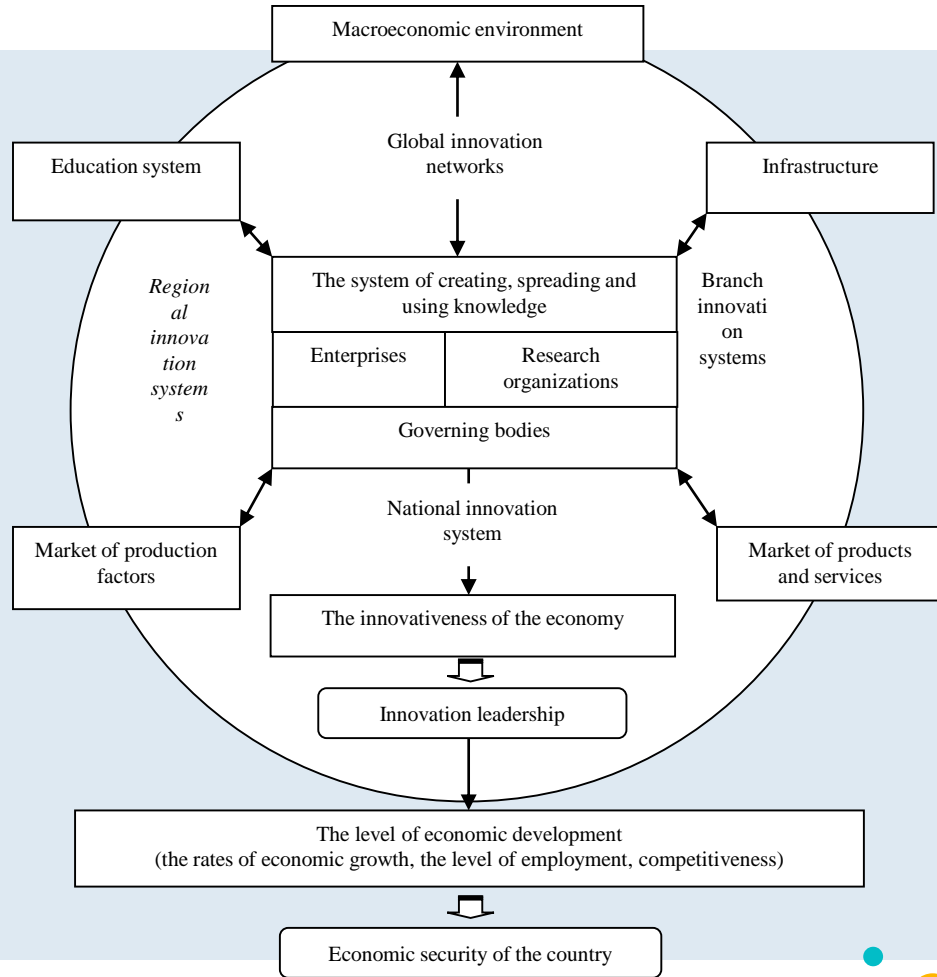


**Fig. 1.** The assessment of the GII and the IoEF in 2018

**Table 3.** The directions of strengthening innovation security of Ukraine

The direction of strengthening the innovation security	Ways of implementation
Institutional-legal	<ul style="list-style-type: none"><li>- regulatory-legal and methodological support of monitoring and evaluating the level of economic and innovation security;</li><li>- the development of state research and scientific-technological organizations, which will carry out the effective coordination of research;</li><li>- the improvement of activity coordination between the government institutions, which regulate innovation activities.</li></ul>
Economic	<ul style="list-style-type: none"><li>- the creation of new productions, economic sectors of advanced technological modes, intensive technological renovation of basic sectors of the economy;</li><li>- the upgrading of the quality of education and researchers' training;</li><li>- development of an innovative market, which presents creative products and services;</li><li>- the stimulation (using direct and indirect methods) of enterprises' innovation activity;</li><li>- the support of patent-licensing activities of inventors and enterprises;</li><li>- development of international cooperation on the basis of joint participation in international innovation projects;</li><li>- formation of high-tech exports, participation in scientific and technical cooperation;</li><li>- the development of the government-private innovation partnership;</li><li>- provision of targeted financing of priority directions of scientific and technical development;</li><li>- the formation of innovation clusters.</li></ul>
Information-analytical	<ul style="list-style-type: none"><li>- creation of a system of representative indicators of innovation security;</li><li>- the establishing of the monitoring of innovation security state and open publishing calculations' results;</li><li>- the determining of real and potential threats (risks) to innovation security;</li><li>- the determining of the optimal ways to eliminate the identified threats and making the programs of their implementation;</li><li>- the organizing and ensuring of the control over implementing the measures to overcome or neutralize the threats to innovation security.</li></ul>

**Fig. 2.** The model of the innovation system of economic security





Thanks for your  
attention!

