

# Development of innovation sphere in Ukraine: status, main directions and trends.

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### THE COMPETITIVENESS OF THE UKRAINIAN ECONOMY IN 2012 -2014 YEARS

	2012	2013	2014
The Global Competitiveness Index	73	84	76
The institutional environment	132	137	130
Macroeconomic environment	90	107	105
Infrastructure	65	68	68
Market size	38	38	38
Labor market efficiency	62	84	80
Financial Market Sophistication	114	117	107
Technological readiness	81	94	85
Higher education	47	43	40
Innovation	71	93	81
Business environment	91	97	99

#### LAST INSTITUTIONAL CHANGES

- Was liquidated the State Agency on Science, Innovations and Informatization
- The number of controlling bodies was reduced from 58 to 26
- List of controlling functions was reduced from 1064 to about 620
- Transfer to the Ministry of Education and Science all public higher education institutions

### LAW OF UKRAINE "ON SCIENTIFIC AND SCIENTIFIC-TECHNICAL ACTIVITY"

#### Main goals amending the Law:

- definition of key terms in actualized edition;
- prediction of new approaches to the management and financing in the scientific sphere;
- laying the effective and transparent mechanisms in the implementation of research and development and their financing;
- increase of level interaction with the scientific community;
- empower scientists and scientific institutions;
- stimulation flow of funds in the scientific sphere and eliminating of artificial barriers;
- actualization mechanisms of international scientific and technical cooperation

#### INSTITUTIONAL CHANGES IN DRAFT LAW

- Establishment of the National Council of Ukraine on Science and Technology Development
- Establishment of National Fund for Research
- Democratize the National Academy of Sciences of Ukraine and national sectoral Academy of Sciences:
- limit by two terms of office held leadership Academy of Sciences;
- attraction to the electoral process officials scientists are not members of the Academy of Science.

#### **NEW OPPORTUNITIES IN DRAFT LAW**

- State Scientific Institution can be cofounders of companies and take part in the formation of their authorized.
- Dismissal of state commercial and state-owned enterprises from payment part of income (profit).

#### **LEGISLATION IN THE INNOVATION SPHERE**

- The Law of Ukraine "On innovation activity";
- The Law of Ukraine "On special regime of innovation activity of technological parks";
- The Law of Ukraine "On Scientific Parks";
- The Law of Ukraine "On the priority directions of innovation";
- The Law of Ukraine "On state regulation of activity in the sphere of technology transfer".

### NEW DRAFT LAWS IN THE INNOVATION SPHERE

- "On Amendments to Some Laws of Ukraine on innovation activity of technological parks";
- "On Amendments to the Law of Ukraine" On state regulation of activities in the sphere of technology transfer ";
- "On the development and support innovation";
- "On Amendments to the Tax Code of Ukraine";
- "On Amendments to the Budget Code of Ukraine (on stimulating innovation)";
- "On Amendments to Certain Legislative acts of Ukraine concerning stimulation of innovation".

#### **CONDITIONS FOR DOING BUSINESS**

- Ukraine's rating in Doing Business report has improved by 16 points;
- will reduce the number of taxes from 22 to 11;
- reduced number of regulatory bodies from 56 to 28;
- Number of permits and licenses for business was reduced by 50%;
- Simplified registration procedure of new companies (within 24 hours);
- about 25% of all administrative services can receive through mail.



## Thank you for your attention!

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### Innovation in Ukraine: current state, key areas and tendencies of development (part II)

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**Assessment-Implementation-Monitoring'** 

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### Context of innovation development in Ukraine during the independence years

- Negative dynamics of main economic indicators: the country have reached less than 70% of the GDP level of 1990. This year we expect further decline by at least 11%.
- Negative structural changes (the share of machine building sector declined from 30% of industrial output in 1990 to 11% in 2013, while the shares of 'heavy' industries grew substantially during the same period)
- More than 30% of the total export are products of the ferrous metallurgy sector in recent years, only in 2014 agricultural export surpassed export of ferrous metallurgy (34% against 26%).

### Key features of innovation in Ukraine in 1990s-2010s

- Decline of R&D expenditures from 3% to less than 0.7% of GDP in 1990-2014, including decline from 0.85% in 2013 to 0.66% in 2014
- Worsening situation with bank's loans provision (more than 85% of innovation expenditures are made from own resources of companies)
- No specialized VCs in Ukraine
- Decline of high tech sector due to recent events
- Outflow of leading specialists to other sectors and emigration

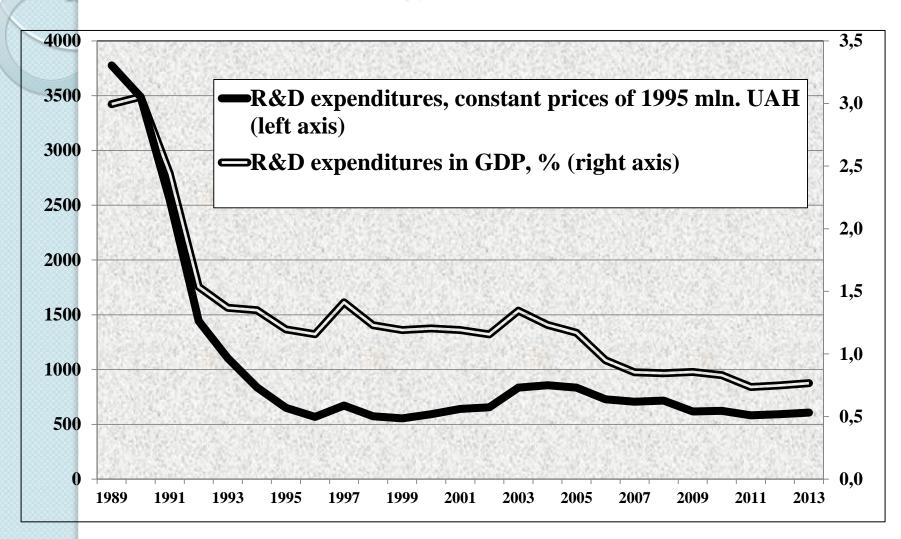
## Financing of innovation from the state and local budgets 2000-2014, %of the total financing of innovation in industrial sector

year	2000	2005	2010	2014
%	2.4	0.8	1.2	5.0

## Financing of innovation from the foreign sources in 2000-2014, %of the total financing of innovation in industrial sector

year	2000	2010	2013	2014
%	12.4	30.0	13.2	1.8

### Key parameters of R&D financing (the longest period of observation), 1989-2013, calculated by Dr. Igor Bulkin



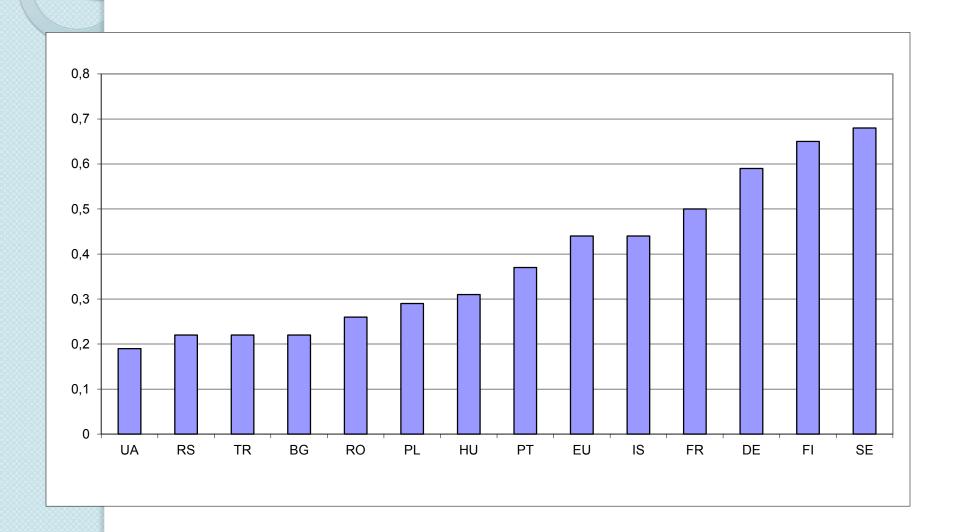
### On the other hand.....

- Large European country (the second largest on territory after Russia) with population of more than 40 million people
- Relatively highly educated population (higher figures, than average for the EU countries), substantial part of knowledge – in a 'tacit form', not in 'codified' form
- Declaration of innovation development as a key priority at the national level
- Agreement on association with the EU is signed

### Results of CIS-type surveys in Ukraine

- 3 surveys were made in 2008-2014 (results of two of them are published)
- In 1990-2010s, the share of innovative enterprises in Ukrainian economy was between 6% and 20%, while in neighbouring Poland it was at least two times higher
- These figures correlate with all major indexes of competitiveness for national economies, which are used for international comparisons.
- However, the level of innovativeness itself could not be an indicator of commercial success.

### The place of Ukraine according to the value of SII (in comparison with selected EU countries), 2008-2011



#### Some Conclusions I

- The transformation of national innovation system with special attention to cooperation between enterprises, state research institutes and universities is critically important for the country.
- Ukraine needs much more institutions that would have potential to finance innovation sector. These institutions have to accept high level of risks for high potential profits and the same time, they will not require collateral, nor charge interest payments.
- It would be also important to provide not only short-term, but also long-term and at least medium term loans and to contribute to boost innovation activities.

### Some Conclusions II

- It is evident, that at the current stage of development, it would be extremely difficult to obtain financing for innovative enterprises from private sources in Ukraine. That is why the state has to play more active role in stimulating creation and development of such cooperation within the national innovation system in Ukraine.
- There is a plethora of different types of incentives, that government could use, including financial and fiscal incentives, direct lending programmes and so on.
- The problem lies in choosing right combination of these incentives, as government involvement easily creates market distortions, cause problems of moral hazard and adverse selection.

### Some Conclusions III

- Bearing in mind rapid changes in technology and markets and the increasing focus on exports, banks, private venture funds and state organizations have to develop specific expertise in project evaluation. Existing domestic technologies and know –how could be commercialized.
- At the same time, technology transfer from the foreign countries could help to solve not purely economic, but also environmental and social problems, from which Ukraine is suffering.
- Special attention has to be paid to the development of cooperation with the EU states. This cooperation brings important expertise in the most advanced areas, and it will help to compensate abovementioned shortcomings in innovation sphere in Ukraine.

Thank you for your attention