экономика присоединилась к Всемирной торговой организации [8], можно говорить о целом ряде недостатктов и даже «провалов» в сотрудничестве. Анализ пятилетнего сотрудничества Украины и ВТО объективно затрудняется тем фактом, что присоединение Украины к данной организации совпало по времени с началом мирового финансового кризиса. Это повлекло за собой замедление интенсивности торгового обмена на мировых рынках и в настоящий момент затруднительно отделить негативные последствия либерализации экономики от объективных тенденций циклического развития мирового хозяйства. Тем не менее необходимо отметить резкое ухудшение состояния внешнеторгового баланса отечественной экономики. Это свидетельствует о том, что либерализация внешней торговли не открыла для украинских производителей рынки развитых стран, но напротив принудила их соперничать на своей территории с более конкурентоспособными международными фирмами.

Кроме того, экспортоориентированная модель отечественной экономики зависит от конъюнктуры наших традиционных сбытовых площадок, а именно мировых рынков металлопродукции, химических изделий, сельскохозяйственной продукции и энергоносителей, а также от состояния региональных рынков машиностроения стран СНГ. Следовательно, без углубления модернизационных реформ, которые поспособствуют переходу к инвестиционной модели роста украинская экономика не сможет играть самостоятельную роль в мировом хозяйстве, а будет зависеть от внешнеэкономических деловых циклов и периодических валютно-финансовых кризисов.

Инвестиционная ситуация, несмотря на тенденцию к росту, не позволяет говорить о том, что она является основой модернизации отечественной экономики, поскольку является крайне нестабильной и зависящей от состояния мировых финансовых рынков. Аналогичная ситуация сложилась вокруг прогнозов развития ВВП. Позитивный тренд номинального ВВП является скорей следствием негативных макроэкономических тенденций, а именно росту инфляции, чем позитивному внешнеэкономическому влиянию сотрудничества Украины с ВТО.

Участие Украины в ВТО предоставяет экономике ряд преимуществ: международно-правовую защиту, которая содействует развитию отечественной экономики, продвижению украинских интересов за рубеж; модернизация основных производственных фондов; возможность проведения активной внешнеторговой дипломатии; упрощение процедур экспорта и импорта продукции; развитие и совершествование инфраструктурной сети. В то же время существует ряд угроз: усиление кризисных тенденций в мировой экономике; падение спроса на украинскую продукцию; дестабилизация на энергетических рынках, рост цен на энергоносители; сокращение объемов производства отечественной продукции вследствие относительной ценовой неконкурентоспособности; недостаточная доля наукоемкого экспорта. Для изменения ситуации в лучшую сторону украинской экономике, необходимо:

• Развитие институционной инфраструктуры содействия экспорту и активизация применения механизмов ВТО для защиты национальных экономических интересов. Развитие коммерческой дипломатии – интернационального компонента системы защиты национальных интересов государства в сфере международной торговли, который собственно стал следствием развития механизмов ВТО, предусматривает создание системы институций, направленной на обеспечение национальных коммерческих интересов.

• Идентификация приоритетных отраслей, которые требуют государственной поддержки развития экспортной деятельности. В условиях углубления системы международного разделения труда и обострения конкуренции на международных рынках становится нецелесообразным и невозможным поддерживать все секторы экономики. Для обеспечения концентрации национальных ресурсов на поддержке наиболее перспективных с точки зрения потенциала роста международной конкурентоспособности отраслей желательно на государственном уровне утвердить систему соответствующих селекционных критериев.

• Завершение реформирования систем технического регулирования и стандартизации. Проблема совершенствования национальных технических, санитарных и фитосанитарных стандартов, в соответствии с международной практикой является стратегически важной для развития отечественного экспорта. Гармонизация системы национальных стандартов с мировыми, улучшения норм безопасности продуктов будет способствовать реализации экспортного потенциала отечественной промышленности на мировых рынках.

 Углубление торгово-экономической интеграции с отдельными странами-партнерами, таможенными и интеграционными союзами и другими экономическими образованиями. Вступление в ВТО положило начало новому этапу развития украинской торговой политики. Участие Украины в ВТО позволяет строить свои торгово-экономические отношения с различными интеграционными группировками на основании правил ВТО, не добиваясь формального членства.

СПИСОК ИСТОЧНИКОВ:

1. Закон України «Про ратифікацію Протоколу про вступ України до СОТ» / Відомості Верховної Ради України (ВВР), – № 23. – ст. 213. – (зі змінами та доповненнями)

2. Офіційний сайт Світової організації торгівлі [Електронний ресурс]. – Режим доступу: http://www.wto.org/

3. Тищук Т. А. Економіка України у 2011 році: прогноз динаміки, виклики та ризики / Т. А. Тищук, Ю. М. Харазішвілі, О. В. Іванов; за заг. ред. Я. А. Жаліла.– К.: НІСД, 2011. – 88 с.

4. Глобализация и регионализация: вызовы для экономики Украины: монография / Р.С. Билык, О.В. Гаврилюк [и др.]. – Черновцы: ЧНУ, 2010. – 520 с.;

5. Офіційний сайт Державного комітету статистики України [Електронний ресурс]. – Режим доступу: www.ukrstat.gov.ua/

6. Офіційний сайт Державної митної служби України [Електронний ресурс]. – Режим доступу: http://www.kmu.gov.ua/dmsu/control/uk/index

7. Глобальна торгова система: розвиток інститутів, правил, інструментів СОТ / Кер. авт. кол.і наук. ред.Т. М. Циганкова. – К.: КНЕУ, 2003. – 660 с.

8. Рудницкий А.О. Диденко А.С., Сравнительной анализ условий присоединения к ВТО стран с транзитивной экономикой / А.О. Рудницкий // Ученые записки Таврического национального университета им. В. И. Вернадского. Серия: Экономика. - 2013. - Том 26 (65). №1. - С. 120-128.

THE ROLE OF THE STATE IN ENCOURAGING THE GLOBAL DEVELOPMENT AND INNOVATIVE GROWTH OF THE ECONOMY $% \mathcal{A} = \mathcal{A} = \mathcal{A} + \mathcal{A} +$

Ryabchyn O., Ph.D., Associate Professor of "International Economics" Department, Donetsk National University, (Ukraine) MSc in Innovation and Sustainability for International Development, SPRU, University of Sussex, UK

Рябчин О.М. Роль держави у стимулюванні глобального розвитку та інноваційного зростання економіки. У статті аналізується роль промислової та інноваційної політики у функціонуванні сучасної держави. Наводяться приклади різних стратегій, які держава може використовувати для стимулювання інноваційних процесів: виправлення провалів ринку та інвестування в галузі фундаментальної науки; «вибір переможців » за допомогою прямого і непрямого інвестування, стимулювання поширення знань; сприяння державно- приватному партнерству; посилаючи сигнали про нові важливі технології для приватних інвесторів в якості «підприємницької держави». На прикладі інвестицій в розробку технологій графена розглянуто успішні приклади державних інтервенцій для стимулювання інноваційного зростання і модернізації економіки. Таким чином, стверджується, що державне регулювання та фінансування можуть бути ефективно використані для стимулювання інноваційного розвитку за певними умовами. Тим не менше, найбільш ефективною стратегією є посднання як механізмів держрегулювання так і ринкових інструментів.

Ключові слова: Розвиваюча держава; підприємницька держава; промислова політика; інноваційна політика.

Рябчин А.М. Роль государства в стимулировании глобального развития и инновационного роста экономики. В статье анализируется роль промышленной и инновационной политики в функционировании современного государства. Приводятся примеры различных стратегий, которые государство может использовать для стимулировании инновационных процессов :исправление провалов рынка и инвестирования в области фундаментальной науки; «выбор победителей» с помощью прямого и косвенного инвестирования, стимулирование распространения знаний; содействие государственно-частному партнерству; посылая сигналы о новых важных технологий для частных инвесторов в качестве «предпринимательского государства». На примере инвестиций в разработку технологий графена рассмотрены успешные примеры государственных интервенций для стимулирования инновационного роста и модернизации экономики. Таким образом, утверждается, что государственное регулирования и финансирование могут быть эффективной использованы для стимулирование как механизмов госрегулирования так и рыночных инструментов.

Ключевые слова: Развивающее государство; предпринимательское государство; промышленная политика; инновационная политика.

Ryabchyn O. The role of the state in encouraging the global development and innovative growth of the economy. The article examines the role of industrial and innovation policy for stimulating economic growth. This article will advocate that state is able to commence the innovate processes with the various strategies such: as correcting market failures and investing in the basic science; picking the winners by means of direct and indirect investment; stimulating the knowledge flows and diffusion; facilitating the public-private cooperation; taking more active "entrepreneurial" role, giving signals about new important technologies for private investors. Graphene technology investment example will be considered to argue about successful cases of government intervention to stimulate innovation growth and modernization of the economy.

Thus, it will be argued that state interventions can usefully guide to the government policy making under certain conditions. However, the most effective strategy is to combine interventionists and market instruments in the STI policy to avoid both market and government failures.

Keywords: Developmental state; entrepreneurial state; industrial policy; science, technology, and innovation policy.

Nowadays, the role of a state in promoting innovation development is being reviewed. Economists actively debate about the role of industrial policy (IP), and science, technology, and innovation (STI) policy for encouraging the global development and innovative growth of the economy.

This article will advocate that state is able to commence the innovate processes with the various strategies such: as correcting market failures and investing in the basic science; picking the winners by means of direct and indirect investment; stimulating the knowledge flows and diffusion; facilitating the public-private cooperation; taking more active "entrepreneurial" role, giving signals about new important technologies for private investors.

The article starts by introducing the theoretical framework to support the main arguments. Nowadays, development economists argue that interventionist's methods have always existed in one or another form, even in neoliberal states. It will be suggested that to avoid common government failures IP should be implemented in a form of "embedded autonomy" (Evans 1995, p.12). Furthermore, to decrease the risk of resource misallocation public and private initiatives should be engaged in a form of "discovery process" (Rodrik 2004, p.4).

Secondly, the article will compare the role of private and government investment than supports technologies in order to foster economic growth and development. It will be argued, that private investors and venture capital firms invest less in basic research and more in applied research to gain an instant return. However, the underlying knowledge base for breakthrough technologies urgently demands long-term financing. Thus, government interventions are a useful guide for policy making in supporting new promising high-tech industries that may contribute to further global development. That is because, the appropriate question is not "how much" but "what kind" of interventions the state should implement for its development policy.

Thirdly, the paper will give examples of successful innovations that were supported by government investment in the basic science and in a form of direct and indirect investment. Furthermore, it will describe some successful cases of innovative public-private cooperation where the state was engaged in funding an early stage of innovative companies.

Finally, it will take a closer look on graphene technology, and describe the case using the "picking winners" and "entrepreneurial economy" concepts. UK has not yet successfully captured the benefits from this invention, losing the patent race to other countries. However, the government has been continuously investing in the graphene, showing the "entrepreneurial" behaviour, and willing to get future benefits.

Thus, it will be argued that state interventions can usefully guide to the government policy making under certain conditions. However, the most effective strategy is to combine interventionists and market instruments in the STI policy to avoid both market and government failures.

The role of the state in the neoliberal and interventionists government policy.

Historically, there have always existed opposite economic policies aimed at economic development such as from Adam Smith's "Invisible hand" to Hamilton's "Protectionism" of domestic industries, or from liberal "Laissez faire" to Keynesian "Government interventions". However, they have constantly been accompanied by so-called "market" or "government failures."

Neoliberalism was the dominant doctrine at the end of the last century promoting the set of policies fostering economic liberalization. The role of the state in the neoliberalism for a STI policy is to support free markets for innovative development, create right conditions for new ideas, adopt the legal framework, and invest in a science base.

IP has often been contrasted with the neoliberalism for promoting a leading role of the state in fostering economic development. The role of the state for STI policy can be generalised as a deliberative ability to "pick the winners", direct various R&D activity to support the "infant industries", and an "import substitution" strategy.

Conditions that allow the state to innovate effectively.

This paper supports the idea that the state is able to innovate by picking the key technologies to invest in, despite the question of corruption, rent seeking and free-market distortion.

As has been argued by developmental economists (Chang 2002, 2003, 2007; Hausmann & Rodrik 2003; Rodrik 2008), the IP remains important for the support of industrial development as it has always existed in one or another form, even in neoliberal states. However, one needs to mention some conditions allowing the state to innovate effectively to avoid common government failures.

Rodrik (2004, p.4) points out a "discovery process" as an essential condition "where firms and the government learn about underlying costs and opportunities and engage in strategic coordination." Evans (1995, p.12) argued that state involvement in industrial transformation should be in a form of an "embedded autonomy" to be an effective instrument to promote growth and economic development.

Functioning bureaucracy must be autonomous (isolated from the society). However, the work of scholars such as Gerschenkron, Hirschman, Amsden, and Wade (cited in Evans 1995, pp.41-42) emphasized the importance of "joint projects" in the pursuit of developmental goals. It appears that states also have to be "embedded" to be effective. The question then becomes how embeddedness and autonomy can be effectively combined.

Is "picking the winners" a good strategy to support the innovations?

Despite the successful implementation examples (salmon industry in Chile, high-tech in East Asia), the IP and STI policy are still criticised as an inappropriate instruments because of government failures that distorted the effective allocation of state resources. Common criticism of interventionist methods is about the risks of a substantial mis-allocation of resources when direct state aid goes to favoured companies, sectors or regions.

However, one may argue, that the government has always been engaged in "picking winners and losers" decisions not only in choosing to

what industry invest or what technology to support. Where to spend the taxpayer's money such as to build roads or invest in bicycles paths can be named as a part of this instrument. Whether to apply for hosting an Olympic games or not is also can be named as a part of the "industrial policy" strategy. However, it should be stressed that the problem of the deliberative picking winners strategy has still not been solved either in developed and, especially, in developing countries.

Nevertheless, the debate about a modern state innovative policy has shifted from the position whether to intervene or not. (Evans, 1995, p.10) argued that the appropriate question is not "how much" but "what kind" of intervention state should implement for their development policy.

By answering the last question, one may suggest several common government strategies. They can be in a form of direct (supporting the industries or the R&D efforts of firms) or indirect investment (providing tax credits and lending). Another policy is to encourage the flow of knowledge between national universities and business, and support the knowledge-diffusion across economy, either through existing networks or by creating new ones.

Thus, the state can have various successful innovative strategies: correct market failures and invest in the basic science, pick the winners by direct and indirect investment, and stimulate the knowledge diffusion or even take a more risky "entrepreneurial" role.

"Entrepreneurial state" as a framework for a national innovative policy.

The permanent rotation of the market and government failures repeating in all types of countries became a driving force in discovering newsophisticated methods of governing the economy.

Mazzucato's concept of the "Entrepreneurial State" (2011) in which "state should become a lead investor in creating the knowledge economy" is an aggregative study supporting the interventionists state policy. The author argues that the government should be more creative in fining the source of income not only from taxes and export-import operations or simply borrowing them. The state should implement both an investment mechanism based on the STI policy and re-investment mechanism that transfer income return from successful new industries. As the state investment has been behind most radical innovations, the state should continue to become a more "developmental" market "maker" and market "shaper" as compared to simply a "regulatory" market "fixer".

Innovation is no longer a linear model where you can invest money in R&D, and with some probability you will receive an innovation as an output. Nowadays, an innovation process is much more complicated system basis with the focus on relationship, knowledge transfer, networks and actors interaction.

Mazzucato argues that this is the underlining basis for government interventions to foster this process, starting the interaction process between different actors, for the knowledge circulation and diffusion. The state may be the leading agent in achieving the type of innovative breakthroughs that allow companies and economies to grow, not just by creating the 'conditions' that enable innovation in a neoclassical framework.

This concept was criticized (Marinov 2011) mainly for the ethical aspect of "government bureaucrats" who are "risking the taxpayers money" while even in private investment the investors must "balance the risk of losses with the promise of gains." Therefore, the paper will analyse the role of private companies in a process of innovative development.

The role of private and government investment in innovation for economic growth and development

According to Schumpeter, entrepreneurs and large-scale R&Ds are the leading forces of innovative development. The main characteristic of the majority investment in private firms is a short-term expectation of R&D outputs. That is why private firms are adopting a "little r, big D" strategy.

They invest in "Research" for very long-term goals, where in the end you may receive something radical and important. However, the nature of research is very uncertain. "Development", in contrast, may be quicker and, with higher probability, bring something new to the firm's portfolio.

In some ways, it could be very useful to look at these two categories separately from an investment point of view.

If you want a short-term and safe investment, you will go for moderate development and minimum research. In contrast, if you want something that will grow, invest on something with both categories valued high. Finally, if you want something long-term, high risk and high reward, go for high research and low (until it has become a technological mature) development.

However, one may argue that private investors and venture capital will invest less in basic research and more in applied research to gain an instant return. It is hard to prove it empirically as long R&D investment are often not reported as two separate categories, but it is quite understandable from a business position.

Global development requires more long-term and high-risk investment.

The discussion about where private firms should invest can be transferred to debates of Lin and Chang (2009) about whether countries should focus more in their competitive advantage (short-term, low-risk investment), or invest in future higher-productive industries (long-term, high-risk investment).

Some experts think that world's development is under the demand of a breakthrough innovation. The Economists (2013) argues that technological development and progress are now slower compared to that of the early and mid-20th century. Nowadays, the world needs technologies that may improve productivity.

Nobel laureate Geim (FT, 2013) mentions that the world faces a technological crisis as long as new technologies arrive less frequently than it is required by the current economic situation. According to Geim, investment in the basic research gave birth to numerous inventions. However, current global challenges, such as global warming or depletion of natural resources have not increased but reduced spending on science. He also argues that scientists are able to provide any new breakthrough innovation, but private investment is not willing to come in high-risk blue-sky research.

BBC (2012) is pointing out that a "collapse in private sector spending on innovation since the recession began is equivalent to five times the amount the government spends each year on science and technology research."

Venture capitalists invest a lot in high-risky start-ups from the seeding and further stages, as a part of their investment portfolio. However, current strategy of private investment in innovation is successful for generating a short-term income but failing to provide new ways to generate growth and support innovations, where the highest value added is located.

Nowadays, industrial transformation is associated with new promising high-tech industries such as green, nano and biotechnologies, which may contribute for further global development. The underlying knowledge base for these technologies urgently demands long-term financing.

According to R&D Scoreboard (2010) "in 2010 top 1000 global companies spent a combined £344 bln on R&D in their attempts to develop new technologies, products and services." To compare, the investment required for the green technologies stands at about US\$ 5 trillion per year to 2020. That is why the government should invest in basic research to fix the "market fail", create vision, and give signals about new important technologies for private investors.

The state is in many cases more efficient in producing new knowledge in partnership with private companies. The majority of innovative firms benefits form direct governmental support from one or another perspective at the beginning of their activities. It could be argued that governmental institutions stayed behind the innovative success of new companies, signalling new perspective sectors before investors have recognised their advantages.

Several successful semiconductor companies in Silicon Valley were governmentally sponsored for 10-15 years before the rise of venture capital which can also be a proof that the state is capable of making effective or useful choices about which technologies to promote and support to foster economic growth and development.

Investment in pharmaceutical and biotech sector makes up 1/5 of overall worlds R&D spending (Jaruzelski, Loehr & Holman 2012). A lot of healthcare companies which top the list of most innovative firms emerge as spin-offs from university labs. The role of the government was often to invest in the knowledge base and in most risky development of new drugs to encourage private pharmaceutical companies shift the investment from

the variations of existing drugs.

Thus, the aforesaid confirms that the state should facilitate innovative development to tackle the common problems and contribute to further global growth.

Challenging aspects of innovation government policy.

Some modern aspects of innovation government policy, interaction between public and private finance and "picking winners" strategy can be illustrated within the "graphene" case study.

Graphene is a promising new material that can be used in various industries from electronic and nanotechnologies to green energy. It was discovered at the Manchester University with £60 million public funded basic research (The Manchester University 2013), however have not been successfully commercialised in the UK yet.

For instance, according to FT (2013) Korea is planning to create a "Korean Graphene Hub" project that is focusing on the fundamental sciences of graphene with the \$200 million budget for 6 years (partially private and partially government money. In Germany BASF (2012) and the Max Planck Institute for Polymer Research opened their $\in 10$ graphene joint research and development platform. The European Commission is looking to support EU-based scientific research with a grant of one billion euros over ten years.

According to (Tannock, CambridgeIP, 2013 cited in Broersma, 2013), in 2012 China led the world in the overall number of graphenerelated patents and patent applications across to date, with 2,204, or just fewer than 30% of the world total of 7,351. The US followed China with 1,754 patent publications, while South Korea has published a total of 1,160 patents and the UK published 54. Thus, foreign high-tech companies like IBM and Samsung are obtaining benefits from the discovery now (FT, 2013).

Government interventions are likely to be more successful when there is collaboration between public and private institutions and the "discovery processes" where the government reacts to the industry needs and their capabilities. In case of the UK, it is hard to tell about the lack of private and public cooperation or collaboration between the Universities and private firms ("embedded autonomy").

One of the main reasons is that there is a shortage of large high-tech companies in the UK. Second is the lack of "absorptive capacity" which Cohen and Levinthal (1990) defined as "a firm's ability to recognize the value of new information, assimilate it, and apply it to commercial ends". Another reason may be the lack of a special state investment bank that can support the private companies willing to innovate.

The £70 million governmental investment in a new graphene research center aimed to support the practical applications of this material by UK firms has already been negatively described as the next possible picking winner failure (Matthews 2012, Shukman 2013).

The government can be advocated by the fact that the private investment from Samsung and IBM was aimed to receive a short-term income from the electronic industry. However, to apply in-home discovered material for the purpose of domestic pharmaceutical or green sectors one will need to wait.

Perhaps, the UK government should demand a future profits reinvestment from a possible successful commercialisation to return the state expenses.

However, the graphene could be a good illustration of an "entrepreneurial state" strategy, when the government invests in a new promising industry, in attempts to gain profit from its investment.

It is only a matter of time for the UK to benefit from its investment either in a form of knowledge slipovers or new methods of graphene implementation. The interest of foreign firms and the rising amount of new graphene patents is the best evidence of future success of the governmental strategy to support the innovation.

Also it proves how complex and sophisticated STI policy can be nowadays. Even with a Nobel prise discovery and deliberate, transparent and accountable approach for picking the winners, no one can guarantee 100% of successful commercialisation.

This is why the state should be legitimised to have a right to make an error while picking the winners in their efforts to stimulate the innovative development to compete at global markets. Venture capital also has a lot of mistakes even with better analytical capabilities. However, spending the taxpayer's money and investing in high-risk innovation should be a part of the deliberative, transparent and accountable process with a personal responsibility.

Conclusion.

This paper analysed theoretical and practical aspect of the IP and STI policy as an important instrument supporting innovation development. It was argued that simply financing basic and applied research is not enough for global development nowadays. Public authorities should act like entrepreneurs, stimulating risky investment into new sectors and investing in capabilities to innovate.

It was suggested that the state is able to lead in innovative processes. However, this seems much more complicated than a linear model with the mix of relationship, knowledge transfer, networks, and actors interaction. The graphene case study showed that it is hard for the state to invest even in a zero-risk enterprise without being accused for an impropriate spending of the taxpayer's money. Thus, without a leading role of the state for private capital and innovator entrepreneurs it would be impossible to successfully commercialize even a Nobel Prize discovery.

The government alone is not able to foresee the success of its investment. The "discovery process" and deliberate STI policy are only able to reduce the risk but not to remove uncertainty. However, the state should facilitate innovative development to compete at world markets, tackle common problems, and contribute for further global growth.

REFERENCES:

BASF (2012) BASF and Max Planck Institute for Polymer Research inaugurate joint research laboratory for graphene. 24 September 2012. [Online]. Available at: www.basf.com/group/pressrelease/P-12-416 (Accessed 22 February 2013).

Broersma M. (2013) UK Falling Behind In Graphene Patent Race. *The Tech Week Europe*. 15 January 2013 [Online]. Available at: http://www.graphenetracker.com/the-uks-innovation-crisis-implodes-on-graphene/ (Accessed 22 February 2013).

Chang, H-J (2002) Kicking away the ladder: Development Strategy in Historical Perspective; Anthem Press.

Chang, H-J (2007) Bad samaritans: The myth of free trade and the secret history of capitalism. Bloomsbury press.

Chang, H-J (2009) Industrial Policy: Can We Go Beyond an Unproductive Confrontation? A Plenary Paper for ABCDE (Annual World Bank Conference on Development Economics) Seoul, South Korea 22-24 June 2009.

Chang, H-J (ed.) (2003) Rethinking Development Economics. Anthem Press

Cohen and Levinthal (1990), "Absorptive capacity: A new perspective on learning and innovation", *Administrative Science Quarterly*, Volume 35, Issue 1 pg. 128-152.

Geim, A. (2013) Be afraid, very afraid, of the tech crisis. *The Financial Times*. 5 February 2013 [Online]. Available at: http://www.ft.com/cms/s/0/ad8e9df0-6faa-11e2-956b-00144feab49a.html (Accessed 12 February 2013).

Hausmann, R., Rodrik, D. (2003). Economic development as self-discovery. Journal of development Economics, 72(2), 603-633.

Jaruzelski B., Loehr J., Holman R. (2012) The 2012 Global Innovation 1000: Key Findings. *The Booz&Co* [Online]. Available at: http://www.booz.com/media/file/BoozCo_The-2012-Global-Innovation-1000-Media-Report.pdf (Accessed 22 February 2013).

Lin, J., Chang, H-J. (2009) Should Industrial Policy in Developing Countries Conform to Comparative Advantage or Defy it? A Debate Between Justin Lin and Ha-Joon Chang. *Development Policy Review*, *27*(5), 483-502.

Marinov, B. (2011) The Fabian Entrepreneurial State as a Modern Dr. Mengele. *The American Vision*. 13 July 2011. [Online]. Available at: http://americanvision.org/4816/the-fabian-entrepreneurial-state-as-a-modern-dr-mengele/ (Accessed 13 February 2013).

Matthews (2012) Picking winners? Osborne reveals graphene cash as Treasury muscles into science funding. [Online]. Available at: *The Times Higher Education* http://www.timeshighereducation.co.uk/story.asp?storycode=422208 (Accessed 16 February 2013).

Mazzucato, M. (2011) The entrepreneurial state. Demos.

Rodrik, D. (2004) Industrial Policy for the Twenty-First century, Harvard University, John F. Kennedy School of Government, Faculty Research Working Paper Series RWP04-047

Rodrik, D. (2008) "Industrial Policy: Don't ask why, ask how", Middle Eastern Development Journal, Vol. 1 (1), pp. 1-29. Rodrik, D. (2010) The Return of Industrial Policy. *Project-syndicate*. 12 April 2010. [Online]. Available at: http://www.projectsyndicate.org/commentary/the-return-of-industrial-policy. (Accessed 20 February 2013).

Shukman (2013) Is graphene really a wonder-material? The BBC. [Online]. Available at: 15 January 2013. http://www.bbc.co.uk/news/scienceenvironment-21014297 (Accessed 16 February 2013).

The 2010 R&D Commentary & Analysis. Department for business innovation and skills. 2010 [Online]. Available at: www.innovation.gov.uk/rd scoreboard/downloads/2010 RD Scoreboard analysis.pdf (Accessed 12 February 2013).

The BBC (2012) UK faces 'crisis' in innovation investment. 16 July 2012. [Online]. Available at: http://www.bbc.co.uk/news/business-18850389 (Accessed 12 February 2013).

The Economist (2013) Innovation pessimism. Has the ideas machine broken down? 12 January 2013. [Online]. Available at: http://www.economist.com/news/briefing/21569381-idea-innovation-and-new-technology-have-stopped-driving-growth-getting-increasing (Accessed 12 February 2013).

The University of Manchester (2013) Graphene Commercialisation: Assumptions and Realities 18 Feb 2013 [Online]. Available at: http://www.manchester.ac.uk/aboutus/news/display/?id=9552 (Accessed 22 February 2013).

СОВРЕМЕННЫЕ МЕХАНИЗМЫ ГОСУДАРСТВЕННОГО АНТИКРИЗИСНОГО РЕГУЛИРОВАНИЯ

Ряховская А.Н., д.э.н., профессор, ректор Института экономики и антикризисного управления, заведующий кафедрой Финансового университета при Правительстве Российской Федерации, заслуженный экономист Российской Федерации, член-корреспондент Академии жилищно-коммунального хозяйства имени К.Д. Памфилова (Россия)

Ряховская А.Н. Сучасні механізми державного антикризового регулювання.

У статті обгрунтовується необхідність застосування різних стратегій, інструментів і методів антикризового управління на різних рівнях управління. З метою забезпечення стійкості функціонування всі суб'єкти ринкової економіки, включаючи макро-, мезо- та мікрорівень, застосовують різні стратегії, інструменти і методи управління. Їх набір залежить від їх організаційно-правової форми, виду і масштабів діяльності. Нові вимоги часу суттєво змінюють основні параметри антикризового управління, значне збільшення його масштабів, а також припускають трансформацію антикризового управління в антикризове бізнес-регулювання. У рамках досягнення цілей, виконання функцій антикризового бізнес-регулювання з використанням відповідних інструментів держава застосовує різні методи впливу прямі і непрямі, адміністративні та економічні. Державне антикризове регулювання представлено видами: нормативно-законодавчим, фінансовим, державною промисловою політикою, перерозподілом доходів.

Ключові слова: антикризове управління, методи управління, соціальна політика, фінансове регулювання.

Ряховская А.Н. Современные механизмы государственного антикризисного регулирования.

В статье обосновывается необходимость применения различных стратегий, инструментов и методов антикризисного управления на различных уровнях управления. В целях обеспечения устойчивости функционирования все субъекты рыночной экономики, включая макро-, мезо- и микроуровень, применяют различные стратегии, инструменты и методы управления. Их набор зависит от их организационноправовой формы, вида и масштабов деятельности. Новые требования времени существенно изменяют основные параметры антикризисного управления, значительное увеличение его масштабов, а также предполагают трансформацию антикризисного управления в антикризисное бизнес-регулирование. В рамках достижения целей, выполнения функций антикризисного бизнес-регулирования с использованием соответствующих инструментов государство применяет различные методы воздействия – прямые и косвенные, административные и экономические. Государственное антикризисное регулирование представлено видами: нормативно-законодательным, финансовым, государственной промышленной политикой, перераспределением доходов.

Ключевые слова: антикризисное управление, методы управления, социальная политика, финансовое регулирование.

Ryakhovskaya A.N. Modern mechanism of the government crisis management.

The article explains the need to use different strategies, tools and methods of crisis management at various levels of government. In order to ensure the sustainability of all the actors of the market economy, including macro-, meso - and micro-level, use a variety of strategies, tools and management techniques. Their combination depends on the legal form of organization, the type and scope of activities. Modern time requirements substantially change the basic parameters of crisis management, a significant increase in its scope, as well as suggest the transformation crisis management crisis in business regulation. As part of achieving the objectives, perform the functions of anti-recessionary business regulation using appropriate tools the state uses different methods of influence - both direct and indirect, administrative and economic. State crisis management represented by the species: the legal and regulatory, financial, government industrial policy, income redistribution.

Keywords: crisis management, methods of management, social policy, financial regulation.

В целях обеспечения устойчивости функционирования все субъекты рыночной экономики, включая макро-, мезо- и микроуровень, применяют различные стратегии, инструменты и методы управления. Их набор зависит от их организационно-правовой формы, вида и масштабов деятельности. Указанные действия предпринимают также муниципальные, региональные образования и государство в целом в отношении национальной экономики.

В любых экономических условиях процесс управления субъектами рыночной экономики должен включать элементы антикризисного управления. Содержание антикризисного управления, его роль в системе управления субъектами экономики существенно меняются в зависимости от:

сталии развития:

- степени важности финансовых и экономических проблем и их усложнения;
- возникновения кризисных явлений и их развития.

Применение антикризисных технологий различными субъектами необходимо даже в стабильных условиях рыночной экономики, что обусловлено наличием жесткой конкуренции как на внутреннем, так и на внешнем рынке, влиянием внешних и внутренних факторов, действием иных обстоятельств.

Основаниями для применения антикризисных технологий на всех уровнях управления могут быть:

- необходимость обеспечения социально-экономической стабильности;
- кризис мировой или государственной финансово-экономической системы;
- преодоление негативных тенденций, предотвращение, недопущение кризисных ситуаций;
- банкротство (с ликвидацией бизнеса) значительного числа субъектов экономики;
- снижение эффективности инвестиционных вложений:
- необходимость обеспечения баланса экономических интересов в стране, регионе, муниципалитете, корпоративной структуре, на