

## CONFRONTING CHAOS IN PRICING AND THE METHODOLOGY OF INFLUENCING MARKET COMPETITION ON THE EXAMPLE OF THE PHARMACEUTICAL MARKET IN UKRAINE

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Today, the pharmaceutical market of Ukraine is one of the most stable and dynamically developing markets of our country, as well as one of the most socially significant. Predictability and the guarantee of providing the population with vital pharmaceutical products depends on its stability and predictability. However, between the main market participants adopted outdated forms of interaction, which in turn are characterized by pronounced signs of oligopolistic competition, chaos and uncertainty in pricing. Price uncertainty and chaos are a source of compensatory over-pricing by all market participants, one of the main methods of countering and insuring possible risks of unpredictable price changes in future periods. These phenomena, in turn, adversely affect the prices of agents in the retail market, as well as prices for end users. The oligopolistic behavior of the wholesale agents of the pharmaceutical market, as well as the lack of information, cause constant and unpredictable price fluctuations caused by exchange rate fluctuations and a number of other factors are considered and described in the article. Using mathematical methods of analysis, certain patterns of price fluctuations and their features were identified, possible causes and driving forces were described, which made it possible to recommend how to resist pricing unpredictability for distributors, as well as to offer an innovative method of interaction between retail market participants and distributors. Unjustified changes in the value of goods on the market and price fluctuations can not affect the characteristics of demand for goods, the total sales and turnover in the industry as a whole, as well as the activities and development of market participants. The problem was identified and justified as part of the existence of a market for oligopolistic competition of distributors operating in the absence or limited information. The proposed methods make it possible to optimize purchases already in modern conditions, as well as to influence the further development of the market on the example of the development of distribution of leading European countries. It is also proposed, within the framework of strategic recommendations for market agents, an innovative methodology for conducting reverse auctions in order to prevent distributors from increasing market prices and overcoming price chaos.

The proposed methods of influencing pricing are designed to lead to lower prices offered by distributors, which, in turn, will lead to lower prices for the end user and an increase in the practical effect of the application of the proposed methods. It is also difficult to overestimate the social effect of the implementation of the proposed methods, since their introduction and use is intended to create market conditions for pricing and competition among market participants.

### References

1. Robinson Dzh. *Jekonomicheskaja teorija nesovershennoj konkurencii* [Economic theory of imperfect competition]. Moscow, Progress Publ., 1986, 471 p.
2. Turan G. Bali, Robert F. Engle, Scott Murray. *Empirical Asset Pricing: The Cross Section of Stock Returns*. New York, 2016, 460 p.

3. John Wiley & Sons. The Use of ARCH/GARCH Models in Applied Econometrics. *Journal of Economic Perspectives*, 2011, vol. 15, no. 4, pp. 157-186.
4. Moiseev S. *Ob jekonometrike, laureatah i... sosiskah* [About econometrics, laureates and... sausages]. *Valjutnyj spekuljant* [Currency speculator]. 2003, no. 12 (50), pp. 94-97.
5. Kantorovich G., Turuncheva M. *Robert Jengl i Klajv Grendzher: novye oblasti jekonomicheskikh issledovanij (Nobelevskaja premija 2003 goda po jekonomike)* [Robert Engle and Clive Granger: New Fields of Economic Research (2003 Nobel Prize in Economics)]. *Voprosy jekonomiki* [Economic issues], 2004, no. 1, pp. 37-49.
6. Strovskij L.E., Kazancev S.K., Netkachev A.B. *Vneshnejekonomicheskaja dejatel'nost' predpriyatija* [Foreign Enterprise Activity]. Moscow, UNITY-DANA Publ. 2012, 802 p.
7. Sorokina T.S. *Sistema distribucii. Instrumenty sozdanija konkurentnogo preimushhestva* [Distribution system. Tools for creating a competitive advantage]. Moscow, Alpina Publisher, 2015, 150 p.
8. Dzhulian Dent. *Vse o distribucii. Upravlenie kanalami prodazh* [All about distribution. Management of sales channels]. Moscow, Akvamarinovaja Kniga Publ., 2011, 360 p.
9. Sistemnoe myshlenie. *Kak upravljat haosom i slozhnymi processami. Platforma dlja modelirovanija arhitektury biznesa* [Systems thinking. How to manage chaos and complex processes. Platform for modeling business architecture]. Minsk, Grevcov Buks Publ., 2010, 480 p.
10. Kirillov V.N. *Mesto i rol tovarnyh birzh v rynochnoj jekonomike: Zarubezh. i otechestv. opyt funkcionirovanija. Dis. kand. jekon. nauk* [Place and role of commodity exchanges in a market economy: Foreign and domestic operational experience. PhD dis.]. Moscow, 2014, 126 p. Available at: <http://www.dissercat.com/content/mesto-i-rol-tovarnykh-birzh-v-rynochnoi-ekonomike-zarubezh-i-otchestv-opyt-funktsionirovani#ixzz5hOCcW7Nk> (accessed 06 August 2018).
11. Logist.FM. Available at: <http://logist.fm/publications/kpi-dlya-farmdistributora-iz-arhiva-dl> (accessed 06 August 2018).
12. RNC Pharma: *rejting aptechnyh setej Rossii po itogam 1 kv. 2016 g.* [RNC Pharma: rating of pharmacy chains in Russia in 1Q. 2016]. *Farmaceuticheskij vestnik* [Pharmaceutical Bulletin], 2016, 13 June. Available at: <http://www.pharmvestnik.ru/publs/lenta/obzory/rnc-pharma-rejting-aptechnyx-setej-rossii-po-itogam-1-kv-2016-g-v-naturaljnom-vyrazhenii.html> (accessed 06 August 2018).
13. Gzhegozh Ornovski. *Trendy na evropejskom rynke (Jalta, 24 maja 2013)* [Trends on the European market (Yalta, May 24, 2013)]. Available at: <http://www.apteka.ua/uploads/2013/05/8.pdf> (accessed 13 August 2018).

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