FORECASTING MARKET DEMAND FOR JEWELRY

Valentyna A. Pavlova, Alfred Nobel University, Dnipro (Ukraine). E-mail: pavlova@ duan.edu.ua

Vladislav V. Lukyanenko, Alfred Nobel University, Dnipro (Ukraine). E-mail: lvladv@ ukr.net

DOI: 10.32342/2074-5354-2019-2-51-3

Key words: market, jewelry, forecast, modeling, model, demand.

The research is devoted to the study of the development of one of the consumer goods markets. The choice is explained by the fact that, in aggregate, such markets form a significant share of gross domestic product. The target jewelry market is a very specific segment of the national economy. On the one hand, jewelry is not a necessity and does not directly affect the level of human life support, which is not included in the consumer basket. On the other hand, as long-term investments in products they perform the function of accumulation. Despite the rise in prices and the decline in the effective demand of the population, the jewelry market is notable for its dynamic development, but its patterns are related to the characteristics of the characteristics and the specifics of the market. The goal is to study the stages of formation and development of the jewelry market and to model the forecast of market demand for them. For evaluation, we used criteria for changes in indicators of the volume of jewelry sold and the influence of external factors.

To justify the stages of development of the jewelry market graphic method; has been used, to obtain market volume forecasts and select the model with the highest approximation value – modeling with a linear, parabolic, polynomial trend using the Microsoft Office Excel program; to confirm the findings on the forecast - numerical methods for the program Mathcad.

Methodical approaches to forecasting the volume of the jewelry market have been developed, consisting in using several models to identify trends in its development based on certain criteria and taking into account the influence of external factors. In the process of researching the jewelry market, three phases of development are highlighted. Predictions for parabolic and polynomial models and for the standard Excel prediction function show that the market will continue to increase sales. The growth in sales confirms that the demand for jewelry and the target group of consumers will continue.

The analysis of the state of the jewelry market in Ukraine, the modeling of the situation for the nearest future made it possible to identify trends in the stability of consumer demand regardless of economic situation and periods of development of the market under study. At the same time the following statement remains valid: the value of the demand for jewelry directly depends on the increase in real incomes of population.

References

1. *Ofictyiniy sait Derzhavhoyi sluzhby statistiki Ukrainy*. [Official site of the State Statistical Service of Ukraine]. Available at: http://www.ukrstat.gov.ua

2. Artyukh T.M. (2014). Derzhavne ta tekhnychne regulyuvannya rynku yuvelirnykh vyrobyv z dragotsennykh metaliv ta dragotsynnogo kaminnya. [The state and technical regulation of the market of jewelry products from precious metals and stones]. Theoretical and applied issues of economics, vol. 2 (29), pp. 178-179.

3. Lutsiv N.V. (2012). *Problemy i osnovnye tendentsyi rozvytku vitchysnyanogo rynku yuvelirnykh vyrobiv* [Problems and main trends of the national jewelry market development]. Commodity analysis and innovations, vol. 4, pp. 79-89.

4. Popivnyak Yu.M. (2013). *Problemy funktsionuvannya yuvelirnoyi promyslovosti Ukrainy u svitovomu konteksti ta shlyahy ih rozvyazannya* [Problems of functioning of the jewelry industry of Ukraine in the world context and the ways of their solutions]. Urgent problems of economics, vol. 9, pp. 62-69.

5. Skublina A.V., Volovyk V.M. (2017). *Otsinka rozvytku rynku yuvelirnykh vyrobyv v Ukraini* [Assessment of the jewelry market development in Ukraine]. Economy and society, Vol. 10, pp. 355-359.

6. Semenyuk K.M. (2013). *Normativno-pravova skladova derzhavnogo reguluvannya yuvelirnoyu galuzzyu v Ukraini:stan I perspectivy*. [Normative-legislative basis of the state regulation of the jewelry field in Ukraine: modern state and prospects]. Economy and state, vol. 11, pp. 145-148.

7. Shtangret A.M., Karaim M.M. (2018). *Ukrainskiy rynok yuvelirnoyi productsi : sychasnyi stan ta zagrozy*. [Ukrainian market of jewelry products:modern state and threats]. Global and national problems of economy, vol. 22., pp. 596-600.

8. Pavlova V.A., Guz A.O. *Suchasny rynok juwelirnykh tovariv*. [Modern market of jewelry products]. Materialy XI Miedzynarodowej naukowi-praktycznej konferencji "Perspektywiczne opracowania sa nauka I technikami - 2015", vol. 3. Ekonomiczne nauki: Przemysl. Nauka i studia. (07-15 November, 2015, Poland), pp. 3-4.

9. Microsoft Excel. – Available at: https://products.office.com/uk-ua/excel

10. MCDX File Extension Mathcad Prime Document. Available at: https://fileinfo.com/ extension/mcdx

11. *Chi prodayutsa yuvelirni vyroby v Interneti?* [Are jewelry products sold in Ukraine?]. Available at: https://horoshop.ua/ua/blog/sozdanie-uvelirnogo-internet-magazina/

Одержано 21.08.2019.