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Оцінка впливу монетарної політики Національного банку України на продовольчу безпеку держави

Продовольча безпека займає центральне місце у системі економічної безпеки держави і є важливою складовою її суверенітету. Залучення фінансових ресурсів сільськогосподарськими виробниками на вигідних умовах має прямий вплив на покращення сільськогосподарської інфраструктури, системи управління якістю продукції, модернізації засобів виробництва, що загалом сприяє посиленню продовольчої безпеки у розрізі її основних компонентів: наявності та безпечності продовольства. У той самий час здешевлення споживчих кредитів для населення дозволяє посилити не менш важливий елемент продовольчої безпеки – економічну доступність продовольства. Об'єктом даного дослідження є процеси регулювання продовольчої безпеки країни через зміну облікової ставки Національного банку. Предметом дослідження є сукупність теоретичних, методичних і практичних аспектів монетарної політики Національного банку України та їх впливу на формування продовольчої безпеки країни. Метою статті є всебічний аналіз та оцінка впливу монетарної політики Національного банку України, що останнім часом знаходить відображення у зниженні облікової ставки, на продовольчу безпеку держави, що виражається у доступності кредитних ресурсів для забезпечення споживчого платоспроможного попиту і модернізації сільськогосподарських підприємств. Проведено аналіз ставки дисконтування та процентних ставок за позиками, що надавалися підприємствам України. Запропоновано вдосконалювати фінансову складову комплексного механізму продовольчої безпеки, яка має на меті забезпечення застосування економічних важелів і створення умов для залучення грошових ресурсів для функціонування системи забезпечення продовольчої безпеки шляхом формування системи багатоканального фінансування.

Ключові слова: продовольча безпека, облікова ставка, монетарна політика, інфляційне таргетування, домогосподарства, платоспроможність, модернізація виробництва, ставки кредитування.

DOI [https://doi.org/10.33146/2307-9878-2020-4\(90\)-45-51](https://doi.org/10.33146/2307-9878-2020-4(90)-45-51)

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Assessment of the Influence of the National Bank of Ukraine Monetary Policy on Food Security of the State

Food security is central to the state's economic security system and is an important component of its sovereignty. Attracting financial resources by agricultural producers on favorable terms has a direct impact on improving agricultural infrastructure, product quality management systems, modernization of means of production, etc., which contributes to food security in terms of its main components: food availability and food security. At the same time, cheaper consumer loans for the population can strengthen an equally important element of food security – the affordability of food. The object of the study is the processes of food security regulation of the country due to changes in the discount rate of the National Bank. The subject of the study is a set of theoretical, methodical and practical aspects of the monetary policy of the National Bank of Ukraine and their impact on the formation of food security. The purpose of the article is a comprehensive analysis and assessment of the impact of monetary policy of the National Bank of Ukraine, which is recently reflected in lowering the discount rate on food security, which is expressed in the availability of credit resources to meet consumer demand and modernize agricultural enterprises. The analysis of the discount rate and interest rates for loans on different periods, which were given to the enterprises of Ukraine, was performed. The authors propose to improve the financial component of the integrated food security mechanism, which aims to ensure the use of economic levers and create conditions for attracting financial resources for the functioning of the food security system by forming a system of multi-channel financing.

Keywords: *food security, discount rate, monetary policy, inflation targeting, households, solvency, modernization of production, lending rates.*

Introduction. The problem of providing humanity with food takes an important place in the hierarchy of global problems. Food security of countries is an important condition and guarantee of preserving their sovereignty and independence, ensuring sustainable socio-economic development, the formation of a high level and quality of life, the reproduction of human capital. Food security should be considered through the prism of several components. Firstly, ensuring the food security of a country and its regions is associated with a guaranteed sustainable and sufficient level of food production, which fully meets the needs of its population. Secondly, food security can only be achieved when the physical and economic conditions of the population in access to food are guaranteed. Thirdly, in order to achieve food security, agricultural products must be supplied in sufficient quantities to both regional and world markets. And the last element of food security is to provide the population with food of a good quality that does not affect health in a harmful way. The monetary policy of the National Bank of Ukraine has recently been aimed at reducing the discount rate, which should be reflected in

cheaper lending resources for agricultural enterprises and households and increase economic activity. Providing cheap loans to agricultural enterprises will stimulate their modernization, which will have an impact on ensuring the efficient production of safe food products. At the same time, lending to households on favorable terms will affect the economic affordability of food.

Literature review. Due to the research of many domestic and foreign scientists and international organizations, it is becoming clear that food security is one of the most important issues for each country and the world in general. Thus, O. Kvasnytsia [4], N. Shevchenko [10], V. Nastych [6] substantiated the creation of an effective system of financial security in terms of food security of the country, suggested ways on how to improve the financial security of agricultural producers and increase the solvency of the population. O. Shebanina [12], M. Babych [1] studied the influence of economic, social and psychological factors on the formation of food security of households developed a system of indicators for integrated assessment of food security. O. Petryk and A. Danylenko [8] conclude about

the viability and benefits of inflation targeting in modern conditions, emphasize the need for further improvement and supplementation of its theoretical and practical basis, in particular in the direction of combination with mechanisms for financial stability. O. Zayachkivska [3], V. Mishchenko, O. Petryk, R. Lysenko and A. Somyk [5] substantiated the need to improve the transmission mechanism in order to achieve the objectives of monetary policy, suggested ways to improve the channels of the transmission mechanism.

The purpose of the article is a comprehensive analysis and assessment of the impact of monetary policy of the National Bank of Ukraine on food security, which is recently reflected in lowering the discount rate, which is expressed in the availability of credit resources to meet consumer demand and modernize agricultural enterprises.

Research methodology. To achieve this goal, the authors used such methods and techniques as analysis and synthesis, the establishment of causal relationships between the development of processes and phenomena, modeling, tabular and graphical methods.

Results and discussions. Food security is central to the state's economic security system and is an important component of its sovereignty [4]. As noted by N. Shevchenko [10], the most important conditions for achieving food security are: potential physical availability of food for everyone; economic opportunity to purchase food for all social groups, including the socially vulnerable, which is achieved by raising living standards or implementing the necessary social protection measures; consumption of high quality products in quantities sufficient for a balanced diet.

Changes of national economy have affected household spending. In recent years, incomes have been rising, while food costs remain extremely high, which is holding back the development of other costs [6]. In order to increase the financial security of food consumption, it is necessary to improve the financial component of the integrated food security mechanism. According to some domestic scientists [8], it is impossible to expect an increase in production without sufficient financial support for agricultural producers; on the other hand, it makes no sense to expect an increase in the level of food consumption with a low level of solvency of the population.

The main tool of the National Bank of Ukraine to perform the tasks defined by the Constitution of Ukraine and the Law of Ukraine "On the National Bank of Ukraine" [9] is the discount rate, however, given the direction of this tool in each of the objectives, its use is contradictory in nature. Ensuring economic growth requires a reduction in the discount rate, and the implementation of inflation targeting on the contrary is carried out through its increase.

According to Article 1 of the Law of Ukraine "On the National Bank of Ukraine" [9], the discount rate of the National Bank of Ukraine is one of the monetary instruments by which the National Bank of Ukraine sets a

benchmark for banks and other money market entities. By changing the discount rate, the central bank influences money supply [11]. Thus, the expansion of the money supply contributes to lower interest rates of commercial banks, which leads to an increase in credit investment in the economy and thus stimulates economic activity, and vice versa.

The main idea of the inflation targeting regime is the public announcement of quantitative inflation targets and the obligation of the central bank to achieve these targets over the medium term. Conversely, with a lower projected inflation rate compared to the target level, a policy of "cheap money" is pursued, when the interest rate falls [5].

By changing the rates on its operations with banks, the central bank affects the conditions under which banks enter into agreements with each other in the money market, and thus the value of short-term loans [1]. Ultimately, by changing interest rates, the central bank indirectly influences macroeconomic indicators such as GDP and inflation. Nominal GDP targeting is an important alternative to inflation targeting, which is also in line with the overall monetary policy strategy. At the same time, the targeting of nominal GDP better copes with demand, stimulating economic growth, and inflation targeting copes better with the achievement of inflation targets [8].

In the short run, negative aggregate demand for consumption, such as falling exports caused by the recession in the economy of an important foreign trade partner, leads to a slowdown in real GDP growth and, consequently, nominal GDP growth [5]. Monetary policy adjustments will stimulate aggregate demand, returning both demand and real GDP growth to the required level.

In addition to the above contradictions, there is an issue of changes in the cost of lending to enterprises and households. Thus, attracting financial resources by agricultural producers on favorable terms has a direct impact on improving agricultural infrastructure, product quality management systems, modernization of means of production, etc. At the same time, cheaper consumer loans for the population can strengthen an equally important element of food security – the affordability of food.

The Board of the National Bank decided to reduce the discount rate from 8 % to 6 % per annum from June 12, 2020 [7]. This is the lowest discount rate in the history of independent Ukraine. Theoretically, the discount rate affects the cost of loans provided by the National Bank to commercial banks. The higher the discount rate, the more expensive refinancing loans are for banks, the more expensive they offer their own loans; the fewer borrowers apply for loans.

Thus, we examine the impact of lowering the discount rate of the National Bank on interest rates for loans of different periods for enterprises and households in Ukraine (Tables 1, 2).

Table 1

Discount rate and interest rates for loans on different periods, which were given to the enterprises of Ukraine

| Period | Discount rate, % | Interest rates on loans (%) granted to enterprises for the period: | | |
|----------------|------------------|--|-------------------|-------------------|
| | | up to 1 year | from 1 to 5 years | More than 5 years |
| August 2019 | 17 | 15.6 | 16.2 | 8.0 |
| September 2019 | 16.5 | 14.0 | 16.3 | 9.7 |
| October 2019 | 15.5 | 13.0 | 16.2 | 7.9 |
| November 2019 | 15.5 | 12.3 | 15.4 | 9.7 |
| December 2019 | 13.5 | 12.6 | 14.7 | 10.2 |
| January 2020 | 11 | 10.6 | 16.1 | 14.2 |
| February 2020 | 11 | 10.1 | 15.8 | 12.4 |
| March 2020 | 10 | 11.8 | 14.8 | 12.4 |
| April 2020 | 8 | 11.4 | 14.6 | 8.7 |
| May 2020 | 6 | 9.9 | 15.4 | 15.4 |
| June 2020 | 6 | 9.0 | 12.0 | 7.2 |
| July 2020 | 6 | 8.4 | 12.8 | 8.6 |

Source: developed by the authors using [2].

The dependence between the change in the discount rate and fluctuations in interest rates on loans provided to enterprises is shown in Figures 1-3.

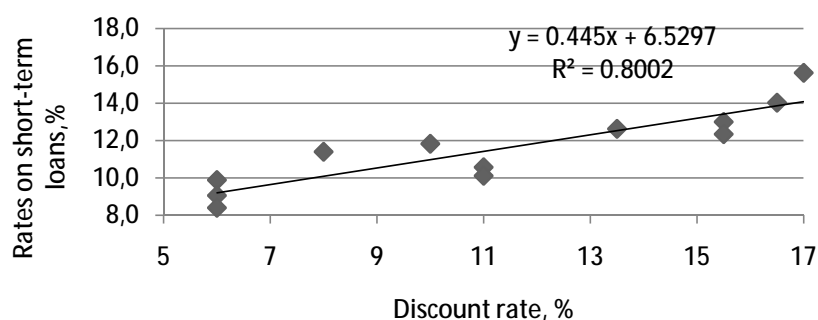


Figure 1. The dependence between the change in the discount rate and fluctuations in interest rates on short-term loans granted to enterprises

Source: developed by the authors using [2].

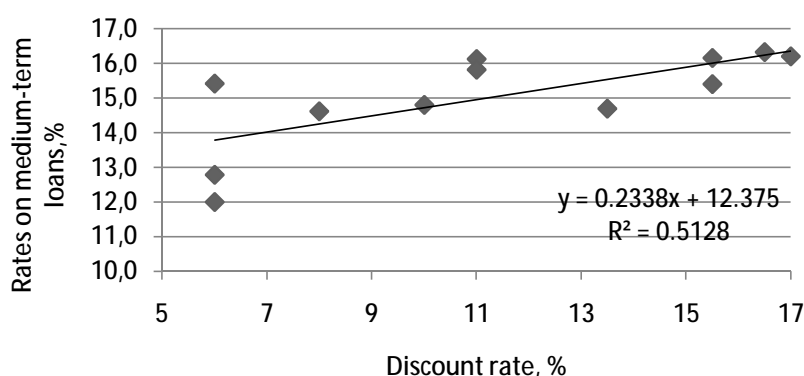


Figure 2. The dependence between the change in the discount rate and fluctuations in interest rates on medium-term loans granted to enterprises

Source: developed by the authors using [2].

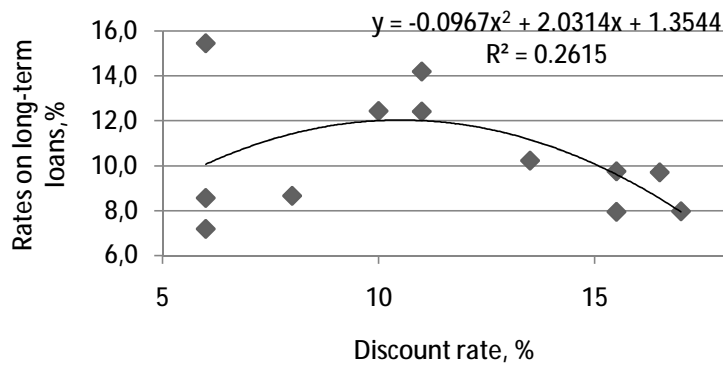


Figure 3. The dependence between the change in the discount rate and fluctuations in interest rates on long-term loans granted to enterprises

Source: developed by the authors using [2].

According to Figures 1-3, it can be concluded that for short-term and medium-term loans, the reduction of the discount rate has led to a gradual reduction of bank interest rates. At the same time, interest rates on long-term loans began to rise sharply when the discount rate fell, due to the aim of banks to insure themselves against loss of profits in the long run.

Based on this, it should be emphasized that the state must provide an effective mechanism for influencing rates on long-term loans for enterprises, since long-term lending allows renovating and technically equipping production enterprises, which is necessary to ensure elements of food security.

Table 2

Discount rate and interest rates for loans on different periods, which were given to the Ukrainian households

| Period | Discount rate, % | Interest rates on loans (%) granted to households for the period: | | |
|----------------|------------------|---|-------------------|-------------------|
| | | up to 1 year | from 1 to 5 years | More than 5 years |
| August 2019 | 17 | 37.9 | 31.7 | 19.2 |
| September 2019 | 16.5 | 37.6 | 31.2 | 18.9 |
| October 2019 | 15.5 | 37.9 | 31.1 | 19.9 |
| November 2019 | 15.5 | 37.6 | 30.8 | 20.6 |
| December 2019 | 13.5 | 37.5 | 29.7 | 21.0 |
| January 2020 | 11 | 38.4 | 32.1 | 20.1 |
| February 2020 | 11 | 38.7 | 33.0 | 16.7 |
| March 2020 | 10 | 38.5 | 32.9 | 17.2 |
| April 2020 | 8 | 38.6 | 36.0 | 17.2 |
| May 2020 | 6 | 38.4 | 32.0 | 16.6 |
| June 2020 | 6 | 38.1 | 31.5 | 18.6 |
| July 2020 | 6 | 38.0 | 30.8 | 14.7 |

Source: developed by the authors using [2].

The dependence between the change in the discount rate and fluctuations in interest rates on loans provided to Ukrainian households in is shown in Figures 4-6.

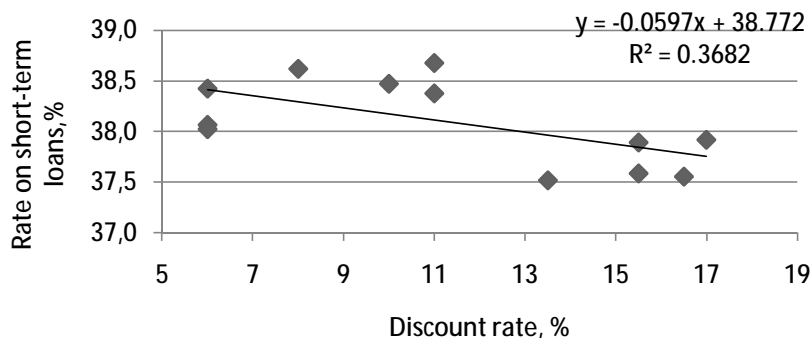


Figure 4. The dependence between the change in the discount rate and fluctuations in interest rates on short-term loans granted to households

Source: developed by the authors using [2].

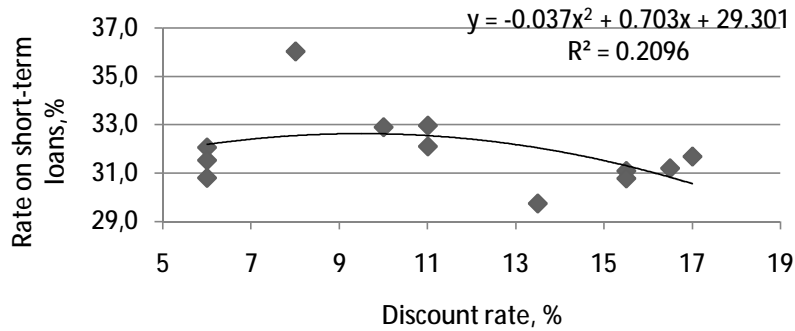


Figure 5. The dependence between the change in the discount rate and fluctuations in interest rates on medium-term loans granted to households

Source: developed by the authors using [2].

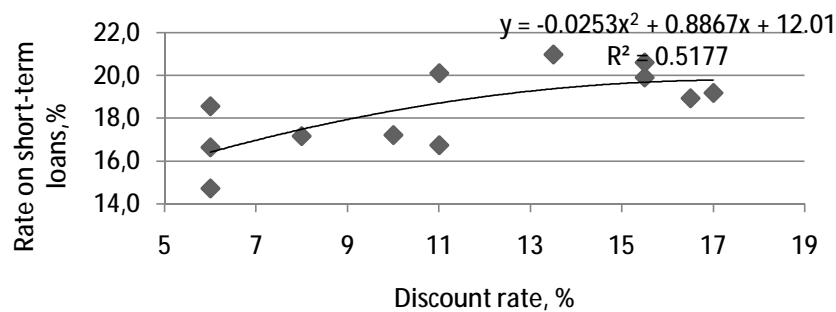


Figure 6. The dependence between the change in the discount rate and fluctuations in interest rates on long-term loans granted to households

Source: developed by the authors using [2].

According to Figures 4-6, it can be concluded that for short-term and medium-term loans for households, the reduction of the discount rate led to a gradual increase in bank interest rates, due to the aim of banks to insure themselves against short-term profits. At the same time, interest rates on long-term loans began to decline gradually along with the reduction of the discount rate. Based on this, it should be emphasized that the state should provide an effective mechanism for influencing rates on short-term consumer loans, as short-term lending allows to provide basic consumer needs, which is necessary to ensure the affordability of consumer products for households.

Conclusions. In order to increase the financial security of food consumption, it is necessary to improve the financial component of the integrated food security mechanism, which aims to ensure the use of economic levers and create conditions for attracting funds that enables the functioning of the food security system by forming a system of multi-channel financing.

Thus, attracting financial resources by agricultural producers on favorable terms has a direct impact on improving agricultural infrastructure, product quality management systems, modernization of means of production, etc., which contributes to strengthening food security in terms of its main components: availability and food security. At the same time, cheaper consumer loans for the population can strengthen an equally important element of food security – the affordability of food.

The state must provide an effective mechanism for influencing rates on long-term loans for enterprises, since long-term lending allows renovating and technically equipping production enterprises, which is necessary to ensure elements of food security. In addition, the state should provide an effective mechanism for influencing rates on short-term consumer loans, as short-term lending allows to meet basic consumer needs, which is necessary to ensure the affordability of consumer products for households.

4 Список використаних джерел

1. Бабич М. М. Фінансова складова забезпечення продовольчої безпеки країни. *Ефективна економіка*. 2014. Вип. 7. URL: <http://www.economy.nauka.com.ua/?op=1&z=4018> (дата звернення: 04.10.2020).
2. Грошово-кредитна статистика. *Національний банк України*: веб-сайт. URL: <https://bank.gov.ua/ua/statistic/sector-financial/data-sector-financial#1ms> (дата звернення: 04.10.2020).
3. Заячківська О. В. Аналіз наявного стану інфляційних процесів у сучасній Україні. *Науковий вісник Міжнародного гуманітарного університету*. 2017. Вип. 24-2. С. 34-38.
4. Квасниця О. Фінансове забезпечення продовольчої безпеки домогосподарств. *Світ фінансів*. 2017. Вип. 4(53). С. 35-45.

5. Міщенко В. І., Сомик А. В. Монетарний трансмісійний механізм в Україні. *Вісник НБУ*. 2017. Вип. 6. С. 24-27.

6. Настич В. Г. Продовольча безпека як складова національної безпеки України. *Вісник Бердянського університету менеджменту і бізнесу*. 2013. Вип. 3(23). С. 43-48.

7. НБУ знизив облікову ставку до найнижчого рівня в історії незалежної України. *Українська правда: веб-сайт*. URL: <https://www.epravda.com.ua/news/2020/06/11/661632/> (дата звернення: 04.10.2020).

8. Петрик О., Даниленко А. Інфляційне таргетування після кризи: міжнародний досвід. *Вісник Національного банку України*. 2012. Вип. 10. С. 15-19.

9. Про національний банк України: Закон України від 20.05.1999 р. № 29. URL: <https://zakon.rada.gov.ua/laws/show/679-14#Text> (дата звернення: 04.10.2020).

10. Шевченко Н. О. Продовольча безпека як політичний та економічний пріоритет держави. *Інвестиції: практика та досвід*. 2011. Вип. 3. С. 111-113.

11. Як Національний банк може впливати на інфляцію, використовуючи облікову ставку? *Національний банк України: веб-сайт*. URL: <https://bank.gov.ua/ua/monetary/about/keyrate-inflat> (дата звернення: 04.10.2020).

12. Burkovska A., Ciccullo F., Shebanina O., Lunkina T., Burkovska A. Modeling the System of Social Stability Through the Food Safety Paradigm. *Management Theory and Studies for Rural Business and Infrastructure Development*. 2019. Vol. 41(4). pp. 474-486. DOI <https://doi.org/10.15544/mts.2019.38>

4 References

1. Babych, M. M. (2014). Finansova skladova zabezpechennia prodovolchoi bezpeky krainy [The financial component of the country's food security]. *Efektivna ekonomika*, (7). Retrieved from <http://www.economy.nayka.com.ua/?op=1&z=4018>

2. Natsionalnyi bank Ukrainy. (2020). Hroshovokredytna statystyka [Monetary statistics]. Retrieved from <https://bank.gov.ua/ua/statistic/sector-financial/data-sector-financial#1ms>

3. Zaiachkivska, O. V. (2017). Analiz naiavnogo stanu inflatsiinykh protsesiv u suchasni Ukraini

[Analysis of the current state of inflation in modern Ukraine]. *Naukovyi visnyk Mizhnarodnoho humanitarnoho universytetu*, (24-2), 34-38.

4. Kvasnytsia, O. (2017). Finansove zabezpechennia prodovolchoi bezpeky domohospodarstv [Financial security of food security of households]. *Svitfinansiv*, 4(53), 35-45.

5. Mishchenko, V. I. & Somyk, A. V. (2017). Monetarnyi transmissiynyi mekhanizm v Ukraini [Monetary transmission mechanism in Ukraine]. *Visnyk NBU*, (6), 24-27.

6. Nastych, V. H. (2013). Prodovolcha bezpeka yak skladova natsionalnoi bezpeky Ukrainy [Food security as a component of national security of Ukraine]. *Visnyk Berdianskoho universytetu menedzhmentu i biznesu*, 3(23), 43-48.

7. Ekonomichna pravda. (2020). NBU znyzyv oblikovu stavku do nainyzhchoho rivnia v istorii nezaleznoi Ukrainy [NBU lowered the discount rate to the lowest level in the history of independent Ukraine]. Retrieved from <https://www.epravda.com.ua/news/2020/06/11/661632/>

8. Petryk, O. & Danylenko, A. (2012). Inflatsiine tarhetuvannia pislia kryzy: mizhnarodnyi dosvid [Post-crisis inflation targeting: international experience]. *Visnyk Natsionalnoho banku Ukrainy*, (10), 15-19.

9. Verkhovna Rada Ukrainy. (1999). Pro natsionalnyi bank Ukrainy: Zakon Ukrainy [On the National Bank of Ukraine: The Law of Ukraine]. Retrieved from <https://zakon.rada.gov.ua/laws/show/679-14#Text>

10. Shevchenko, N. O. (2011). Prodovolcha bezpeka yak politychnyi ta ekonomichni priorytet derzhavy [Food security as a political and economic priority of the state]. *Investysii: praktyka ta dosvid*, (3), 111-113.

11. Natsionalnyi bank Ukrainy. (2020). Yak Natsionalnyi bank mozhe vplyvaty na inflatsiiu, vykorystovuiuchy oblikovu stavku? [How can the National Bank influence inflation using the discount rate?]. Retrieved from <https://bank.gov.ua/ua/monetary/about/keyrate-inflat>

12. Burkovska, A., Ciccullo, F., Shebanina, O., Lunkina, T. & Burkovska, A. (2019). Modeling the System of Social Stability through the Food Safety Paradigm. *Management Theory and Studies for Rural Business and Infrastructure Development*, 41(4), 474-486. DOI <https://doi.org/10.15544/mts.2019.38>