Industry Structure of Agri-Food Production and Consumer Food Price Index

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Abstract. It is believed that one of the main conditions for the absence of a shortage and stability of food prices on the domestic market is a sufficient level of food self-sufficiency, calculated as the ratio of the volume of production of this type of food to the volume of its use in the territory of the given country. However, this approach has a weak point: production volumes in the numerator are agricultural raw materials, and not consumer-ready industrial products. Considering the export channel of the extraction of food raw materials, the production volumes of agricultural goods sufficient for food self-supply do not guarantee their availability at national enterprises of the food industry to produce semifinished foods and ready-made food in a quantity sufficient for the food market to function without a deficit. Therefore, the purpose of this study is to test the hypothesis that the violation of industry proportions of agri-food production is one of the reasons for the growth of the consumer price index in the food market of Ukraine. The authors of this study proposed the "coefficient of the ratio of gross value added created in the food industry to gross value added created in agriculture" as an indicator that describes the sectoral structure of agri-food production. It was found that, provided the other factors of influence remain unchanged, an increase in the coefficient "the ratio of gross value added created in the food industry to gross value added created in agriculture" by 1% leads to a decrease in the consumer price index of food products and soft drinks by 0.317%. It was concluded that to ensure the stability of national food prices, such a coefficient should not be less than 1. The prospects of further research include the development of an organisational and economic mechanism for the development of a closed value chain in the system of national agri-food production

Keywords: agriculture, food processing, food products, deficit, inflation, value added, coefficient

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INTRODUCTION

The growth of the Ukrainian economy and the improvement of the living conditions of its citizens are hindered by several factors of internal and external origin – the Russian-Ukrainian war, the COVID-19 pandemic, the monopoly influence of financial and industrial groups that resist the dismantling of the clan-oligarchic model of the economy, sabotaging judicial, anti-corruption, and other important reforms. As a result, the Ukrainian economy has an uncompetitive structure, excessive resource intensity and critical dependence on the import of hydrocarbons, mainly the raw material nature of production, an acute shortage of investment, unjustifiably low modernisation rates and introduction of modern resource-saving technologies, etc.

The external manifestation of the difficult state of the Ukrainian economy is chronic macroeconomic instability – long-term cyclical unemployment and constant price growth (State Statistics Service of Ukraine, 2021). And if the factors that reduce the socio-economic losses of households from excessive unemployment are the growth of self-employment, the shadow labour market and labour emigration, then fixed-income households do not have protection against excessive inflation.

The most popular object of analysis in the study of national inflationary processes is the Consumer Price Index (CPI). This is explained by the fact that the purchasing power of nominal incomes of citizens of the country, i.e., the final demand of households, directly depends on its dynamics. Over the past 22 years (2000-2021), consumer prices in Ukraine have increased 10.9 times with an average annual growth rate of +11.5% (State Statistics Service of Ukraine, 2022). These are signs of galloping inflation, which hinders the formation of national savings and undermines the policy of income growth of the population.

One of the key reasons for the growth of the food CPI is the faster growth rate of food demand compared to food supply, which leads to the emergence of deficits. According to the authors, the violation of the sectoral structure of agri-food production is a factor in the growth of consumer food prices in Ukraine. This violation is caused by excessive exports of food raw materials from Ukraine, which leads to a shortage of food industry products and an increase in the corresponding prices on the internal market.

LITERATURE REVIEW

Considering the outstanding importance of the full functioning of the food market to ensure macroeconomic stability, the subject of food prices, conditions of their formation and factors of influence attracts the constant attention of scientists, representatives of competent state bodies, consumers.

J. Baek and W.W. Koo (2009) believe that the key drivers of rising food prices in the United States between 1991 and 2008 were agricultural prices and the exchange rate. Scientists also conclude that energy prices have insignificant effect on food prices in the short term – their impact is a long-term factor.

When investigating the causes of the rapid rise in global food prices in 2002-2008, D. Mitchell (2008) focused on three factors – the increase in biofuel production from food raw materials, the devaluation of the US dollar, and the increase in food production costs due to rising energy prices. The scientist believes that the most important of them was the increase in biofuel production in the United States and the EU. The authors find a similar approach in C. Alexander & C. Hurt (2007). Studying the impact of increased biofuel production on food prices, the researchers conclude that the increase in the area under maize and soybeans used for biofuel production in the United States leads to an increase in retail prices for livestock products in the short term.

A group of scientists, including J. Davidson *et al.* (2016), conducted a study on food price factors in the UK between 1990 and 2012. The researchers concluded that the main drivers of food prices included world prices for agricultural products, the exchange rate of the national currency, oil prices, and the duration of the period during which prices rose.

G. Erber, M. Petrick and V. von Schlippenbach (2008) believe that the main reason for the rapid increase in global food prices since 2007 was the abuse of market power by agricultural producers (fertilisers, seeds, etc.) and wholesalers in relation to agricultural producers, which requires an immediate response from international regulatory authorities. These drivers are classified by researchers as short-term impact factors. According to researchers, the factors of the long-term impact of the increase in food prices, include population growth, changes in eating habits, the growing scale of urbanisation, and the increase in the production of biofuels. The authors believe that their effect will manifest itself in an increase in supply shortages.

S. Charlebois *et al.* (2021) from the Universities of Dalhousie, Guelph, Saskatchewan and British Columbia proposed a list of factors driving food price increases in Canada in 2021: increased agricultural production costs, inflation, currency fluctuations and an adverse trade environment, the COVID-19 pandemic, problems in retail and distribution channels, changes in agricultural policy and increased regulation.

In contrast to the developed countries of Europe and North America, the factors of food prices in developing countries in Asia look different. For instance, Huh Hyeon-Seung and Park Cyn-Young (2013) argue that in a given region, the predominant factors for changes in domestic food prices are as follows: 1) own macroeconomic instability, especially in the short term; 2) food price shocks at the regional level considerably affect internal food prices in Asian countries. This effect is particularly pronounced in the medium and long term;

3) global food price shocks have little impact on both general regional food prices and internal prices of Asian countries. Similarly, other global factors, such as oil prices and food futures, according to scientists, do not justify the reasons for variations in the overall regional price and individual internal prices of Asian countries. Researchers believe that the reasons for the low dependence of food prices in Asian countries on changes in global prices are as follows: 1) there is a closer regional integration than the global one; 2) food prices are often prudently controlled and become the target of political intervention, especially in developing countries, given their impact on poverty and household well-being. Concerns about food security, agricultural protection, and food self-sufficiency also mean that food trade is subject to strict administrative and legal regulation. Unlike other manufactured goods, agricultural goods are generally subject to strict protectionist agricultural policies. Researchers believe that the main drivers of food prices in Asia are low transitional food stocks and supply shocks due to unfavourable agroclimatic conditions.

A similar approach was found in the study by A. Henna, I. Zainab and A.K. Muhammad (2011). Scientists investigate the causes of fluctuations in food prices in Pakistan and conclude that the most important variable affecting food prices in both the long and short term is the macroeconomic factor – the supply of money. Therewith, the authors do not consider energy prices to be a key factor determining food prices. However, there is a statement that contradicts the findings of Huh Hyeon-Seung and Park Cyn-Young for Asia – A. Henna, I. Zainab and A.K. Muhammad (2011) believe that global prices noticeably impact food prices in Pakistan. Specifically, the researchers note that even without imports, the growth of world food prices still puts pressure on the internal market, causing an increase in internal food prices. If world food prices rise and there is a need to import said food, imported inflation occurs in the internal food market. The close relationship between food prices on the world and national markets has been indicated by H. Ameye, F.N. Bachewe and B. Minten (2021).

Investigating the reasons for the prolonged increase in food prices in India, R. Anand, N. Kumar and V. Tulin (2016) conclude that the main factor of food inflation is the higher growth rate of food demand compared to food supply, which causes a shortage. The main reason for the accelerated increase in food demand is economic growth in India, which leads to an increase in household incomes. Rising incomes are leading to a shift in food consumption from simple starchy plant-based diets to more nutritious and valuable foods that include a range of dairy products, vegetables, fruits, and meat. But scientists attribute the insufficient rate of increase in food supply to the low level of labour productivity in India's agriculture. The problem is aggravated by inefficient management of transitional food supplies – their overaccumulation and insufficient use during periods of rapid growth in food prices.

For poor and developing countries, seasonal fluctuations in agricultural production and the competitive structure of the market are key factors in food prices. C.B. Cedrez, J. Chamberlin and R.J. Hijmans (2020) note pronounced fluctuations in food prices in Africa – the lowest prices 2-3 months after harvesting, and the highest just before harvesting. B.L. Falcao and M. Dinerstein (2020) confirmed the assumption that resellers in Africa, using market power, pay farmers prices that are lower than competitive ones, and the consumer prices are higher than the competitive ones. In this context, P. Obie (2019) has also expressed his opinion quite unequivocally. The author notes substantial losses in the welfare of African households due to underdeveloped food supply chains – they are five times higher than anywhere else in the world. The scientist believes that the potential increase in well-being from reducing these losses is significant and is conditioned upon lower food prices. This can be effectively achieved by investing in expanding the supply chain.

Among the current factors of rising food prices around the world, the COVID-19 pandemic should be highlighted separately. J.B. Adewopo, G. Solano-Hermosilla, L. Colen and M. Fabio (2021) note that the spread of the disease and related quarantine measures are destroying supply and demand in the value chains of goods and have led to a sharp increase in food prices. The negative humanitarian and economic impact of COVID-19 will be long-term. J. Hammond *et al.* (2022) note that in poor countries, its most devastating effects will affect small rural owners. L. O'Meara, C. Turner, D.C. Coitinho and S. Oenema (2022) note the urgent need to create food systems that are resistant to chronic stress and future shocks. This, according to scientists, requires a synergistic approach. It must combine innovative responses in food systems and the food environment to ensure access to sustainable, healthy food and the use of positive adaptive behaviours adopted by some consumers in response to the pandemic.

Despite the considerable scientific development of the topic of food price formation, the problem of violation of the sectoral structure of agri-food production in the context of one of the factors of growth of consumer food prices in Ukraine has not been reflected in the research of foreign and Ukrainian scientists. Notably, the focus of research on the sectoral structure of agri-food production in the foreign expert community is considered from a broader perspective of identifying conditions, factors of formation, and development of the value chain. For instance, K. Mausch, A. Hall and C. Hambloch (2020) investigate the value chain development in agri-food production in the context of the problem of achieving the Sustainable Development Goals. A similar approach is found in A.K. Farmery *et al.* (2021).

Researchers explore the possibility of simultaneously accounting for food and food security, added social, economic, or environmental outcomes in different options of value chain creation. S. Allen & A. de Brauw (2018) study the types of interventions in the value chain that can improve the consumption of micronutrient-rich foods in the context of achieving the second Sustainable Development Goal – food security and nutrition improvement by 2030. G. Soullier *et al.* (2020) investigate measures taken by African governments to increase investment in the modernisation of the value chain in the rice industry after the 2008 food crisis. The authors assess the state of modernisation by examining data on rice mill investments in semi-industrial and industrial grinding technologies, contract farming and vertical integration during the post-crisis period of 2009-2019 in West Africa, etc. Therewith, as the authors' earlier studies show, the problem of consumer price growth in Ukraine due to the presence of seasonal shortages of certain types of food products exists (Mudrak *et al.*, 2020) and the authors suggest that it is related to the problem of violations in the sectoral structure of domestic agri-food production. Therefore, such a problem requires more in-depth research and justification of respective solutions.

The purpose of this study is to test the hypothesis that the violation of the sectoral structure of agri-food production is one of the reasons for the growth of the food CPI.

The practical significance of the study lies in the fact that its results constitute a scientifically based argument in favour of changes in the national food policy of Ukraine. It should become further proof that to ensure the stability of the internal food market, it is no longer enough to stimulate the production of agricultural goods. It is necessary to ensure the formation of a closed added value chain.

MATERIALS AND METHODS

The authors of this study propose the "coefficient of the ratio of gross value added created in the food industry to gross value added created in agriculture" as an indicator that describes the sectoral structure of agri-food production.

$$K_{i.s.} = \frac{GVA_{f.i.}}{GVA_a} , \qquad (1)$$

where: $K_{i.s.}$ is the ratio of gross value added created in the food industry to gross value added created in agriculture; $GVA_{f.i.}$ is the gross value added created in the food industry, in real prices; GVA_a is the gross value added created in agriculture, in real prices.

To find the likely impact of the sectoral structure of agri-food production on the index of consumer food prices, it is proposed to build two dynamic series: 1) real values of the coefficient for a certain period; 2) real values of the consumer price index of food products and

non-alcoholic beverages for the specified period. It is proposed to use the obtained real values of control indicators for analytical grouping and nonlinear correlation analysis.

When conducting analytical grouping, the grouping attribute "the ratio of food industry GVA to agriculture GVA" for each country is calculated as the average annual value for a certain period:

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i = \frac{1}{n}(x_1 + \dots + x_n). \qquad (2)$$

The real value of the CPI of food products and soft drinks for each country is calculated as the base price index for a certain period.

The authors of this paper propose nonlinear (curved) correlation analysis and construction of the regression equation based on the power function $Y=x^b$. Its important property is that the regression coefficient b is a ready-made coefficient of elasticity, which shows how many percent the functional attribute will change when the factor attribute changes by 1%. To identify stable relationships of the features under study, the authors used the following long-term statistics:

1) for Ukraine for 2004-2018: a) GVA indicators in agriculture, hunting, forestry in real prices, mln. UAH; b) GVA indicators in the industrial production of food, beverages, and tobacco products in real prices, mln. UAH; c) CPI of food products and soft drinks, %;

2) for the countries of the Organisation for Economic Cooperation and Development (OECD) for 2003-2018: a) GVA indicators in agriculture, hunting, forestry and fisheries, in real prices in the national currency; b) GVA indicators in the industrial production of food, beverages and tobacco products, in real prices in the national currency; c) CPI of food products and soft drinks, %;

3) for individual OECD countries with available static data for 1970-2018: a) GVA indicators in agriculture, hunting, forestry, and fisheries, in real prices in the national currency; b) GVA indicators in the industrial production of food, beverages and tobacco products, in real prices in the national currency; c) CPI of food products and soft drinks, %.

RESULTS AND DISCUSSION

Considering that the population of Ukraine spends more than half of its expenses on the purchase of food products (52.1% in 2020 (State Statistics Service of Ukraine, 2022)), the critical segment of the national consumer market is the food market, and the critical CPI component is the CPI for food products and soft drinks. The last assumption also has factual confirmation – in the weight structure of the CPI, according to the Classification of individual consumption by goals, food products and non-alcoholic beverages account for 44.7% (State Statistics Service of Ukraine, 2022). Thus, the study of the factors that form the CPI of food and non-alcoholic

beverages in Ukraine is an urgent scientific task, the solution of which depends on the ability of the state to guarantee food security to its citizens.

The factors influencing the CPI and prices on the food market, as its most significant part in Ukraine, are monetary and non-monetary in nature. Monetary factors determine core inflation, which is measured by the "core consumer price index" indicator. Its distinctive feature is the exclusion of short-term uneven price changes under the influence of factors that have administrative, random or seasonal properties, and the assessment of price dynamics based on the exchange equation. Non-monetary factors are formed under the influence of changes in production costs, industry structure, administrative regulation of prices and tariffs, etc.

Research by Ukrainian scientists and analytical reports of the National Bank of Ukraine suggest that non-monetary factors are currently the main factors of inflation in Ukraine (Danylyshyn, 2022; National Bank of Ukraine, 2022). According to the authors, one of the least studied non-monetary factors of the CPI for food products is the sectoral structure of agri-food production.

The sectoral structure of agri-food production refers to the ratio between the production volumes of food raw materials in the form of agricultural products and the volumes of food industry products. The authors suggest that the violation of proportions towards increasing the production of agricultural food raw materials and reducing the production of finished goods of the food industry leads to the emergence of periodic or chronic food shortages in the internal market. This causes food inflation. This phenomenon is impossible in conditions of complete or partial closure of the national economy, the exchange of which with the

institutional sector "abroad" is limited by protectionist measures of the national foreign trade policy. However, in the context of the growing openness of national economies, because of the unprecedented expansion of the boundaries of economic globalisation, the export of food raw materials in the form of agricultural products becomes almost unlimited. As a result, there is an increasing potential for situations when, with sufficient volumes of agricultural production to meet internal food needs, the excessive export of food raw materials causes its shortage in the internal market. This leads to the stagnation of the country's food industry and the galloping growth of consumer food prices.

It is generally accepted that one of the main conditions for the absence of a deficit and the presence of price stability in the internal food market is an elevated level of food self-sufficiency, calculated as the ratio of the volume of production of the given type of food to the volume of its use in the territory of the given country. However, this approach has a weak point – production volumes in the numerator are agricultural raw materials, and not consumer-ready industrial products. Given such a channel of extraction of food raw materials as "export", the production volumes of agricultural products sufficient for food self-supply do not guarantee their arrival at national food industry enterprises and the internal market in the form of ready-made food or semifinished food products.

Most developed countries, especially the EU, protect their internal food markets by applying the principle of increasing import duties as the degree of processing of imported food products increases. For instance, from zero or minimum values for importing raw materials to maximum values for importing finished products (Table 1).

Table 1. *Import duty rates for certain Ukrainian goods when imported to the EU*

Good*s*	Code according to UCG FEA	Basic rate of import duty, %
Live animals for slaughter	0102 90 21 00, 0102 90 51 00, 0102 90 61 00	5
Cattle meat, fresh or refrigerated	0201	15
Cattle meat, frozen	0202	15
Live domestic chickens	0105 11	0
Poultry plucked, half-patted, with a head and legs, the so-called "83% chickens"	0207 11 10 00	15
Wheat and a mixture of wheat and rye (meslin), other	1001 10 00 90	10
Wheat flour or a mixture of wheat and rye (meslin)	1101 00	15
Cereals, groats, and granules from grain crops, from durum wheat	1103 11 10 00	20
Cereal grains, processed in other ways (e.g., hulled, flattened, flaked, cut (kernel) or ground), except for rice of heading 1006; wheat germ, whole, flattened, flaked, or ground	1104 19 10 00	20

Source: *Law of Ukraine No. 1678-VII (2014)*

Thus, they restrict the import of finished food products, encourage the import of agricultural products and provide cheap raw materials to their processing enterprises, accumulating added value in their economies. As a result, countries exporting raw materials from among the poor or developing countries are experiencing a deterioration in the terms of trade and face the problem of stagnation of the national food industry. For instance, in Ukraine, the level of self-supply in grain products in 2020 was 323.3% (State Statistics Service of Ukraine, 2021). However, its excessive export causes a shortage of feed grains, which leads to seasonal shortages of primary processed meat and an increase in corresponding prices (Mudrak *et al.*, 2020).

As the results of the analytical grouping show (Table 2), as the real value of the ratio of food industry GVA to agriculture GVA decreases, the CPI of food products and non-alcoholic beverages increases:

– for the first group of countries with an average coefficient of 2.481, the average CPI value is 1.29;

– for the second group of countries with an average coefficient of 1.342, the average CPI value is 1.451;

– for the third group of countries with an average coefficient of 0.728, the average CPI value is 1.571.

***Table 2**. Analytical grouping of OECD countries and Ukraine by the real value of the ratio of food industry GVA to agriculture GVA*

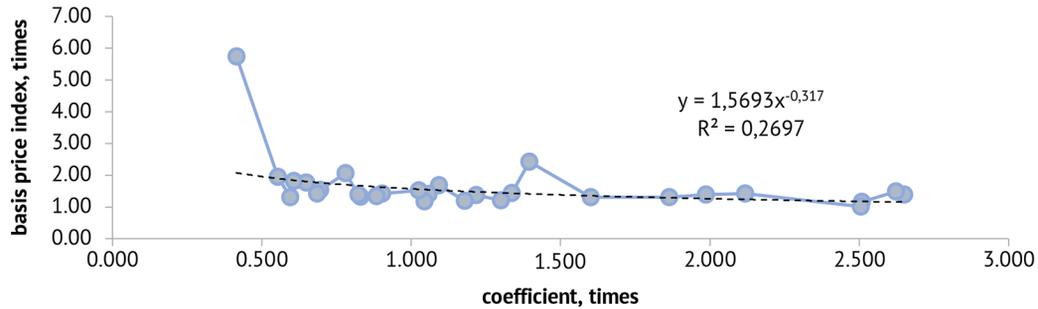| Country	Coefficient	Basic CPI of food products and soft drinks for 2003-2018*
Belgium	2.651	1.39
United Kingdom	2.622	1.48
Japan	2.508	1.16
Switzerland	2.505	1.01
Luxembourg	2.118	1.42
Average for the group	*2.481*	*1.29*
Norway	1.987	1.38
Germany	1.864	1.30
Denmark	1.602	1.31
Mexico	1.396	2.42
Austria	1.337	1.44
France	1.301	1.21
USA	1.217	1.37
Netherlands	1.180	1.18
Lithuania	1.093	1.68
Czech Republic	1.059	1.40
Portugal	1.045	1.18
Poland	1.026	1.52
Average for the group	*1.342*	*1.451*
Spain	0.903	1.41
New Zealand	0.884	1.34
Italy	0.830	1.32
Australia	0.824	1.39
Latvia	0.780	2.06
Slovenia	0.696	1.53
Slovakia	0.685	1.42
Estonia	0.649	1.77
South Korea	0.608	1.81
Finland	0.595	1.30
Hungary	0.554	1.94
Average for the group	*0.728*	*1.571*
Ukraine	0.415	5.74

Note: *for Ukraine for 2004-2018*
Source: *compiled by the authors based on the data from the State Statistics Service of Ukraine, OECD (2022)*

Ukraine closes the table with the real values of the features under study of 0.415 and 5.74, respectively.

To test the results of the analytical grouping, the authors of this study analysed the relationship between the functional feature "basic CPI of food and soft drinks" and the factor feature "coefficient of the ratio of food industry GVA to agriculture GVA" using a non-linear correlation based on the power function (Fig. 1).

$$y = 1{,}5693x^{-0{,}317}$$
$$R^2 = 0{,}2697$$

Figure 1. *Correlation analysis of the relationship between the functional feature "basic CPI of food products and soft drinks" and the factor feature "coefficient of the ratio of food industry GVA to agriculture GVA" according to statistics from OECD countries* and Ukraine***

Note: ** for 2003-2018; ** for 2004-2018*
Source: *compiled by the authors based on the data from the State Statistics Service of Ukraine, OECD (2022)*

Correlation coefficient $r=0.519$. This indicates the average density of the relationship between the function under study and the factor. Given that the CPI of food products and soft drinks is influenced by many other key factors, the result obtained is a good confirmation of the hypothesis formulated at the beginning of the study. Regression coefficient $b=-0.317$. This means that, while other factors of influence stay unchanged, an increase in the coefficient by 1% leads to a decrease in the CPI of food products and soft drinks by 0.317%.

To further verify the results obtained, the authors performed a correlation analysis of the relationship between the features under study based on statistical data from individual OECD countries for 1970-2018 (Fig. 2).

For this sample of countries (Table 3), the relationship under study occurs in 58.3% of cases. Notably, in all countries the relationship under study is reversed. This suggests that the sectoral structure of agri-food production affects the CPI even in those countries where the relationship under study has a low density ($r<0.5$). Evidently, its impact is difficult to distinguish due to the strong influence of other factors of food inflation.

Table 3. *Values of correlation coefficients, relationship density and elasticity coefficients based on the result of correlation analysis of the relationship between the functional feature "CPI of food products and soft drinks, %" and the factor feature "coefficient of the ratio of food industry GVA to agriculture" according to long-term statistics of individual OECD countries*

Country	Correlation coefficient, r	Communication density	Coefficient of elasticity, E
Australia	0.432	Low	-0.101
Austria	0.384	Low	-0.024
United Kingdom	0.518	Average	-0.217
Denmark	0.555	Average	-0.078
Italy	0.781	High	-0.118
Mexico	0.471	Low	-0.213
Netherlands	0.251	Low	-0.041
New Zealand	0.283	Low	-0.072
USA	0.816	High	-0.116
Finland	0.708	High	-0.158
France	0.771	High	-0.098
Japan	0.681	Average	-0.071

Source: *compiled by the authors based on the data from OECD (2022)*
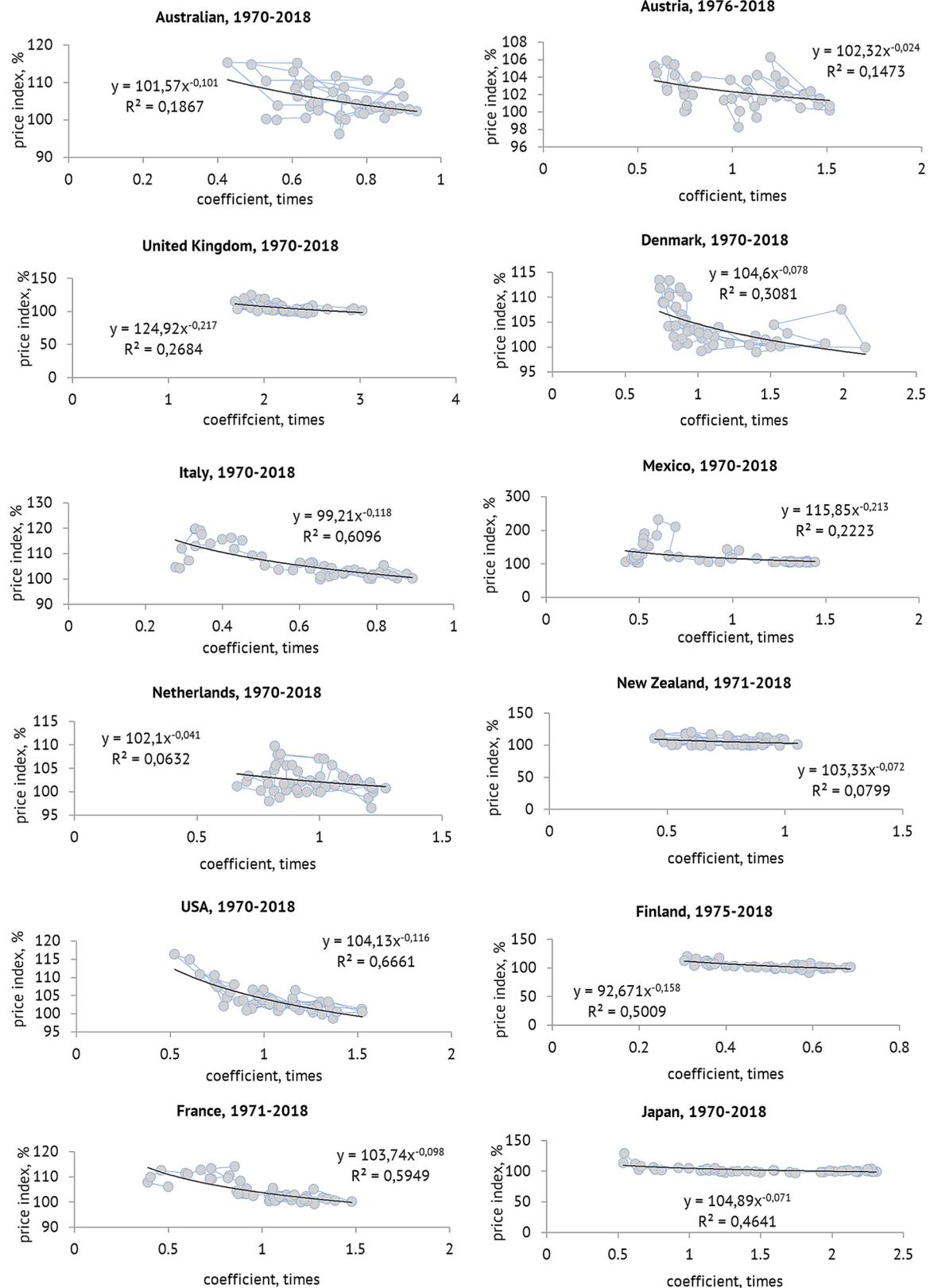
Figure 1. *Correlation analysis of the relationship between the functional feature "CPI of food and soft drinks, %"
and the factor feature "ratio of food industry GVA to agriculture GVA" according to long-term statistics
of individual OECD countries*
Source: *compiled by the authors based the data from OECD (2022)*

The results of this study confirm the hypothesis about a connection between the industry structure of agri-food production and the CPI. Its effect is manifested in the long term. According to the authors, it is significant that the average and high density of the relationship under study takes place in developed economies. This is probably due to the long period of formation of highly organised competitive agricultural production and national industrial capital, the development of a complex multichannel supply and sales logistics system, the achievement of a prominent level of purchasing power of the population, which eventually ensures the stable functioning of a closed value chain in the field of agri-food production.

CONCLUSIONS

In the conditions of unhindered export of products of domestic producers to the foreign market, sufficient volumes of agricultural production for food self-supply are no longer a guarantee of a deficit-free national food balance and stability of internal food prices. The latter should be provided with sufficient volumes of production of finished products by enterprises of the national food industry. This means that prices for food products depend on the industry structure of agri-food production. The nature of this relationship is as follows: if other factors of influence stay unchanged, an increase in the ratio of GVA created in the food industry to GVA created in agriculture causes a decrease in the consumer food price Index, and vice versa. An essential condition for the stability of national food prices is sufficient production volumes by the food industry – the ratio of the gross added value created in the food industry to the gross added value created in agriculture should not be less than 1.

The clear conclusion for the Ukrainian economy is the recognition of the fact that the national agrarian policy, which is based solely on the problem of increasing budget support to agricultural producers, requires qualitative changes. Presently, its relevant task should be to create organisational and economic mechanisms for stimulating the demand of national food industry enterprises for agricultural raw materials and the final demand of households for food products.

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Галузева структура агропродовольчого виробництва
та індекс споживчих продовольчих цін

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Анотація. Вважається, що однією із головних умов відсутності дефіциту та стабільності продовольчих цін на внутрішньому ринку є достатній рівень продовольчого самозабезпечення, що розраховується, як відношення обсягів виробництва даного виду продовольства до обсягів його використання на території даної країни. Однак, цей методичний підхід має слабке місце: обсяги виробництва в чисельнику – це сільськогосподарська сировина, а не готова до споживання промислова продукція. Беручи до уваги експортний канал вилучення продовольчої сировини, достатні для продовольчого самозабезпечення обсяги виробництва сільськогосподарської продукції не є автоматичною гарантією їх надходження на національні підприємства харчової промисловості для виробництва продовольчих напівфабрикатів та готової їжі в кількості достатній для бездефіцитного функціонування продовольчого ринку. Тому, метою дослідження є перевірка гіпотези про те, що порушення галузевих пропорцій агропродовольчого виробництва є однією із причин зростання індексу споживчих цін на продовольчому ринку України. В якості показника, що характеризує галузеву структуру агропродовольчого виробництва, пропонується «коефіцієнт відношення валової доданої вартості, створеної в харчовій промисловості, до валової доданої вартості, створеної в сільському господарстві». Встановлено, що за незмінності інших факторів впливу, підвищення коефіцієнта «відношення валової доданої вартості, створеної в харчовій промисловості, до валової доданої вартості, створеної в сільському господарстві» на 1 % зумовлює зниження індексу споживчих цін продовольчих товарів і безалкогольних напоїв на 0,317 %. Робиться висновок, що для забезпечення стабільності національних продовольчих цін такий коефіцієнт не повинен бути меншим 1. Перспективою подальших досліджень є розробка організаційно-економічного механізму формування замкнутого ланцюга вартості в системі національного агропродовольчого виробництва

Ключові слова: сільське господарство, харчова промисловість, продовольчі товари, дефіцит, інфляція, додана вартість, коефіцієнт