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ESTIMATION OF THE STATE OF THE DOMESTIC MARKET OF GOODS

Abstract. The paper examines the state of the domestic market goods of Ukrainian, based on methodological approaches to assessing the state of the domestic market. The distribution of coefficients of change of individual indices of the internal market of goods with the account of information orientation of indicators is substantiated. The group of coefficients was substantiated and introduced and the method of calculation was determined. As a result, the distribution of indicators for assessing the state of the domestic market, taking into account their informational heterogeneity, was formed and substantiated. The evaluation of indicators of a functional nature, a structural nature, a factor and a determining factor was conducted in order to obtain a generalizing indicator of the state of the domestic market of goods.

Introduction. The assessment of the state and development of the internal market of goods in order to identify strategic guidelines for predicting its development is an important and topical issue. Especially important is the study of the domestic market of goods in the period of modern integration transformations and are constantly considered in the writings of many economists-scientists. The study of a process or phenomenon in order to assess their condition or development involves the creation of a methodological apparatus based on appropriate methodological approaches.

Methodical apparatus for assessing the development of the domestic market is formed taking into account relevant methodological approaches and methods of evaluation.

According to the methodological approach for determining the state of the domestic market of goods, it is proposed to conduct assessments of the state of the domestic commodity market in order to form a system of indicators for assessing the state of the domestic market of goods taking into account the data base of the information.

Previous studies found that the distribution of indicators for assessing the state of the domestic market using the method of systematization is by blocks, where the indicators are systematized depending on:

1. Estimates of a functional nature: an estimate of the change in the volume and price parameters (changes in the physical volume of wholesale trade, retail trade turnover, retail trade turnover and the volume of the domestic market); assessment of the change in the uniformity of the distribution of goods turnover (the ratio between the coefficients of variation of wholesale trade turnover, retail trade turnover and retail turnover by regions in the achieved and previous year).

2. Structural assessments: evaluation of changes in structure by product groups (evaluation of the progressiveness of structure changes in wholesale and retail trade by commodity groups); assessment of changes in the structure of the subjects (assessment of the progressiveness of changes in the structure of wholesale and retail trade turnover by the manufacturer, estimation of the progressiveness of changes in the structure of the volume of the domestic market for the purposes of the consumer.

3. Estimates of factor-causing nature: assessment of the change of the main infrastructure (estimation of the change in the number of wholesale enterprises, exchanges, retail trade objects, the number and retail area of stores, the number of stationary objects of trade, markets, the provision of goods by businesses and trade area); assessment of the change of the service infrastructure (estimation of changes in the number of enterprises by types of economic activity, services of which can be used by trade enterprises - transport, warehousing, postal and courier activities, financial and insurance activities, information and communication, professional, scientific and

technical activities, administrative and support services, education); assessment of changes in competitive conditions (assessment of changes in the share of markets with a competitive structure, level of competition); assessment of changes in the regulatory influence of the state (assessment of changes according to the estimations of Ukraine according to the Doing Business rating for its components of obtaining loans, protection of minority investors, taxation, international trade, enforcement of contracts, restoration of solvency).

1. An assessment of the state of the internal market of a functional nature

Using the methodological apparatus, according to the proposed estimates, an assessment was made of the state of the domestic market of goods of Ukraine for the last decade (2008-2017).Table 1 shows the normalized values of the indicators of the estimation of the volume and price parameters of the domestic market of goods.

Table 1

**Normative values of indicators of estimation of volume and price parameters of the domestic market of goods**

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
The volume of wholesale turnover corrected for the price index	1,000	0,729	0,815	0,865	0,856	0,837	0,616	0,542	0,603	0,650
Volume of retail trade, adjusted for the price index	0,653	0,573	0,629	0,765	0,914	1,000	0,818	0,644	0,652	0,404
Volume of retail turnover corrected for the price index	0,730	0,613	0,671	0,810	0,948	1,000	0,815	0,622	0,633	0,599
The volume of the domestic market, adjusted for the price index	0,681	0,575	0,681	0,810	0,941	1,000	0,735	0,519	0,701	0,661

Note: calculated by the author

As can be seen from Table 1 data, for 2008-2017, there was a decrease in the normalized values adjusted for the price index of volumes of wholesale trade by 0.350 points, retail trade turnover - by 0.249 points, retail trade volumes - by 0.141 points and volumes of the domestic market - by 0.020 points. This means that the growth of

these indicators, which was revealed during the formation of the information base for evaluation, was mainly due to the price factor.

The partial indicator for estimating the volume and price parameters of the domestic market is presented in Figure 1.

Partial indicator of the estimation of the volume and price parameters of the domestic market
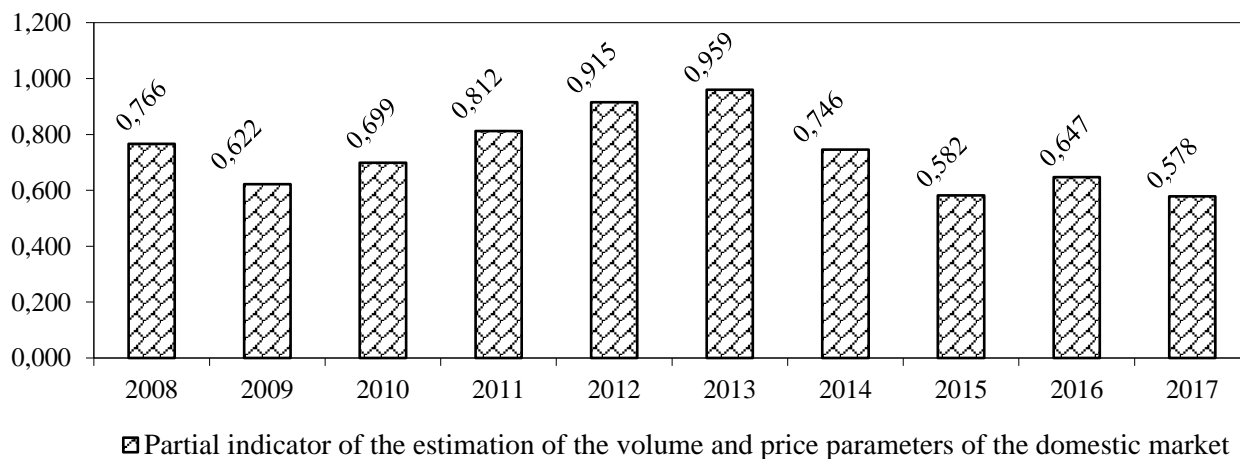
Fig. 1. Partial indicator of the estimation of the volume and price parameters of the domestic market

As Figure 1 shows, the state of the domestic market in terms of volumetric parameters in 2008-2010 was acceptable, after which there was a wave of growth that led to its transition to a perfect state that was inherent in the domestic market during 2011-2013. The destabilization of the political situation in 2014 led to a fall in the normalized values of indicators for estimating volumetric and price parameters of the domestic market. As a result, in 2014 the state of the domestic market for volumetric and price parameters could be characterized as acceptable, and in 2015 - as a transitional one. Despite a certain improvement in 2016, when the state of the domestic market by volumetric and price parameters again became acceptable, the next 2017 again characterized by a deterioration of the normalized values of the indicators for measuring the volumetric and price parameters of the domestic market. As a result, in 2017, the state of the domestic market in terms of volume-price parameters again became a transitional one.

Normative values of indicators for estimating the uniformity of distribution of goods turnover are given in Table 2.

Table 2

Normative values of indicators for assessing the uniformity of distribution of goods turnover by region

| Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Uniform distribution of wholesale trade turnover	0,193	0,269	0,286	0,209	0,199	0,182	0,161	0,066	0,022	0,000
Uniform distribution of the volume of retail trade	0,033	0,059	0,065	0,077	0,064	0,059	0,098	0,025	0,000	0,031
Uniformity of distribution of volume of retail commodity turnover	0,136	0,158	0,162	0,172	0,169	0,170	0,167	0,119	0,094	0,000

Note: calculated by the author

As can be seen from the data in Table 2, the normalized value of the uniform distribution of wholesale trade by regions decreased by 0.193 points, retail trade turnover - by 0.002 points, and the volume of retail trade turnover - by 0.136 points. That is, the differentiation of regions of Ukraine in terms of sales of goods in the domestic market has increased significantly compared with the beginning of the period under study.Partial indicator of the uniformity of distribution of goods turnover by regions is presented in Figure 2.

☒Partial indicator for assessing the uniformity of distribution of goods turnover by region
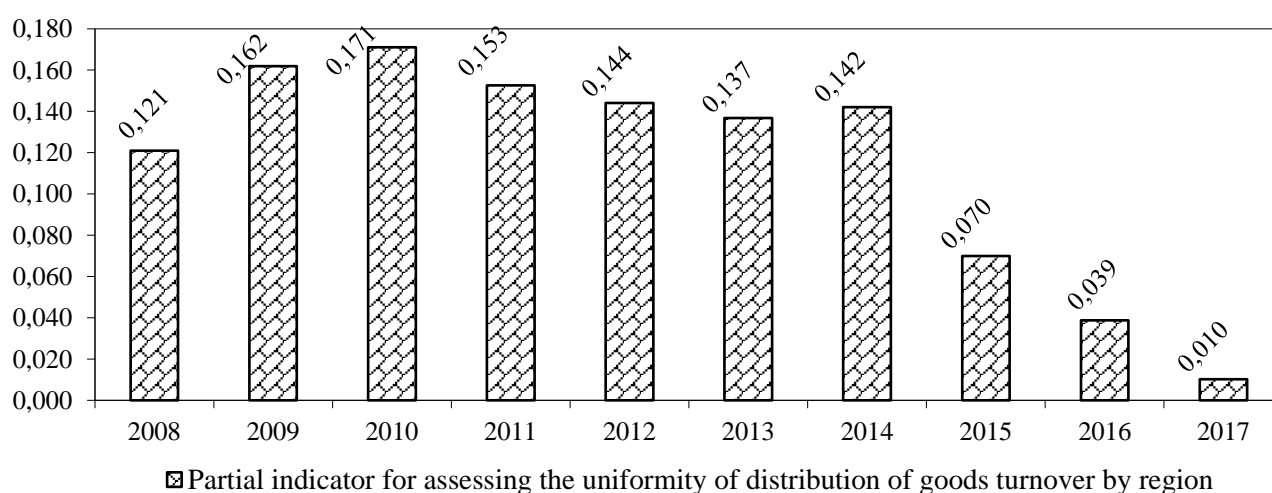
Fig. 2. Partial indicator for assessing the uniform distribution of the domestic market

As can be seen from the data in Figure 2, the state of the domestic market of goods in terms of evenness of distribution of goods turnover throughout the

investigated period can be considered critical. In addition, during the period under investigation there is a decrease of the partial indicator of the uniform distribution of trade turnover by regions by 0,11 points.Figure 3 shows a general indicator of the assessment of the state of the internal market of a functional nature.
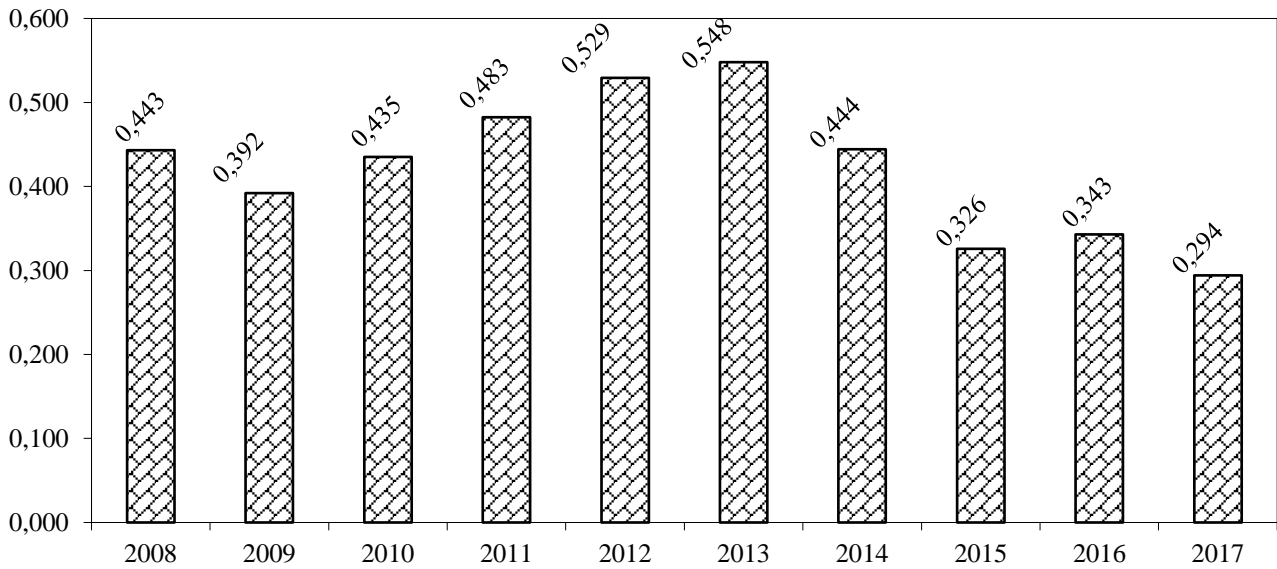
☒ A general indicator of the assessment of the state of the internal market of a functional nature

Fig. 3. A general indicator of the assessment of the state of the internal market of a functional nature

As can be seen from the data in Figure 3, the general indicator of the assessment of the state of the internal market of a functional nature was prone to significant fluctuations. If at the beginning of the investigated period the state of the internal market of functional character could be regarded as transitive, then in the end it is unsatisfactory. The reasons for such a situation are the deployment of inflation processes, the reduction of purchasing power of the population and the growth of regional differentiation by indicators characterizing the state of the domestic market of goods by functional nature.

2. Assessment of the state of the internal market of a structural nature

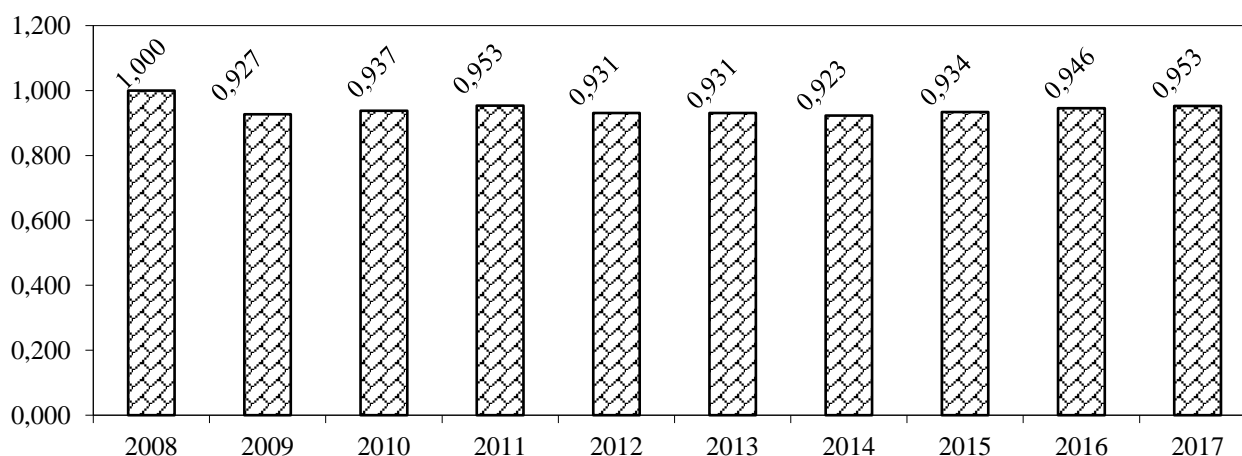Table 3 shows the normalized values of the indicators for evaluating the structure by product groups.

Table 3

Normative values of indicators for the assessment of the structure by product groups

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Specific weight in the wholesale trade of non-food products Share in retail turnover of non-food products	1,000	0,940	0,953	0,975	0,950	0,963	0,950	0,970	0,992	0,988
Share in retail turnover of non-food products	1,000	0,915	0,922	0,931	0,912	0,898	0,895	0,898	0,899	0,918

Note: calculated by the author

As can be seen from Table 3, the standardized value of the share of sales of non-food products in the wholesale and retail trade turnover decreased by 0.012 and 0.082 points, respectively. This testifies to non-progressive changes in the structure of wholesale and collapsible goods turnover.

Partial indicator of structure evaluation by product groups is shown in Fig. 4.

☒ Partial indicator of the estimation of the structure of the domestic market by product groups

Fig. 4. Partial indicator of structure evaluation by product groups

Despite the slight decrease in the partial indicator of the structure's valuation by commodity groups, its value indicates that the state of the domestic market by the indicators of structure by product groups remains perfect, since non-food products are the prevailing element in the structure of trade turnover.Table 4 shows the normalized values of the indicators of the structure evaluation by market participants.

Normative values of indicators for the assessment of the structure of the subjects of the market

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Specific weight of sales of goods of domestic production in wholesale trade turnover	0,982	1,000	0,996	0,957	0,882	0,813	0,726	0,702	0,666	0,654
Specific weight of domestic goods sales in retail trade turnover	0,936	1,000	0,954	0,918	0,874	0,849	0,858	0,862	0,828	0,776
Specific weight of sales of investment goods in the volume of the domestic market	0,933	0,938	0,962	0,961	0,962	0,961	0,923	0,882	0,994	1,000

Note: calculated by the author

As can be seen from the data in Table 4, the normalized value of the share of domestic goods sold in wholesale and retail trade decreased by 0.328 and 0.160 points. The same weight of investment goods in the total volume of the domestic market, on the contrary, increased by 0.067 points.

Partial indicator of the evaluation of the structure of the subjects of the market is shown in the figure 5.

☒ Partial indicator of the evaluation of the structure of the domestic market by the subjects of the market
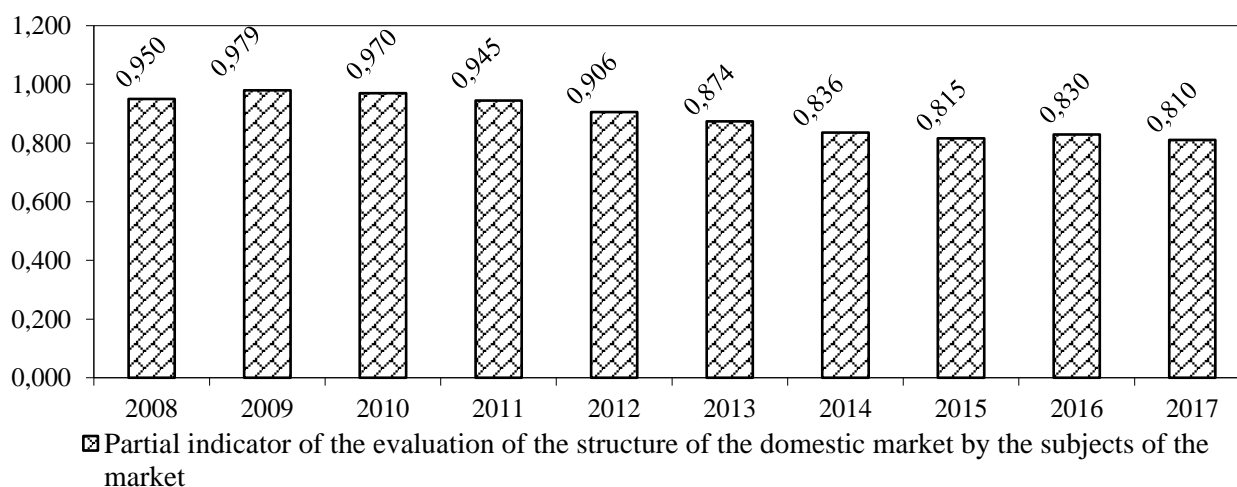
Fig. 5. Partial indicator of the estimation of structure by the subjects of the market over the years

As can be seen from Figure 5, the partial indicator of the structure evaluation by market participants (market partners) has slightly decreased (by 0.140 points for 2008-2017 years). However, its value indicates that the state of the domestic market of goods in terms of structure of the subjects of the market remains perfect.

A general indicator of the assessment of the state of the internal market of structural nature is shown in Figure 6.
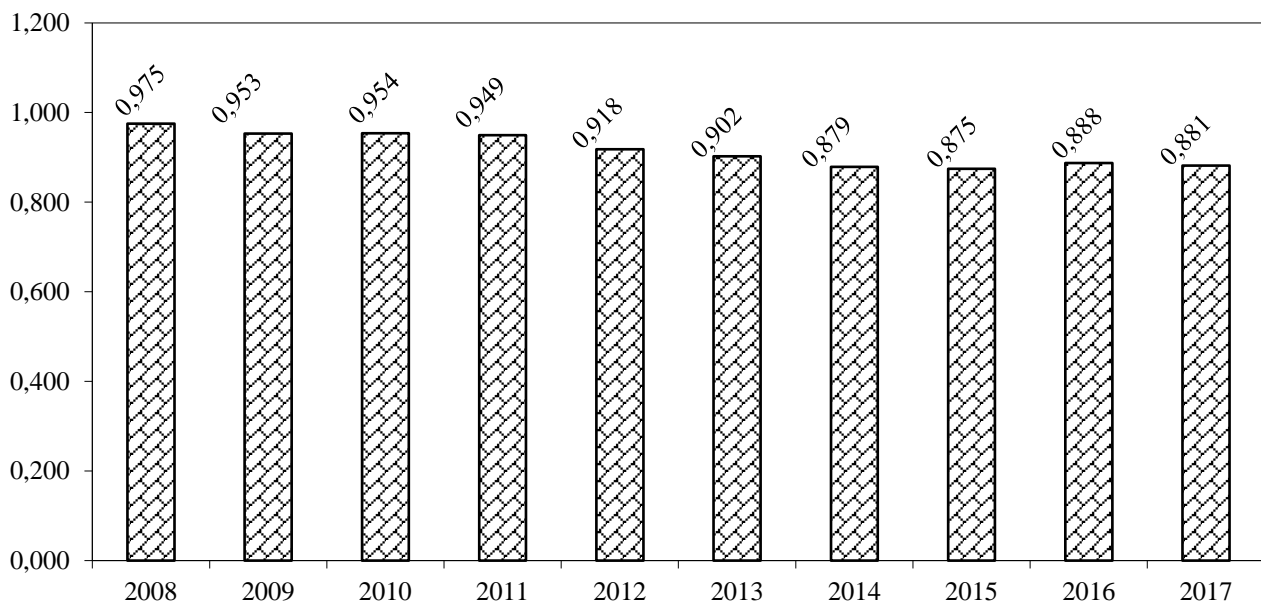
☒ A general indicator of the assessment of the state of the internal market of a structural nature

Fig. 6. General indicator of the assessment of the state of the internal market of a structural nature

A general indicator of the assessment of the state of the internal market of a structural nature had a rather pronounced tendency to decrease and decreased for the period under study by 0,094 points. At the same time, its level remains high enough to say that the state of the internal market of goods of a structural nature remains perfect.

3. Estimates of the state of the domestic market factor-causing nature

Table 5 shows the normalized values of indicators for assessing the development of the main infrastructure of the domestic market.

Normative values of indicators of development of the main infrastructure of the domestic market

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of wholesale enterprises	0,960	0,959	0,959	1,000	0,821	0,707	0,644	0,516	0,468	0,442
Number of active exchangesNumber of retail stores	0,929	0,968	0,976	1,000	0,853	0,767	0,611	0,593	0,614	0,637
Number of retail stores	1,000	0,962	0,909	0,902	0,893	0,866	0,832	0,690	0,690	0,686
Number of stores	1,000	0,965	0,911	0,918	0,925	0,903	0,870	0,738	0,736	0,735
Trading area of stores	0,796	0,859	0,851	0,895	0,957	0,987	1,000	0,823	0,820	0,817
Number of semi-stationary trade objects	1,000	0,956	0,903	0,859	0,809	0,767	0,731	0,561	0,567	0,556
Provision for 10,000 people by trade objects	1,000	0,938	0,875	0,875	0,875	0,875	0,813	0,750	0,750	0,750
Provision for 10,000 people in the shopping area in stores	0,780	0,846	0,841	0,889	0,953	0,984	1,000	0,871	0,871	0,872
Number of markets	1,000	0,984	0,990	0,969	0,950	0,937	0,782	0,766	0,770	0,771

Note: calculated by the author

As can be seen from Table 5, a significant deterioration was observed in most indicators of the development of the core domestic market infrastructure during 2008-2017. The partial indicator for assessing the development of the main infrastructure is shown in Figure 7.
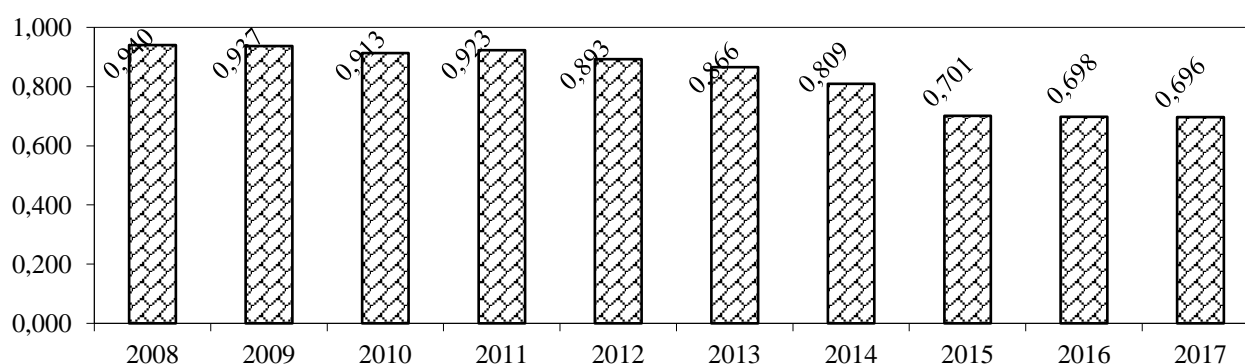
☒Partial indicator of the development of the main infrastructure of the domestic commodity market

Fig. 7. Partial indicator of the development of the basic infrastructure of the internal market of goods over the years

The partial indicator of the assessment of the development of the main infrastructure of the domestic market of goods shows that during 2008-2014 the state of the domestic market according to indicators of development of the main infrastructure was perfect, and from 2015 is acceptable.In general, for the years 2008-2017, the importance of a partial indicator of the assessment of the development of the main infrastructure of the domestic market of goods decreased by 0.244 points, which indicates a deterioration of the main infrastructure of the domestic commodity market.

Table 6 shows the normalized values of indicators for assessing the development of the serving infrastructure of the domestic market.

Table 6

**Normative values of indicators of development of the service infrastructure of the domestic market**

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of transport, warehousing, postal and courier activities	0,820	0,773	0,809	0,880	0,920	1,000	0,887	0,901	0,816	0,815
Number of enterprises of financial and insurance activity taking into account banks	1,000	0,970	0,973	0,955	0,853	0,854	0,750	0,733	0,644	0,679
Number of enterprises in information and communication	0,877	0,850	0,886	0,966	0,903	1,000	0,895	0,915	0,802	0,808
Number of enterprises of professional, scientific and technical activity	0,978	0,969	0,948	0,971	0,912	1,000	0,885	0,877	0,732	0,706
Number of enterprises engaged in administrative and auxiliary services	0,930	0,913	0,916	0,960	0,920	1,000	0,868	0,895	0,790	0,789
Number of educational enterprisesOperating length of railways of general use, km	1,000	0,943	0,956	0,948	0,842	0,922	0,810	0,813	0,722	0,683

Operating length of railways of general use, km	0,999	0,999	1,000	0,998	0,997	0,996	0,966	0,966	0,966	0,912
Length of public roads	0,999	0,999	0,999	1,000	1,000	1,000	0,961	0,961	0,961	0,961
The total area of the warehouse	1,000	0,998	0,996	0,911	0,845	0,790	0,677	0,362	0,383	0,447

Note: calculated by the author

As with the indicators of development of the main infrastructure, all indicator of the development of the service infrastructure of the domestic market of goods was observed, albeit insignificant, but the decrease of the normalized values of indicators.

A partial indicator for assessing the development of the service infrastructure is shown in Figure 8.
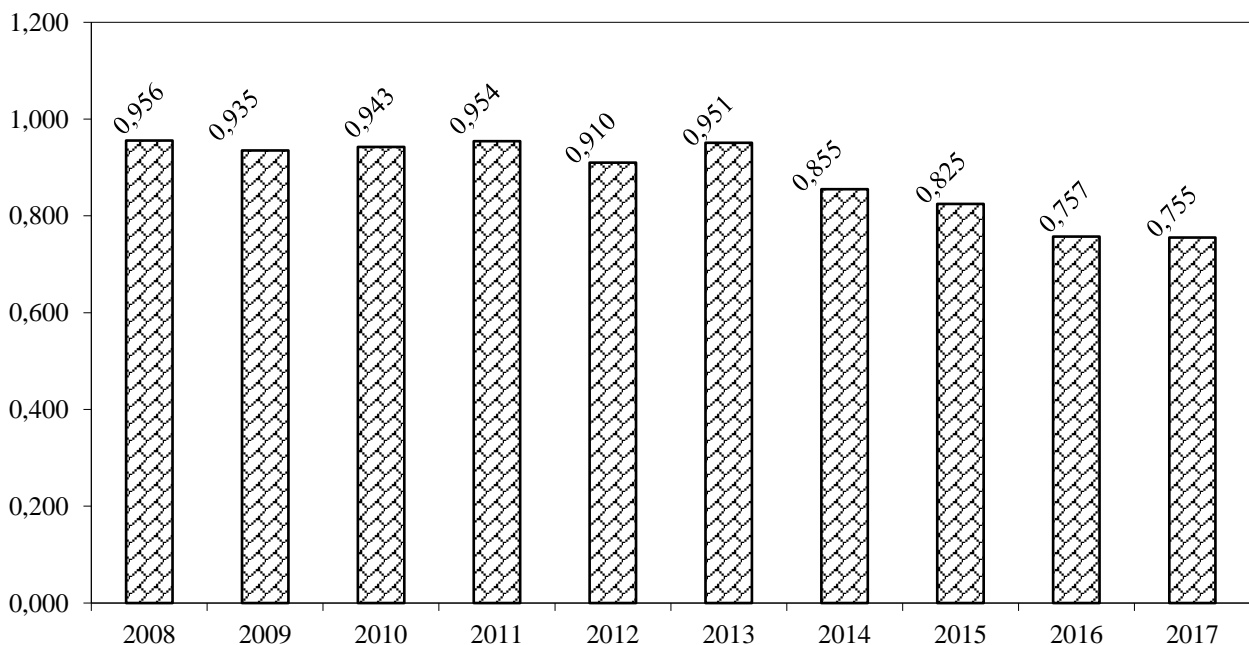
Partial indicator of the development of the service infrastructure of the internal market of goods

Fig. 8. Partial indicator for assessing the development of the service infrastructure

As can be seen from the data in Figure 8, a partial indicator for assessing the development of the service infrastructure has a stable tendency to decrease. As a consequence, if at the beginning of the investigated period the state of the domestic market according to the indicators of development of the service infrastructure was perfect, then at the end of the investigated period is acceptable.

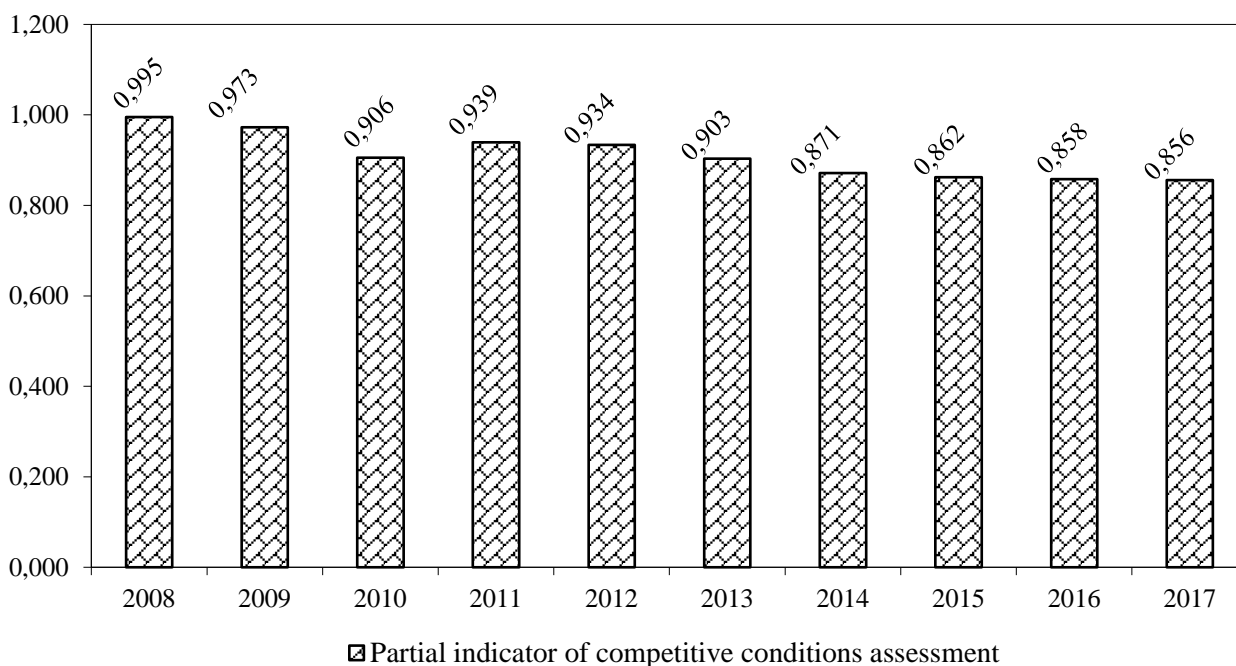Table 7 shows the normalized values of the indicators for assessing competitive conditions.

Normative values of indicators of competitive conditions assessment

Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Markets with competitive structure	1,000	0,958	0,852	0,878	0,868	0,806	0,838	0,753	0,743	0,732
The level of competition	0,990	0,988	0,959	1,000	1,000	1,000	0,905	0,972	0,974	0,980

Note: calculated by the author

As can be seen from Table 7, for 2008-2017, the normalized value of the share of markets with a competitive structure in Ukraine shrank by 0.268 points. Also, the normalized value at the indicator of the level of competition (by 0,010 points) also decreased.

Partial indicator of competitive conditions evaluation is shown in Figure 9.

Fig. 9. Partial indicator of competitive conditions assessment

As can be seen from the data in Figure 9, despite a certain reduction, the state of the domestic market by the indicators of the assessment of competitive conditions remains at an advanced level.Table 8 shows the normalized values of the indicators for assessing the regulatory impact of the state.

Table 8

Normative values of indicators for assessing the regulatory impact of the state

| Indexes	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Registration of companies	0,700	0,724	0,738	0,840	0,867	0,910	0,929	0,929	1,000	0,988
Obtaining building permits	0,172	0,172	0,058	0,058	0,213	0,972	1,000	0,956	0,956	0,957
Connection to the power supply system	0,552	0,552	0,552	0,551	0,554	0,557	0,890	0,934	0,938	1,000
Ownership registration	0,718	0,731	0,738	0,683	0,689	0,804	0,981	0,981	0,997	1,000
Getting loans	0,643	0,643	0,643	0,929	0,929	0,929	1,000	0,857	0,857	0,857
Minor investor protection	0,625	0,625	0,750	0,750	0,750	0,750	0,875	0,875	0,875	1,000
Taxation International trade	0,245	0,241	0,241	0,280	0,269	0,658	0,735	0,946	1,000	0,995
International trade	0,615	0,661	0,740	0,772	0,748	0,782	0,819	1,000	0,999	0,985
Enforcement of contracts	0,996	1,000	1,000	1,000	1,000	0,986	0,986	0,850	0,850	0,878
Restoration of solvency	0,382	0,383	0,383	0,332	0,374	0,365	0,992	1,000	0,995	0,979

Note: calculated by the author

The majority of indicators for assessing the regulatory impact of the state saw an increase in normalized values, which indicates an improvement in the state's influence on the state of the domestic market of goods.The partial indicator for assessing the regulatory impact of the state is shown in Figure 10.
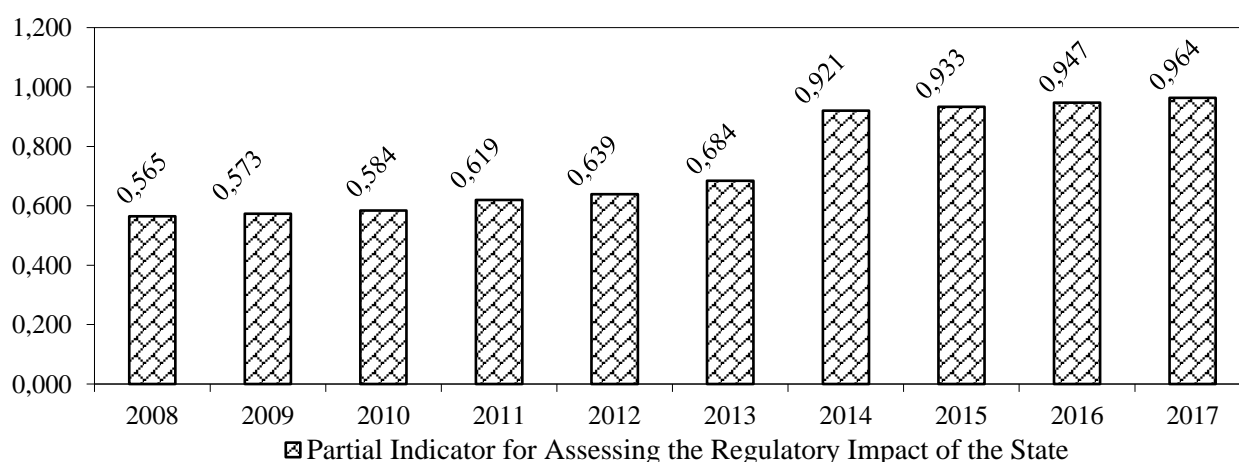
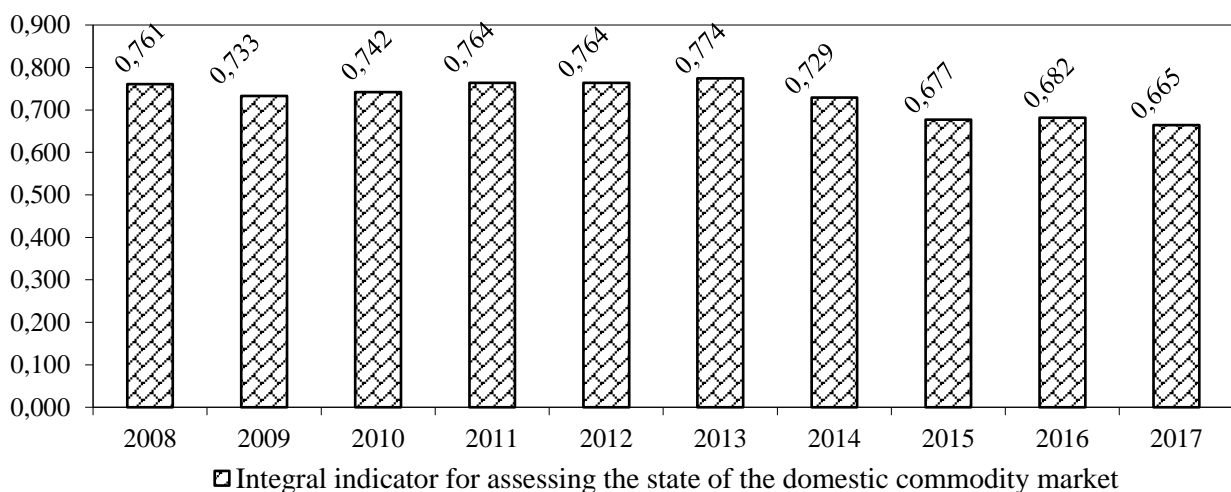Fig. 10. **Partial indicator of the assessment of the regulatory influence of the state**

As can be seen from Figure 10, the state of the domestic market of goods in terms of assessing the regulatory impact of the state has significantly improved and can be characterized as perfect in 2017 compared with the transition in 2008.

A summary indicator of the state of the domestic market of factor-determining character is shown in Figure 11.

□ Generalizing indicator of the state of the domestic market factor-causing character
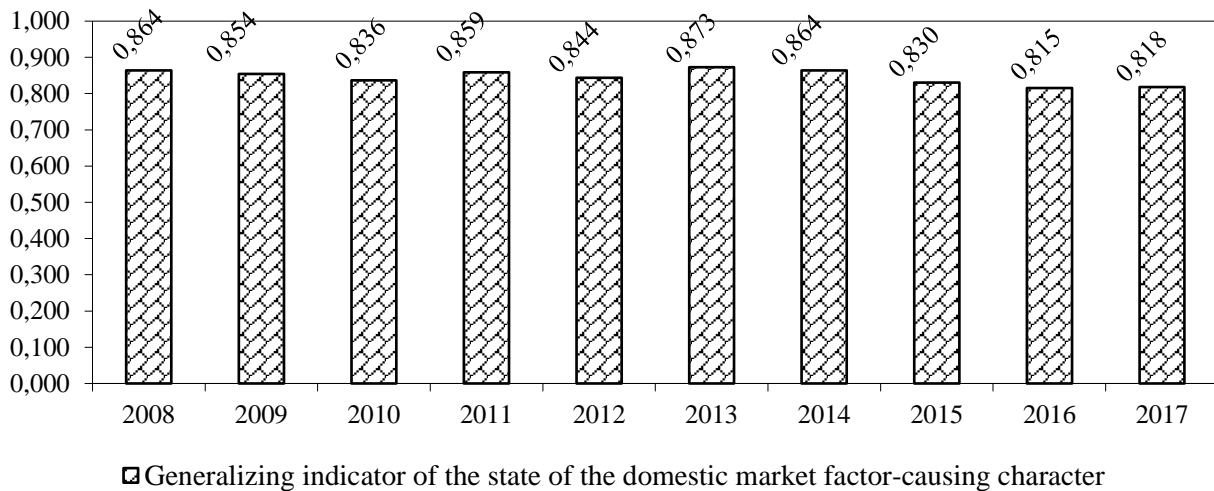
Fig. 11. A general indicator of the assessment of the state of the domestic market factor-causing nature

As shown in Figure 11, despite a certain reduction, the state of the domestic market factor-causing nature remains perfect.An integral indicator for assessing the state of the domestic market of goods is shown in Figure 12.

□ Integral indicator for assessing the state of the domestic commodity market

Fig. 12. Integral indicator of the assessment of the state of the domestic market of goods

As can be seen from the data in Figure 12, the integral indicator for assessing the state of the domestic market of goods has decreased from 0,761 to 0,665 points.

Conclusions. On the basis of research and systematization of methodological approaches and methods for assessing the state and nature of the domestic market of goods, a methodical approach has been developed to assess its development.

As a result, the distribution of indicators for assessing the state of the domestic market, taking into account their informational heterogeneity, is substantiated.

Also, the distribution of coefficients for the change of individual indicators of the domestic commodity market is taken into account taking into account the information orientation of the indicators, which are proposed to calculate by the index method, for which the group of coefficients was substantiated and the method of calculation was determined.

On the basis of coefficients of change through multi-stage aggregation, it is proposed to determine:

- partial coefficients of development of the internal market, generalizing factors of development of a functional nature (1 block);

- generalizing factor of development of a structural character (2 blocks);

- generalizing coefficient of factor-causing character development (3 blocks).On the basis of aggregated coefficients, the definition of the integral coefficient of development of the domestic commodity market is proposed.

Studies have shown that the state of the domestic commodity market in 2008-2017 as a whole can be considered acceptable.

The formed methodological approach to the assessment of the development of the domestic market of goods is an element of the corresponding methodological apparatus, which combines methods for assessing the state of the domestic market of goods and methods for assessing the development of the domestic market of goods, provided by appropriate methodological approaches. Using the current methodological apparatus discussed above, the prospects for further research are an assessment of the state and development of the domestic market of goods of Ukraine during the last

decade (2008-2017) in order to determine the strategic guidelines for the development of its provision.

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