



## Assessment of the attractiveness of regional retail markets in Ukraine using the combined GRDI-IMI methodology

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**Abstract.** In the current conditions of economic transformation caused by the COVID-19 pandemic and the full-scale invasion by the Russian Federation (24 February 2022), research into the attractiveness of regional retail markets in Ukraine was particularly relevant. Despite socio-economic shocks, the market is showing gradual recovery, but regional disparities in economic potential, trade infrastructure saturation and investment levels created uneven conditions for development. The aim of the study was to assess the attractiveness and potential of regional retail markets, taking into account the macroeconomic situation, infrastructure, investment activity, and market digitalisation based on the combined GRDI-IMI index. Statistical data from government agencies, open sources, and methods of indicator normalisation, weighted indexing, and integration of macroeconomic and market factors were used. The results obtained showed that combining the Global Retail Development Index (GRDI) approach with the Index of Macroeconomic Integrality (IMI) allows for a comprehensive assessment of the prospects for regional market development. Significant heterogeneity in the attractiveness of regional markets was revealed: the leaders were Kyiv City, Dnipropetrovsk and Lviv regions, powerful regional centres – Kyiv and Kharkiv regions, medium potential – Poltava, Odesa and Vinnytsia regions, and low potential – regions that have experienced significant economic shocks due to the war. The study offered practical guidelines for strategic planning of retail network development. The proposed GRDI-IMI methodology provided a comprehensive approach to assessing the market and macroeconomic attractiveness of regions, which could become the basis for a differentiated retail development policy in Ukraine. The results can be used by both state institutions to develop regional economic policy and by retail enterprises and investors to make strategic management decisions

**Keywords:** retail trade development index; regional competitiveness; investment attractiveness of regions; integrated assessment indicators; macroeconomic market analysis; methods of ranking regions; strategic planning of retail networks

### INTRODUCTION

Retail trade is one of the leading sectors of the national economy, shaping domestic demand, creating jobs and influencing the investment climate in the regions. Its dynamics and structure are a sensitive indicator of socio-economic changes, and the level of development of the trade infrastructure is directly linked to the competitiveness of territories. In the context of global challenges, in particular the consequences of the pandemic and military actions, the issue of assessing the attractiveness of regional markets is

of particular importance, as economic recovery, consumer market balance and Ukraine's integration into global economic processes depend on their development. That is why research into the attractiveness of regional retail markets is relevant for both public policy and business. In this context, it is important to record not only the volume and rate of change in consumer demand, but also structural shifts in the geography of sales, population movements, logistics flexibility and the digitalisation of sales channels (e-commerce,

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marketplaces), as these are the factors that influence regional attractiveness for investors and chain retailers.

The issue of measuring the attractiveness of retail markets in global practice is addressed by constructing integrated indices, among which the Global Retail Development Index (GRDI), developed by Kearney (2023), occupies a special place. This index evaluates markets in four areas – attractiveness, saturation, risks and time pressure – combining macroeconomic and institutional parameters. Thanks to this structure, the GRDI reflects not only demand potential and competitive pressure, but also time windows of opportunity for market entry, taking into account risks. It has been used in studies by Serbian researchers S. Mladenović *et al.* (2020) and Colombian researchers C. Arango *et al.* (2021) to compare retail trade in different countries around the world. Although the GRDI was created to analyse national markets, its logic can be adapted to the regional level, as confirmed by a study by O. Nikishyna & A. Shcherbak (2023a), which provides similar blocks for analysing Ukrainian retail trade, including saturation level, investment climate, foreign direct investment volume, and market attractiveness.

Ukrainian scientific literature has accumulated considerable experience in developing integrated indicators of regional development. In particular, the work of V. Derykhovska (2021), aimed at measuring the investment attractiveness of regions, uses weighting schemes, standardisation and benchmarking, which are relevant for constructing an index of retail market attractiveness. Such tools allow combining heterogeneous variables into a single integrated indicator and ensure the comparability of regions in dynamics.

Separate comparative reviews of the retail market in Ukraine by I. Horodniak & Y. Hnativ (2023), O. Chupryna *et al.* (2024), T. Oliinyk & M. Ivanova (2024) provide valuable indicators for the formation of the index system, including trade turnover dynamics, sales structure and regional disparities, emphasising the importance of taking into account spatial differences in trade development. In particular, some studies provide a detailed analysis of individual regions of Ukraine. For example, A. Lialiuk (2021) examines trends in the development of the Volyn region and identifies key factors in regional development. Such regional approaches allow for a more accurate assessment of local market characteristics and their integration into the combined GRDI-IMI index. This enhances the validity of the assessment, as local effects (demographics, cross-border trade, infrastructure conditions) are often not apparent at the macro level.

Conceptual approaches to determining market potential as a key parameter of regional market attractiveness allow for a theoretical justification of the integration of macroeconomic and market characteristics into a single model (Teslya, 2021). For Ukrainian regions, it is advisable to additionally take into account the restoration of logistics, business relocation, the digitalisation of sales channels, and the role of international assistance in rebuilding the

consumer sector. Thus, the combination of the international GRDI methodology and national regional development indices makes it possible to create a combined GRDI-IMI index that can objectively reflect the attractiveness of regional retail markets in Ukraine. The scientific novelty of the approach lies in combining the global logic of GRDI with the regional specificity of indicators and their standardisation for the Ukrainian context.

The aim of the study was to develop and test a combined GRDI-IMI methodology for assessing the attractiveness of regional retail markets in Ukraine. To achieve this goal, the following tasks were set: to analyse global and Ukrainian approaches to assessing the attractiveness of retail markets, identifying opportunities for regional adaptation of GRDI; to develop an author's system of indicators for the GRDI-IMI combined index; to calculate and conduct a comparative analysis of indices for regions of Ukraine, with the formation of recommendations for the development of retail trade.

## MATERIALS AND METHODS

The study proposes an author's methodology for assessing the attractiveness of regional retail markets, based on the combined Global Retail Development Index (GRDI) and the author's macroeconomic index, the IMI (Index of Macroeconomic Integrality). The methodology is based on the use of official statistical information from the State Statistics Service of Ukraine (n.d.), its quantitative processing, standardisation and aggregation of indicators into a single integrated indicator. Microsoft Excel was used to calculate and process data at all stages of the study. The programme was used to normalise indicators, calculate weighted GRDI and IMI indices, integrate both indices into a combined GRDI-IMI indicator, and group regions according to the attractiveness of the retail market. Excel ensured the verification of calculations through control calculations, checking of sums, weights and normalised values, as well as the construction of tables for visual analysis of the results. The use of Excel ensured the accuracy, reliability, and reproducibility of the results obtained at all stages of the study. GRDI includes the following indicators: volume of retail sales; average salary; number of enterprises in the retail sector; consumer price index. The indicators were normalised using the min-max formula:

$$X_{NORM} = \frac{X - X_{min}}{X_{max} - X_{min}}, \quad (1)$$

where  $X$  – the value of the indicator for a specific region;  $X_{min}$  – the minimum value of the indicator among all regions;  $X_{max}$  – the maximum value of the indicator among all regions;  $X_{NORM}$  – the normalised value of the indicator, which brings the data to the interval [0;1].

The study used the following indicators: volume of retail sales – reflects the sales potential and purchasing power of the population in the region; average salary – characterises the income level of the population and the solvency of consumers; number of retail enterprises – an indicator of

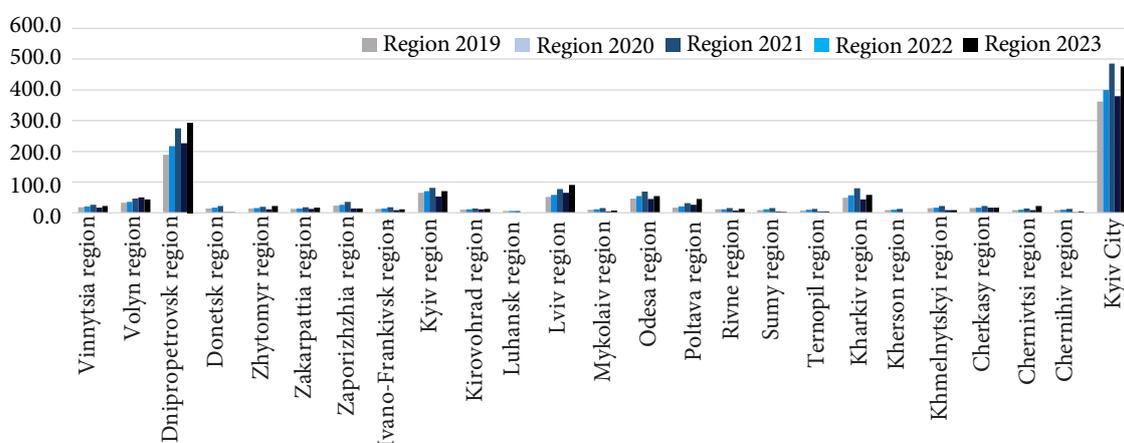
market saturation and the level of competition; consumer price index – taken into account as a factor in the affordability of goods and its impact on the purchasing power of the population. This normalisation allows all indicators to be brought to a single scale, which is necessary for the correct calculation of the GRDI integral index and further integration with the IMI macroeconomic index. Further aggregation was carried out using weighting coefficients: sales volume – 40%; wages – 30%; number of enterprises – 20%; consumer price index – 10%. The IMI was created to reflect the macroeconomic situation in the region and includes: gross regional product (weight – 50%); foreign direct investment in trade (40%); consumer price index (10%). The integrated indicator of the attractiveness of regional retail markets was calculated as a weighted combination of two indices: GRDI (70%) and IMI (30%).

Statistical data for the five-year period 2019-2023 was used for the comprehensive assessment. This time frame made it possible to track the dynamics of regional development and verify the stability of the indicators. At the same time, the final calculations focused on the 2023 indicators, taking into account: relevance – reflecting the current state of the markets, which is key to making business and political decisions; the instability of previous years – due to the impact of the COVID-19 pandemic and military events, which led to high data volatility; unification and comparability – using one year as a basis for normalisation ensures the accuracy of interregional comparisons. At the same time, data from 2019-2022 was used to verify and confirm the stability of the results obtained. Based on the integrated index, the regions of Ukraine were grouped into five categories according to the attractiveness of the retail market: market leaders, powerful regional centres, regions with average potential, regions with low potential, and crisis regions. Thus, the GRDI-IMI methodology made it possible to combine indicators of market activity and macroeconomic development, which provides a comprehensive and up-to-date assessment of Ukraine's regional retail markets.

## RESULTS AND DISCUSSION

Current socio-economic changes, including the consequences of the COVID-19 pandemic and military events, highlight the need for a detailed assessment of the development and potential of regional retail markets in Ukraine. Despite socio-economic shocks, the market is showing gradual recovery, reflected in the growth of retail trade volumes, increased household incomes and growing investment activity in the regions. Given the current challenges, including war and economic turmoil, the development of e-commerce is becoming increasingly important. Research by M. Ilchuk *et al.* (2023) shows that consumer adaptation to online shopping and active use of digital sales channels can reduce the negative impact of crisis factors on regional markets. This confirms the need to take digital presence into account when assessing market attractiveness and formulating retail network development strategies. At the same time, regional differences in economic potential, retail infrastructure saturation and investment levels create uneven market attractiveness. In this context, the use of the combined GRDI-IMI index allows for a comprehensive assessment of the potential and competitiveness of different regions, a comparison of macroeconomic and infrastructure characteristics with investment attractiveness, and the formulation of sound recommendations for the development of the retail network.

During 2019-2023, the volume of sales (goods, services) of economic entities in the retail trade sector, except for trade in motor vehicles and motorcycles, was characterised by significant interregional differences. The largest volumes are traditionally concentrated in Kyiv City, Dnipropetrovsk and Kyiv regions, due to the high concentration of retail infrastructure and purchasing power of the population. At the same time, a number of western and northern regions show relatively lower indicators. Despite fluctuations caused by both internal economic factors and full-scale war, the overall dynamics indicate the preservation of regional asymmetry in the development of retail trade (Fig. 1).

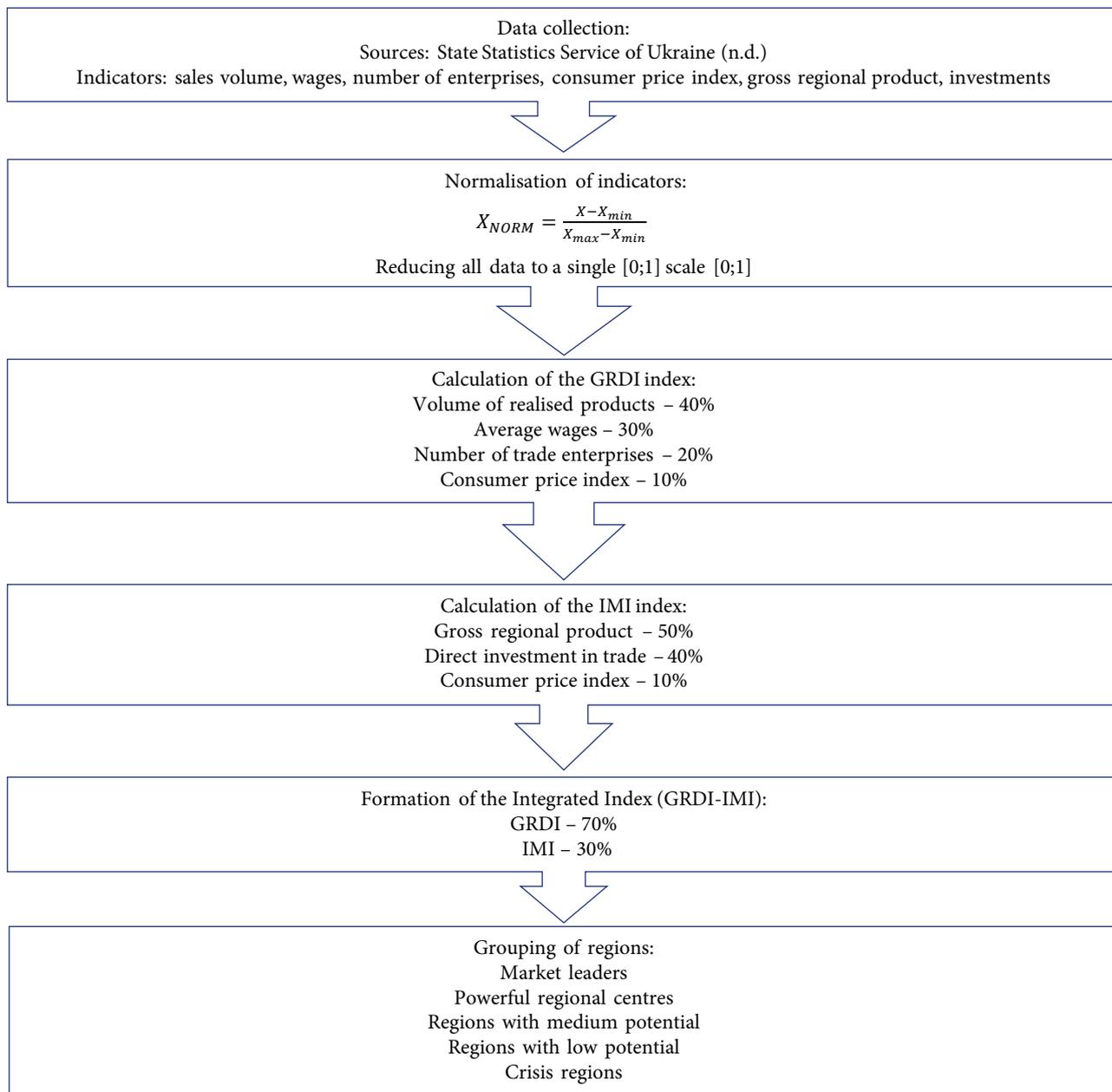


**Figure 1.** Volume of realised products (goods, services) of economic entities in the sphere of retail trade, excluding the trade of motor vehicles and motorcycles, broken down by regions in 2019-2023, bln UAH

Source: developed by the author based on the State Statistics Service of Ukraine (n.d.)

The results shown in Figure 1 provide only a general idea of product sales volumes by region, but they do not allow for a comprehensive assessment of the attractiveness of retail markets. For a more detailed study, it is necessary to take into account a wider range of indicators, including economic, infrastructural and investment characteristics of

the regions. That is why it is advisable to use the combined GRDI-IMI methodology, which provides a systematic approach to analysis and allows for more informed conclusions about the potential for retail development. Below are the methodological approaches of the combined GRDI-IMI index and the research algorithm (Fig. 2).



**Figure 2.** Algorithm for assessing the attractiveness of regional retail markets in Ukraine using the combined GRDI-IMI methodology

Source: compiled by the author

This approach allows for a comprehensive comparison of the region's economic indicators (GRP, investment level, average salary, number of enterprises) with infrastructure and market characteristics, identification of the most promising regions for retail trade development, and

assessment of their competitiveness and investment risks. The methodology provides a structured analysis that combines quantitative and qualitative indicators and allows recommendations to be made for strategic planning of the development of retail chains in different regions (Table 1).

**Table 1.** Author's structure of the GRDI-IMI composite index blocks

Block	Name	What it assesses	Key indicators
A	Macroeconomic potential (IMI)	Overall economic condition and stability of the region	IMI= (Gross Regional Product, Direct foreign investment in trade, Consumer price index)
B	Market capacity and dynamics	Sales potential and purchasing power of the population	Volume of realised retail trade products (excluding motor vehicles), Average wages
C	Market environment and competition	Number of players and market saturation level	Number of retail trade enterprises
D	Infrastructure and price accessibility	Conditions for trade development and impact of the price situation	Consumer price index (in the context of purchasing power and goods accessibility)

Source: compiled by the author

Thus, the GRDI calculation for the regions of Ukraine was based on the following indicators: volume of retail sales (excluding motor vehicles); average wage; number of retail enterprises; consumer price index. The following weights were used for these indicators: volume of retail sales – 40%; average salary – 30%; number of enterprises – 20%; consumer price index – 10%. This was followed by a separate analysis of macroeconomic factors: gross regional product; foreign direct investment in trade; consumer price index (as a supporting factor).

The data for each region and indicator was normalised using formula (1). This is a basic procedure for GRDI to ensure that all indicators are on the same scale [0;1].

Calculation of the weighted GRDI index for each region:

$$GRDI_i = 0.4 * P_{i,sale} + 0.3 * P_{i,salary} + 0.2 * P_{i,enterprises} + 0.1 * P_{i,price\ index} \quad (2)$$

where  $P_i$  – the normalised value for region i.

The calculations are presented in Table 2.

**Table 2.** Assessment of the attractiveness of regional retail markets in Ukraine using the GRDI methodology, 2023

Region	Normalised indicators				GRDI (combined)
	Sales	Salary	Enterprises	Price index	
Kyiv City	1.000	1.000	0.959	1.000	0.990
Dnipropetrovsk	0.222	0.243	0.786	0.979	0.239
Lviv	0.199	0.210	0.979	0.979	0.225
Kyiv	0.155	0.174	0.834	0.979	0.178
Kharkiv	0.143	0.154	0.925	0.979	0.169
Poltava	0.112	0.117	0.546	0.979	0.120
Odesa	0.115	0.122	0.638	0.979	0.127
Vinnitsia	0.087	0.091	0.567	0.979	0.093
Zaporizhzhia	0.053	0.061	0.627	0.979	0.057
Volyn	0.033	0.035	0.633	0.979	0.035
Zhytomyr	0.069	0.070	0.586	0.979	0.073
Khmelnitskyi	0.066	0.068	0.543	0.979	0.070
Cherkasy	0.062	0.063	0.525	0.979	0.065
Ternopil	0.039	0.041	0.504	0.979	0.042
Rivne	0.041	0.042	0.595	0.979	0.044
Ivano-Frankivsk	0.046	0.047	0.541	0.979	0.049
Chernivtsi	0.045	0.046	0.519	0.979	0.048
Mykolaiv	0.044	0.046	0.513	0.979	0.047
Chernihiv	0.041	0.042	0.486	0.979	0.043
Sumy	0.034	0.035	0.505	0.979	0.036
Kirovohrad	0.033	0.034	0.521	0.979	0.035
Kherson	0.022	0.023	0.138	0.979	0.023
Luhansk	0.004	0.004	0.017	0.979	0.004
Donetsk	0.002	0.002	0.020	0.979	0.002

Source: author's calculations based on State Statistics Service of Ukraine (n.d.)

The calculations allow to draw the following conclusions: Kyiv City is the market leader due to its high concentration of sales, high salaries and number of enterprises. Kyiv also has the best conditions in terms of

the consumer price index, which supports purchasing power; powerful regional markets: Dnipropetrovsk, Lviv, Kyiv and Kharkiv regions demonstrate relatively high sales and enterprise indicators. These are the main retail

centres outside Kyiv; the middle positions are occupied by such regions as Poltava, Odesa, Vinnytsia, and Zaporizhzhia, where the indicators are lower but still noticeable; low attractiveness in regions that have experienced significant economic shocks due to the war (Luhansk, Donetsk, and Kherson regions). Sales, businesses and salaries are very low there.

The weights of the indicators reflect the balance between economic activity (sales, number of businesses) and the level of household income (salaries). The price index has little impact as it is relatively stable. Studies by G. Kharlamova (2014) and M. Ilchuk *et al.* (2025) emphasise that wholesale trade in food products in Ukraine is undergoing significant changes under martial law: optimisation of logistics, adaptation of supply chains and integration of

digital inventory management tools are becoming critically important. These factors directly influence regional differences in the attractiveness of retail markets.

A macroeconomic analysis of Ukraine's regions was conducted using the following key indicators: gross regional product; foreign direct investment in trade; consumer price index. To compare data between regions, each indicator was normalised to the maximum value across the country (maximum region value = 1). Weights reflecting their significance in the macroeconomic context: gross regional product – 0.5 (main indicator of economic power); direct investment – 0.4 (indicator of investment attractiveness); consumer price index – 0.1 (indicator of inflationary pressure). The calculation of the integrated macroeconomic index is presented in Table 3.

**Table 3.** Assessment of the attractiveness of regional retail markets in Ukraine according to the IMI methodology, 2023

Region	Normalised indicators			IMI
	Gross regional product	Direct investment	Consumer price index	
Ukraine	1	1	1	1
Vinnytsia	0.033	0.006	1	0.018
Volyn	0.017	0.001	1	0.009
Dnipropetrovsk	0.11	0.159	1	0.112
Donetsk	0.016	0.000	1	0.009
Zhytomyr	0.021	0.001	1	0.012
Zakarpattia	0.015	0.003	1	0.009
Zaporizhzhia	0.045	0.001	1	0.025
Ivano-Frankivsk	0.024	0.001	1	0.014
Kyiv	0.058	0.089	1	0.056
Kirovohrad	0.02	0.003	1	0.012
Luhansk	0.005	0.000	1	0.003
Lviv	0.063	0.021	1	0.042
Mykolaiv	0.026	0.001	1	0.015
Odesa	0.058	0.005	1	0.033
Poltava	0.056	0.028	1	0.045
Rivne	0.019	0.001	1	0.011
Sumy	0.022	0.007	1	0.015
Ternopil	0.017	0.002	1	0.011
Kharkiv	0.028	0.012	1	0.019
Kherson	0.009	0	1	0.005
Khmelnyskyi	0.024	0.003	1	0.015
Cherkasy	0.027	0.006	1	0.017
Chernivtsi	0.011	0.001	1	0.007
Chernihiv	0.023	0.001	1	0.013
Kyiv City	0.253	0.648	1	0.312

**Source:** author's calculations based on State Statistics Service of Ukraine (n.d.)

Table 3 shows that the leader in terms of macroeconomic attractiveness is Kyiv (index = 1), which is the capital and a centre of business and finance. Dnipropetrovsk region ranks second (0.363) thanks to its significant gross regional product and investments; Lviv, Kyiv and Poltava regions have average values, with a noticeable gross regional product and moderate investments. Regions with low direct investments (Odesa, Zaporizhzhia, Volyn) have low

indices, even if their gross regional product is average. The consumer price index is virtually the same for all, so it has little impact on the result in this calculation.

For a comprehensive assessment of regional retail markets using the GRDI-IMI methodology, the integration of the main GRDI index and the macroeconomic index (IMI) is provided for. Integration model: main GRDI (blocks B, C, D) – 70%; macroeconomic IMI index (block A) – 30%;

$$\text{Complex Index} = 0.7 * \text{GRDI} + 0.3 * \text{IMI}, \quad (3)$$

where GRDI (Global Retail Development Index) – an index of retail development that assesses market capacity, purchasing power of the population, level of competition

and accessibility of commercial infrastructure; IMI (Macroeconomic Interest Index) – an index that reflects the overall economic condition of the region, investment activity and price stability. Using formula (3), the data presented in Table 4 was obtained.

**Table 4.** Integrated calculation of the GRDI-IMI comprehensive retail market attractiveness index for regions, 2023

Region	GRDI	IMI	GRDI_Integrate
Kyiv City	0.990	0.312	0.819
Dnipropetrovsk	0.239	0.112	0.205
Lviv	0.225	0.042	0.168
Kyiv	0.178	0.056	0.140
Kharkiv	0.169	0.019	0.124
Poltava	0.120	0.045	0.102
Odesa	0.127	0.033	0.101
Vinnitsia	0.093	0.018	0.073
Zaporizhzhia	0.057	0.025	0.049
Volyn	0.035	0.009	0.029
Zhytomyr	0.073	0.012	0.054
Khmelnyskyi	0.070	0.015	0.052
Cherkasy	0.065	0.017	0.051
Ternopil	0.042	0.011	0.034
Rivne	0.044	0.011	0.034
Ivano-Frankivsk	0.049	0.014	0.040
Chernivtsi	0.048	0.007	0.034
Mykolaiv	0.047	0.015	0.038
Chernihiv	0.043	0.013	0.035
Sumy	0.036	0.015	0.031
Kirovohrad	0.035	0.012	0.029
Kherson	0.023	0.005	0.017
Luhansk	0.004	0.003	0.004
Donetsk	0.002	0.009	0.004

Source: compiled by the author

Kyiv City remains the undisputed leader, but macroeconomic integration slightly lowers its rating (taking into account dependence on investment and gross regional product). Dnipropetrovsk, Lviv, and Kyiv regions maintain high ratings, but these are declining due to average macroeconomic indicators. Regions with low GRDI (retail activity) and weak macroeconomic index (IMI) – Luhansk, Donetsk, Kherson – receive minimum integrated scores, which signals low attractiveness for retail trade. The calculations of the GRDI-IMI integrated index made it possible to classify the regions of Ukraine according to the level of attractiveness of the retail

market. The proposed approach combines market and macroeconomic indicators in a single integrated assessment, which provides a more comprehensive reflection of development potential. Based on the results obtained, not only was the differentiation of regions by their level of attractiveness determined, but also the strategic development guidelines for each group were substantiated, taking into account the specifics of their economic environment and market opportunities. The generalised results are presented in Table 5, which serves as a basis for the further development of recommendations for improving regional trade policy.

**Table 5.** Grouping of Ukrainian regions by retail market attractiveness (GRDI-IMI) and strategic development guidelines

Group	Integrated index range	Regions	Strategic guidelines
Market leaders	>0.200	Kyiv City, Dnipropetrovsk, Lviv	Retention and expansion strategy: development of premium formats and omnichannel sales; maintaining high service quality; modernisation of retail space; stimulating innovation; development of logistics hubs for e-commerce
Powerful regional centres	0.140-0.199	Kyiv, Kharkiv	Intensive growth strategy: increasing presence in the market of national and international chains; developing a new generation of shopping centres; actively implementing loyalty programmes; investing in fast delivery

Table 5 . Continued

Group	Integrated index range	Regions	Strategic guidelines
Regions with average potential	0.070-0.139	Poltava, Odesa, Vinnytsia	Selective expansion strategy: opening retail outlets in satellite cities and agglomerations; developing a network of discounters and local markets; adapting the product range to regional preferences; using franchising to reduce risks
Regions with low potential but stable presence	0.030-0.069	Zaporizhzhia, Volyn, Zhytomyr, Khmelnytskyi, Cherkasy, Ternopil, Rivne, Ivano-Frankivsk, Chernivtsi, Mykolaiv, Chernihiv, Sumy, Kirovohrad	Spot expansion strategy: development of retail facilities in regional centres and largest district towns; support for local producers; expansion of the product range through own brands; development of partnership programmes with online platforms
Crisis regions	<0.030	Kherson, Luhansk, Donetsk	Recovery and support strategy: focus on basic goods and mobile retail formats; creation of humanitarian and commercial hubs; involvement of donor and government support programmes; development of e-commerce as an alternative to physical presence

Source: developed by the author based on research by V. Hryniv (2023), M. Usova (2024), I. Hrabovska (2025)

The grouping of regions based on the integrated GRDI-IMI index allows for clear identification of market leaders and regions with potential risks. This classification serves as a basis for the informed formulation of retail development strategies and investment planning at the regional level. In addition, it provides practical guidelines for adapting business models to the specific economic environment of each group of regions. The results of the study, which provide an integrated assessment of the attractiveness of Ukraine's regional retail markets using the combined GRDI-IMI index, confirm the importance of a comprehensive approach to analysing the economic potential of regions. This is consistent with the findings of N. Sirenko *et al.* (2025), who emphasise the importance of multifactor models for assessing regional development in conditions of economic instability. The authors note that the integration of consumer demand, investment attractiveness and macroeconomic stability indicators allows for a more accurate identification of priority regions for investment in the retail sector. A comparison with the study demonstrates a common understanding of the need for a comprehensive approach to assessing the attractiveness of regional markets. However, unlike their study, which focuses on the analysis of macroeconomic indicators, the authors' study includes a detailed assessment of market indicators, such as sales volume and the number of enterprises in the retail sector, which allows for a more in-depth assessment of regional development dynamics.

According to the studies, in the near future, the attractiveness of Ukraine's regional retail markets will remain uneven, but they will gradually recover provided that the external environment stabilises. This coincides with the conclusions of L. Stanca *et al.* (2025), who argued that in the post-pandemic period, the main factor in the development of retail trade will be adaptation to the conditions of the new socio-economic reality and increased resilience through consumer clustering and omnichannel strategies.

A similar opinion is held by S. Kovalchuk (2024), who emphasised that digitalisation and reorientation of trade formats are the defining trends in Ukrainian retail. However, as the author's research shows, the spatial aspect of development will remain key in the coming years – the heterogeneity of regional markets' attractiveness, which requires targeted strategies. An important confirmation of the results obtained is the study by S. Pepchuk & T. Palonina (2023), who pointed to the concentration of chain trade in the capital and several large regional centres. This is consistent with the author's calculations using the GRDI-IMI integral indicator, which also revealed a concentration of attractiveness in these regions. In the context of crisis conditions, it is advisable to take into account the conclusions of T. Sak & N. Hrytsiuk (2020), who emphasised the need for flexible anti-crisis retail strategies. The authors' results specify this approach, demonstrating which regions have greater potential for recovery in the future.

Another strategic direction is state support and regulatory measures. This is emphasised by O. Nikishyna & A. Shcherbak (2023b), who argued that the effective functioning of retail trade requires transparent regulation, equal conditions for all market participants, and support for small and medium-sized businesses. Similar conclusions are confirmed by the results of the author's analysis, since the typology of regions formed using GRDI-IMI can become the basis for a differentiated development policy. At the same time, the conclusions of K. Huk & A. Zeynalov (2022) should be taken into account, who emphasised the deep regional disparities in Ukraine that determine the inequality of socio-economic development conditions. The author's research details this problem, showing how these disparities manifest themselves in the retail trade sector. The study complements the existing scientific base and provides strategic guidelines for regions of Ukraine belonging to different groups in terms of the attractiveness of the retail trade market.

## CONCLUSIONS

The study showed that retail trade in Ukraine is characterised by significant regional heterogeneity, which is due to differences in macroeconomic potential, investment activity and the saturation of trade infrastructure. The use of the combined GRDI-IMI index made it possible to comprehensively assess the attractiveness of regional markets by comparing economic, infrastructure and market indicators. According to the results of the integrated calculation, Kyiv City remains the market leader, which is explained by the high concentration of sales, significant household incomes, the number of enterprises and a favourable consumer price index. Its integral indicator was 0.819, which is almost 4-6 times higher than that of other developed regions. Powerful regional centres – Dnipropetrovsk, Lviv, Kyiv and Kharkiv regions – demonstrate high retail activity, but their average macroeconomic potential slightly lowers their integrated assessment. Thus, Dnipropetrovsk region received an index of 0.205, Lviv – 0.168, Kyiv – 0.140, Kharkiv – 0.124, which indicates the presence of significant but uneven potential for further development. Regions with average potential (Poltava, Odesa, Vinnytsia) are characterised by moderate sales and business indicators. Their index values vary between 0.073 and 0.102, in particular Poltava region – 0.102, Odesa – 0.101, Vinnytsia – 0.073. This indicates the possibility of selective expansion and the formation of specialised retail formats. Regions with low potential but a stable presence require targeted strategies for expansion and development of local trade. This group includes Zhytomyr (0.054),

Khmelnitskyi (0.052), and Zaporizhzhia (0.049) regions, where the level of market attractiveness is 15-20 times lower than in the capital. Crisis regions (Kherson, Luhansk, Donetsk) need to focus on basic goods, mobile formats and support for e-commerce. Their index values are minimal: Kherson – 0.017, Luhansk and Donetsk – 0.004 each, reflecting the critical state of the market infrastructure. The weights of the indicators reflect the balance between economic activity (sales, number of enterprises) and the level of household income (salaries), while the consumer price index has a negligible impact due to its relative stability. The results obtained emphasise the importance of a comprehensive approach to assessing regional development, integrating macroeconomic and market indicators, and the need to adapt retail development strategies to local conditions. Further research could focus on the development of online commerce and omnichannel strategies. Particular attention should be paid to analysing the role of digital technologies in stabilising retail trade in the context of military challenges, as well as assessing the effectiveness of adaptive business models for different categories of regions.

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## CONFLICT OF INTEREST

## REFERENCES

- [1] Arango, C., Pinzón, R.W.A., & Karachas, D. (2021). Global retail development index. Year & area. 2004-2019. In *2<sup>nd</sup> South American international conference on industrial engineering and operations management* (pp. 1422-1433). São Paulo: IEOM Society International. [doi: 10.46254/SA02.20210586](https://doi.org/10.46254/SA02.20210586).
- [2] Chupryna, O., Arakelova, I., & Popova, Y. (2024). Development of domestic retail trade: Current trends and perspectives. *Economy and Society*, 70, 1-8. [doi: 10.32782/2524-0072/2024-70-104](https://doi.org/10.32782/2524-0072/2024-70-104).
- [3] Derykhovska, V.I. (2021). The typification of regions of Ukraine according to the level of development of the trade industry by the method of cluster analysis. *Business Inform*, 10, 159-164. [doi: 10.32983/2222-4459-2021-10-159-164](https://doi.org/10.32983/2222-4459-2021-10-159-164).
- [4] Horodniak, I.V., & Hnativ, Y.P. (2023). Analysis of the retail trade market in Ukraine. *Economic Space*, 187, 49-54. [doi: 10.32782/2224-6282/187-8](https://doi.org/10.32782/2224-6282/187-8)
- [5] Hrabovska, I. (2025). Methodological aspects of strategic management of enterprise development in the trade sphere. *Herald of Khmelnytskyi National University. Economic Sciences*, 342(3(1)), 59-64. [doi: 10.31891/2307-5740-2025-342-3\(1\)-8](https://doi.org/10.31891/2307-5740-2025-342-3(1)-8).
- [6] Hryniv, V.B. (2023). Conceptualization of innovative development of retail trade in a fast-changing environment. *Herald of Lviv University of Trade and Economics. Economic Sciences*, 73, 118-127. [doi: 10.32782/2522-1205-2023-73-17](https://doi.org/10.32782/2522-1205-2023-73-17).
- [7] Huk, K., & Zeynalov, A. (2022). Regional disparities and economic growth in Ukraine. *arXiv*. [doi: 10.48550/arXiv.2211.05666](https://doi.org/10.48550/arXiv.2211.05666).
- [8] Ilchuk, M., Kyrychenko, A., & Vodnitskyi, M. (2023). Development of e-commerce in Ukraine in the war and post-war conditions. *Science and Innovation*, 19(3), 3-14. [doi: 10.15407/scine19.03.003](https://doi.org/10.15407/scine19.03.003).
- [9] Ilchuk, M., Kyrychenko, A., Tomashevskaya, O., Zanizdra, A., & Zanizdra, A. (2025). Development of wholesale food trade in Ukraine's domestic market under martial law. *Science and Innovation*, 21(3), 67-85. [doi: 10.15407/scine21.03.067](https://doi.org/10.15407/scine21.03.067).
- [10] Kearney. (2023). *Expanding markets: Demographics, technologies, and regulation drive retail growth in developing nations*. Retrieved from <https://www.kenarney.com/global-retail-development-index/>.
- [11] Kharlamova, G. (2014). Investment attractiveness of Ukrainian regions: Rating assessment and marketing promotion. *Journal of International Studies*, 7(1), 9-26. [doi: 10.14254/2071-8330.2014/7-1/1](https://doi.org/10.14254/2071-8330.2014/7-1/1).
- [12] Kovalchuk, S. (2024). Analysis of the state and transformations of retail: Global trends and the Ukrainian segment. *Innovation and Sustainability*, 1, 120-132. [doi: 10.31649/ins.2024.1.120.132](https://doi.org/10.31649/ins.2024.1.120.132).

- [13] Lialiuik, A. (2021). Trends development trends in Volyn region: Regional development factors. *Economic Journal of Lesya Ukrainka Volyn National University*, 2(26), 119-127. doi: 10.29038/2786-4618-2021-02-119-127.
- [14] Mladenović, S.S., Mladenović, I., & Randelović, M.P. (2020). Emerging markets and internationalization of retail: The case of BRIC countries. *Economic Themes*, 58(4), 479-500. doi: 10.2478/ethemes-2020-0027.
- [15] Nikishyna, O.V., & Shcherbak, A.V. (2023a). Transition to selective regulation of retail trade in Ukraine on the basis of EU experience. *Economy and Forecasting*, 1, 65-82. doi: 10.15407/econforecast2023.01.065.
- [16] Nikishyna, O.V., & Shcherbak, A.V. (2023b). [Retail trade in Ukraine: Status, trends and institutional ways to improve selective regulation](#). *Food Industry Economics*, 15(1), 3-12.
- [17] Oliinyk, T., & Ivanova, M. (2024). Development of retail in Ukraine. *Young Scientist*, 1(125), 126-129. doi: 10.32839/2304-5809/2024-1-125-1.
- [18] Pepchuk, S., & Palonna, T. (2023). Overview of network retail in Ukraine and prospective directions of its development. *Economic Bulletin of Cherkasy State Technological University*, 24(4), 47-55. doi: 10.62660/ebcstu/4.2023.47.
- [19] Sak, T., & Hrytsiuk, N. (2020). Retail market in Ukraine: Trends and perspectives of development in a crisis. *Economic Journal of Lesya Ukrainka Volyn National University*, 2(22), 33-42. doi: 10.29038/2411-4014-2020-02-33-42.
- [20] Sirenko, N., Mikuliak, K., & Oreshko, A. (2025). Development of retail in Ukraine. *Modern Economics*, 50, 167-174. doi: 10.31521/modecon.V50(2025)-22.
- [21] Stanca, L., Dabija, D.-C., & Câmpian, V. (2025). Adaptation and resilience in retail: Exploring consumer clusters in the new normal. *Journal of Retailing and Consumer Services*, 82, article number 104112. doi: 10.1016/j.jretconser.2024.104112.
- [22] State Statistics Service of Ukraine. (n.d.). Retrieved from <https://www.ukrstat.gov.ua/>.
- [23] Teslya, D.V. (2021). *Formation and use of the market potential of regions of Ukraine*. (Doctoral dissertation, Institute of Regional Research named after M.I. Dolishniy of the National Academy of Sciences of Ukraine, Lviv, Ukraine).
- [24] Usova, M.A. (2024). A conceptual approach to risk resistance management of retail trade enterprises. *Economic Journal Odessa Polytechnic University*, 1(27), 89-98. doi: 10.15276/EJ.01.2024.10.

## Оцінка привабливості регіональних ринків роздрібної торгівлі України за комбінованою методикою GRDI-IMI

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**Анотація.** У сучасних умовах економічних трансформацій, спричинених пандемією COVID 19 та повномасштабним вторгненням РФ (24 лютого 2022 р.), особливої актуальності набуває дослідження привабливості регіональних ринків роздрібної торгівлі в Україні. Незважаючи на соціально-економічні шоки, ринок демонструє поступове відновлення, однак регіональні диспропорції щодо економічного потенціалу, насиченості торговельної інфраструктури та рівня інвестицій створюють неоднорідні умови для розвитку. Метою дослідження була оцінка привабливості та потенціалу регіональних ринків роздрібної торгівлі з урахуванням макроекономічного стану, інфраструктури, інвестиційної активності та цифровізації ринку на основі комбінованого індексу GRDI-IMI. Використано статистичні дані державних органів, відкриті джерела та методи нормалізації показників, зваженого індексування та інтеграції макроекономічних та ринкових факторів. Отримані результати показали, що поєднання глобального підходу GRDI з індексом макроекономічної інтегральності (IMI) дозволяє комплексно оцінити перспективи розвитку регіональних ринків. Виявлено значну неоднорідність привабливості регіональних ринків: лідерами стали м. Київ, Дніпропетровська та Львівська області, потужні регіональні центри – Київська і Харківська області, середній потенціал – Полтавська, Одеська та Вінницька області, а низький – регіони, що зазнали значних економічних потрясінь через війну. Дослідження запропонувало практичні орієнтири для стратегічного планування розвитку торговельної мережі. Запропонована методика GRDI-IMI забезпечила комплексний підхід до оцінки ринкової та макроекономічної привабливості регіонів, що може стати основою для диференційованої політики розвитку роздрібної торгівлі в Україні. Отримані результати можуть бути застосовані як державними інституціями для розробки регіональної економічної політики, так і підприємствами роздрібної торгівлі та інвесторами для ухвалення стратегічних управлінських рішень

**Ключові слова:** індекс розвитку роздрібної торгівлі; регіональна конкурентоспроможність; інвестиційна привабливість регіонів; інтегральні показники оцінювання; макроекономічний аналіз ринку; методи ранжування регіонів; стратегічне планування роздрібної мережі