

# Concentration in the European Union commercial sector

*Michal Stojanov<sup>1\*</sup>*

<sup>1</sup>University of economics, Department of Economics and Management of Commerce and Services, 77 Kniaz Boris I Blvd., H-106, 9002 Varna, Bulgaria

**Abstract.** The main purpose of the present work is, based on a theoretical summary of the essence of concentration in the commercial sector, to carry out an assessment and comparative study of the level of concentration reached within the EU member states in the commercial activity of [G47] Retail trade, except of motor vehicles and motorcycles. The paper uses the methods of descriptive, content and comparative analysis. The main results show the rising concentration and economic power of companies operating in the retail trade sector. This process has an impact on the competitive structure of the sector and its power in the economic process as the key element and the final stage in the realization of the goods and its emerging importance in the national and global economy.

## 1 Introduction

The modern development of the market economy is accompanied by the strengthening of concentration processes in all economic activities, and mainly in those that provide attractive levels of return on invested resources, reasonableness of risks and an optimal time period for the realization of the expected economic and social effects.

The main objective of the present work is to summarize the theoretical concept of concentration in the retail trade and, by means of selected indicators, to examine the pattern of its current state in the EU.

Within the framework of the study, the methods of content analysis of various theoretical sources were applied, and on the basis of secondary data from Eurostat, quantitative assessments of selected indicators for measuring concentration were derived, which allow the application of methods of descriptive and comparative analysis.

With regard to the object of the study in the work, it is specified and limited to business operators in economic activity of NACE rev. 2 – G 47 Retail trade, except of motor vehicles and motorcycles. The choice of this economic activity is related to the agents of product exchange, who, through the variety of commercial forms and formats, organize the product supply on the consumer market and, with the help of various business strategies, try to attract the consumer resource and satisfy the final customer demand as fully as possible. A specific limitation of the present study is that it does not carry out an assessment of concentration, taking into account the situation, economic characteristics and financial importance of

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\* Corresponding author: [michal.stojanov@ue-varna.bg](mailto:michal.stojanov@ue-varna.bg)

individual economic entities from the retail trade industry, but considers the state of the economic activity of the retail trade as a whole by EU countries. An additional limiting condition of the present comparative study is related to the broader assessment of the level of concentration using selected indicators for Turnover or gross premiums written per enterprise (million euro), Persons employed per enterprise (number) and Enterprises per 1,000 residents. Another accompanying constraint is the timing of the study, which is set to the most recent data released through the European statistical system – Eurostat, for 2021.

## **2 Theoretical framework of concentration in retail trade**

The current study focuses on the state of concentration in the retail trade sector within the EU, and for the purposes of this paper, retail trade concentration is defined as "a form of organization of the retail trade network which is expressed in an increase in the capacity of trade outlets" [1]. Concentration in trade is "an objective and regular progression process ... of important economic and social importance" [2]. The level of concentration characterizes "the qualitative state of the main resources and the material and technical base of trade" [3]. The development of the concentration is accompanied by an increase in sales, raise in the size of the population served and an improvement in the quality and culture of commercial service. Simultaneously with these favourable results, the concentration allows optimization of operating costs, which is achieved as an effect of the scale of business activity. In the market economy, "increased concentration has resulted from a string of mergers and acquisitions" [4] and is a natural process of the business cycle in the commercial sector. Concentration in trade "is one of the main prerequisites for building barriers to the entry of new competitors in the industry" [5], which is determined by the need to commit substantial resources in order to be able to adequately engage in the competitive race in the trade sector. Nevertheless, trade continues to be one of the economic activities in which the field for entrepreneurship and innovative behaviour in market implementation of business and the diverse store formats and forms of non-store commercial exchange, allow continuous experimentation with innovations in the organization, the means, technology and techniques of product exchange. The escalation of "globalization of the market led to the intensifying of the trade internationalization, which has resulted in strengthening of the trade concentration on international level" [6]. Consequently, "the internationalization of retail trade significantly increases the level of concentration of commercial activity" [7]. This leads to the spread of the process of commercial concentration at the national and international level, which changes the balance in the power and importance of individual actors in the market distribution of products. In this process, the increase in the power of the agents of exchange takes place at the expense of the other participants in the economic process and mainly at the expense of the end users. That is why, in this aspect, concentration is assessed as an unfavourable phenomenon, specified in the provisions of Article 26 of the Law on the Protection of Competition, where it "leads to a significant obstruction of effective competition on the relevant market, especially as a result of creating or strengthening of a dominant position" [8]. In a certain situation, under specific conditions and to a certain degree, concentration can be a favorable economic process and a phenomenon, while under other hypotheses it can cause an obstacle to competition and free enterprise in the economic system. Nevertheless, the prevailing understanding is that the concentration in trade should help to the greatest extent for its modernization, optimization of the number and structure of commercial establishments and effective satisfaction of consumer demand. In the opposite situation, a deformation of the market is realized, which leads to a redistribution of resources in favor of some participants, which is entirely at the expense of others or everyone else. In such a situation, the intervention of control administrative bodies or the initiation of other market and non-market mechanisms is imperative, which, by means of transparent

procedures, will make a correction in the direction of achieving a given level of market justice for all participants in the economic process. Undoubtedly, such a situation should not be absolutized, insofar as every state of the market and its condition is subject to the continuous challenges of the maximization behavior of individual market participants and their desire to transfer risk and/or utility from or to the other economic agents. This determines why the development of trade will be committed to the highest degree by the "competitive struggle of the biggest and strongest players" [9]. But this situation should not be accepted uncritically, because it has long been established that "such a state is not favorable for the society organized in a state and that in fact it does not want it" [10]. This is because the concentration is a significant factor in retail competition.

The concentration of commercial activity can be measured by means of "size of a commercial establishment, volume of sales, market share" [9]. For the purposes of this study and within its limitations, the estimates of the following indicators will be used - Turnover or gross premiums written per enterprise in a million euro, Persons employed per enterprise as number and Enterprises per 1 000 residents. With their help, it is possible to assess the level of concentration reached in the retail trade by individual EU countries and, based on the compatibility of the data presented in millions of euro and in numbers (of active companies; employees), composite average estimates per enterprise or per 1 000 residents can be obtained and in this way the leaders in terms of the size of countries that have achieved concentration and those that are lagging behind in this process can be identified. The possible significant deviation of the countries on the indicators will be a confirmation of the effectiveness of the sales activity and the related use of human resources, which will allow the clustering of the member states in groups with the importance of the assessment of the indicators above and below those obtained in general for the EU.

The main beneficial effects associated with the increase in the power of retail trade establishments are associated with:

- An increase in the sales of a commercial outlet and, in connection with this, an increase in the volume of the population served by it. Concentration is an important factor determining the level of profitability in the industry [5].
- Increasing the satisfaction of consumer demand and the allocation of consumer disposable income in retail outlets with higher complexity, rich assortments, larger commercial areas, attraction power and throughput. Thus, achieving effective customer service, which is distinguished by a certain flexibility in the provision of service at all stages of the transaction and by rapid adaptation to changes in the external environment and to the growing needs of customers [11].
- Application of multi-channel and omni-channel sales strategies, which increases opportunities for the point of contact with the merchant in a physical store, out-of-store and primarily in an electronic environment.
- The simultaneous, parallel progress of the processes of concentration with urbanization, the increasing share and density of the urban population and the related modern way of life.
- Successful integration of contemporary information, communication and electronic technologies in the organization of trade and the management of retail trade operations.
- Achieving improved economic efficiency through the effects of scale and the full use of commercial resources (capital investments, sales personnel, inventories, etc.) and many other direct and indirect effects associated with the increase of concentration in trade.

A natural increase in concentration in a given country causes rational economic migration to countries and regions with a lower level of market saturation with business operators and their economic power. This leads to the successful spread of a global model of doing commercial business with a high degree of convertibility and convergence. The change in the competitive structure of the retail sector requires strategic intervention at the European level to ensure effective protection and practical implementation of the "Think Small First"

principle, because small and medium-sized operators "have a crucial importance for the future development, but very often face enormous bureaucratic hurdles and obstacles" [12]. The latter applies to all small and medium-sized participants in the economic process, not only to agents of exchange.

In the retail trade, the concentration expressed in terms of the commercial network has positive aspects related to the "self-reinforcing relationship that results from the formation of a structure (cluster) with concentrated stores and concentration of customers" [13]. Moreover, "the maintenance and efficient use of the concentration of economic activity is very important for the good condition of a regional or national economy and hence - for the well-being of the people of the respective region and the respective country" [13]. Concentration intensifies in conditions of digital transformation of trade, economy and society. In this way, concentration optimizes the economic process by making the use of modern information and communication technologies the basis for the optimization of resource use, the higher and complex management of the entire commercial process. Therefore, the simultaneous processes of concentration and digital transformation create opportunities for the successful introduction and application of innovative forms and methods of sales in the retail trade.

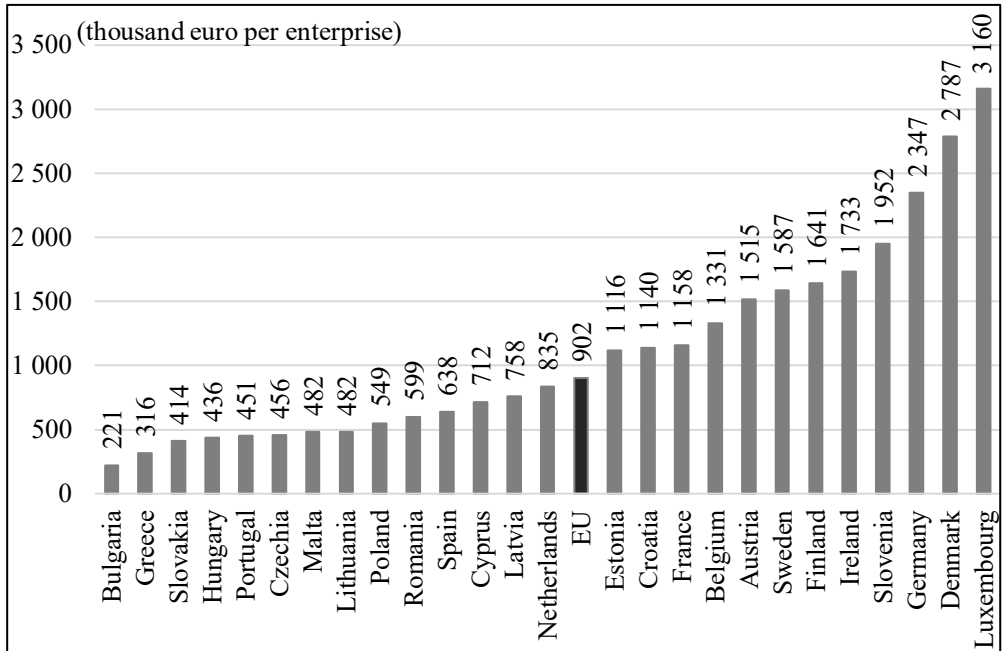
Of course, "the level of concentration of industry is a prerequisite for monopoly power and opportunities for price manipulation" [14]. But here, rather its role should be sought to reduce the weak and unprofitable units in the retail trade and those agents of exchange who do not possess sufficient competitive potential to meet the challenges of the changing market environment and instability of its parameters. This is because there is no unambiguously accepted and universal business model in the economic system. On the contrary, in each specific market situation and with the formed complex of environmental factors, a given model will be established as successful, and under the impact of changes in the economic situation, an alternative entrepreneurial solution will be established as economically viable.

A possible effect of the increase in concentration, measured as the average volume of sales revenue made by an active economic entity, is related to the achievement of better effects of economies of scale. Such a state is strongly determined by the level and the degree of applicability of modern technologies in the enterprise. The integration of contemporary innovative information-communication and electronic solutions in business improves labour productivity, provides company management with adequate information certainty in real time and allows continuous optimization of resource efficiency. In the current transition to the New Economy, the concentration of commerce is shifting from the field of physical trade to the dimensions of electronic forms of product exchange. This predetermines the concentration in trade to increasingly accompany its digital transformation. Therefore, multi-channel and omni-channel commercial strategies are a new dimension of escalating concentration in trade that expands the scope of the concentration process. Of course, in the conditions of electronic product transaction, attention should also be given to the technological essence and capabilities of electronic product exchange, which uniquely can scale successful local processes and activities into a global business model, at the same time in relatively short periods of time and with lower resources used compared to traditional store-based retailing.

This allows us to conclude that retail concentration is an economically motivated process, the importance and rationality of which is driven by the desire to extract economic benefits from the window of market opportunity created for certain business agents. Undoubtedly, the excessive growth of concentration can cause distortion of the market, which leads to an undue redistribution of utility and risk between market participants, and therefore the process of its increase should be subject to systematic studies, preventive and corrective actions if and where necessary.

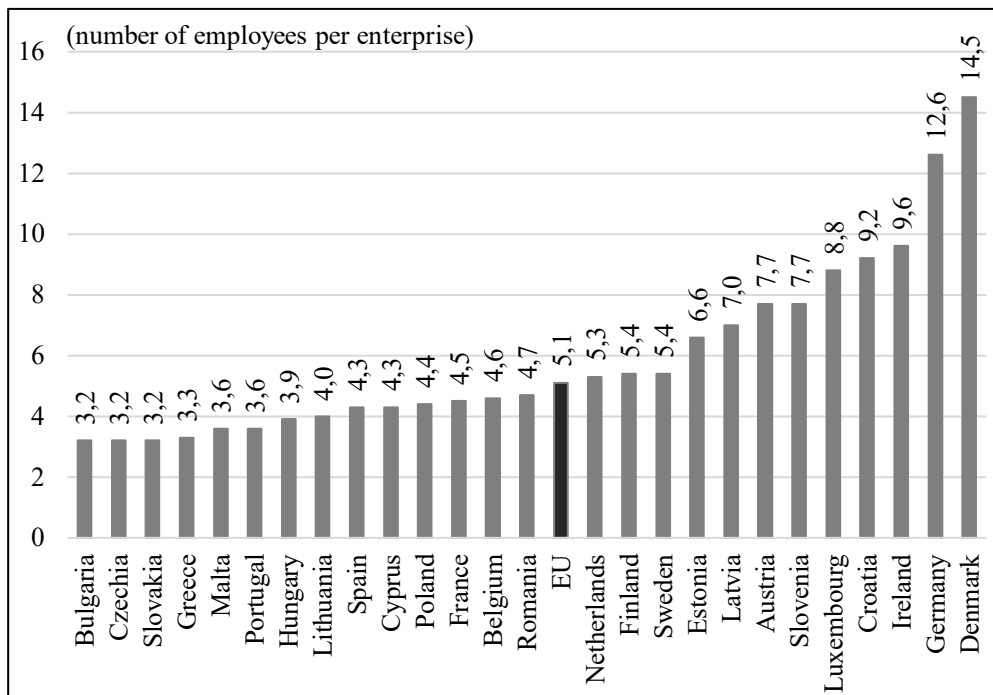
### **3 Results and discussion**

Within the EU in 2021, an average level of turnover or gross premiums written per enterprise from the retail trade was reached in the amount of 902 thousand euro per business unit. In the ranking by country, the two opposite extreme positions are occupied by Luxembourg with 3 160 thousand euro per enterprise specialized in retail trade and Bulgaria with 221 thousand euro per retail company, which forms a relative difference of 14.3 times. Within the comparison against the EU average, 14 countries fall with their lower values, against 12 countries with higher scores than the EU average on the indicator. A country's placement into one of the two groups may be a product of the magnitude of the reported higher or lower turnover or gross premiums written or due to the significant or small number of active economic operators in the retail trade in the country concerned. Thus, for example, Luxembourg is the country where the lowest value of the number of enterprises is reported, with only 3 106 business units in retailing, compared to 444 848 commercial enterprises in France. With regard to the second factor in the deterministic model assessing turnover or gross premiums written per enterprises, the highest turnover in terms of its value is in Germany with a total of 704 241.7 million euro, and the smallest is in Malta of only 3 042.7 million euro. The lowest position occupied by Bulgaria according to the indicator turnover or gross premiums written per enterprise is the result of the 17th position out of 26 countries (excluding Italy), ranked from lowest to highest by a number of specialized agents of product exchange or 93 232 active enterprises, and in terms of turnover or gross premiums written, the country occupies the 9th position in the ranking of countries from the lowest to the highest in terms of the value of the reported volume of turnovers in the sector. Therefore, the last position of the country is neither determined by the small number of active enterprises, nor by the low volume of sales turnover, but the two factors in their combination have contributed to the formation of the last place in the ranking of countries according to the indicator turnover or gross premiums written per enterprise. This is a signal that there is a conditional fragmentation in the country among many economic agents who do not consider significant sales effects in their business independence and in general for the economic activity of all enterprises of section 47 of sector G. The country's conditionally unfavourable position is reinforced by the significant difference between Bulgaria and the penultimate positioned Greece (316 thousand euro per enterprise), which occupies the 25<sup>th</sup> place out of 26 countries, since the absolute difference between the last two is 95.6 thousand euro, or a relative underperformance of more than 43.3%, which is mainly a product of the lower turnover or gross premiums of 20 580 million euro for Bulgaria compared with 44 946.1 million euro in Greece.



**Fig. 1.** Turnover or gross premiums written per enterprise in economic activity Retail trade, except of motor vehicles and motorcycles (thousand euro) in 2021 by EU countries.  
Source of data: Eurostat [15]. Note: There is no information reported for Italy within the database.

The second dimension of the research is related to the metric – persons employed per enterprise in economic activity Retail trade, except of motor vehicles and motorcycles, which indicates that within the EU average number of persons employed per enterprise are 5.1 employees. According to this indicator, Bulgaria again occupies the lowest position, which is shared together with the Czech Republic and Slovakia with 3.2 persons per economic entity in the retail trade. For Bulgaria, this position is a product of the 299 656 persons employed in the economic activity of retail trade, which is the 13th position out of 26 countries (excluding Italy), ordered from the lowest to the highest number of employed persons by country in 2021. Therefore, again, neither the number of active commercial operators nor the persons engaged in their main activity independently determined the lowest position for the country, but this is the product of the combined and joint action of the two factors to achieve this lowest score. Denmark has the highest rating with 14.5 persons on average per enterprise, and the difference between the first and the last is more than 4.5 times or more than 11 persons. The reported higher values for 12 EU countries compared to the average value is an indication of the more significant labour resource that is engaged in carrying out the economic activity of the product exchange on average per enterprise in these countries. Within the framework of economic logic, the higher estimate for the number of persons of one commercial operator is both a prerequisite and a result of the greater power and concentration of commercial units. In this situation, the inclusion and work of a larger volume and composition of the labour resource used is a prerequisite for achieving higher economic results, but at the same time significant effects also arise in relation to the quality and culture of the commercial activity and mainly the service provided as an element of the commercial service. Such a finding is associated with the importance of the human factor for commercial activity, which unambiguously defines "human labour as the most important resource, because without it the other resources cannot be used, because it puts them into action" [1].



**Fig. 2.** Persons employed per enterprise in economic activity Retail trade, except of motor vehicles and motorcycles (number) in 2021 by EU countries.  
 Source of data: Eurostat [15]. Note: unavailable information – Italy.

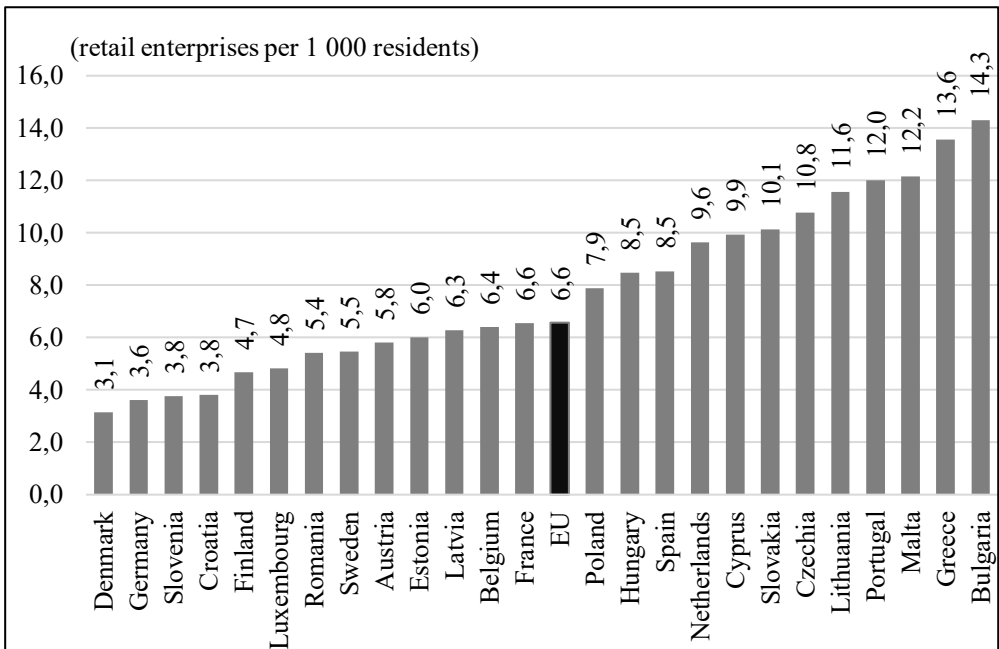
A specific feature is that the top five countries according to the indicator turnover or gross premiums written per enterprise in economic activity of the retail trade are the same five countries and according to the second metrics persons employed per enterprise, but with a change in the positions they occupy. Despite this movement by the places they occupy, their positioning in this highest cluster by both metrics shows the existence of a direct correlation dependence between the volume of the reported sales effects of the commercial activity and the persons employed in the enterprise. The latter implies that the increase in concentration, measured by means of the two investigated indicators, is accompanied by an increase in labour productivity in commercial activity. This essentially leads to "trade of a new, different, and higher rank ... a grace important, timeless, and ever-expanding economic reality" [16].

The processes of concentration in the economic activity of the retail trade are associated with improving business effects, and hence increasing the effectiveness of the use of resources. For example, in 2021, labour productivity measured as turnover or gross premiums written per person positions Bulgaria again at the bottom with 6 868 euro of the 26 EU countries surveyed, while Luxembourg again retakes the top position with 35 715 euro, or the absolute amount of the difference between the first and the last is 28 847 euro, which is a relative excess of 520%.

The formation of higher concentration estimates should not be taken unambiguously as a prerequisite for increasing the market power of certain individual market participants. In this aspect, power and consolidation in the commercial business are a requirement for increasing the level of commercial activity and forming a higher scale of allocation and utilisation of resources and improving the level of optimality in commercial activity. Of course, in a situation of violation of competition law, a legal system, special legislation and mechanisms of preventive and corrective actions operate within each EU member state, which as general norms are set out in Article 101 and Article 102 of the Treaty on European Union and of the

Treaty on the Functioning of the European Union aimed at "prohibition as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market" and "any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States" [17]. In this way, both on a national and even more so at a common supranational level valid for the EU, it is ensured that the action of market concentration should fall only in the dimensions of seeking sustainability in economic development, protecting competition in the internal market, defending the interests and rights of consumers and in relation to all the possible economic and social consequences of its development.

Bulgaria's standing out as a leader in the EU's negative statistics on the studied dimensions of retail trade concentration undergoes a sharp change, when obtaining the estimates of the indicator for the degree of provision of the population with trade enterprises specializing in retail sales per 1 000 residents. In 2021, the country is assured of 14.3 retail establishments actively operating per 1 000 residents, which is 4.5 times (455%) above the lowest indicator estimate for Denmark, where only 3.1 enterprises operate per 1 000 residents. Therefore, the economic situation in the country, the requirements and conditions for entrepreneurship in the economic activity of retail trade and the characteristics of the consumer market provide for the highest level the satisfaction of residents in Bulgaria with commercial operators and their retail outlets. The latter again supports the finding of the presence of significant fragmentation in the retail trade in the country and the extensive entrepreneurial activity of commercial operators in the local consumer market. Of course, this general finding should not be accepted uncritically, because in individual market segments the presence of significant concentration processes is possible, which can be a task of in-depth research in the future or by other authors.



**Fig. 3.** Enterprises per 1 000 residents in economic activity Retail trade, except of motor vehicles and motorcycles (number) in 2021 by EU countries.

Source of data: Eurostat [15, 18]. Note: unavailable information – Italy, Ireland.



The average value for the EU (with missing information and estimates for Italy and Ireland) is 6.6 enterprises classified in economic activity G 47 Retail trade, except of motor vehicles and motorcycles per 1 000 residents, which is 2.2 times less than the estimate for Bulgaria and 2.1 times above the estimate for Denmark.

## 4 Conclusion

Undoubtedly, the process of concentration and its positives should not be absolutized and accepted uncritically. Concentration in retail trade is favourable as long as it provides conditions of exchange that balance the interest of the participants in the economic process. In the presence of low barriers for entering of innovative commercial forms and formats on the consumer market and their positive perception by consumers, that should be combined with certain market and even regulated non-market mechanisms to control the emergence of overconcentration. Thus, by means of original business approaches and modern commercial entrepreneurship, which will be a source of continuous improvement of the organization and technology of product exchange, conditions are created for the continuous development of the market structure and trade. The dynamics of concentration on the economic activity of retail trade should benefit the customer, but also create profitable economic effects for the product exchange agent and its survival in a dynamic and uncertain local, national, intra-Community and global market environment.

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