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# AUTOMOTIVE TRADE TURNOVER AT THE BEGINNING OF 2024

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## Abstract

*The trade in motor vehicles is an important element of any national economy, including for Romania, it generates important revenues to the state budget, contributing an important percentage to the national GDP and in addition it is a binder and enhancer of other industries. Governments are very interested in attracting the automotive industry, which is encouraged through tax facilities and other various methods agreed to support their activity. Within the developed economies, services and production have an important weight in the composition of the Gross Domestic Product, therefore the support of this industry which not only generates income, but is also the supporter of other industries becoming a great responsibility of the administrations. In this article, the authors set out to highlight how the trade in motor vehicles has evolved in our country, based on the data obtained from the National Institute of Statistics, being analyzed on the basis of raw series and on the basis of seasonally adjusted series, but also based on nominal data or by denomination brought to real data.*

**Keywords:** turnover, trade, developments, data series, indicators.

**JEL classification:** H10, H20

## Introduction

In any developed economy, motor vehicles of any category and their trade together with the market services provided to the population are essential elements on the quality of life. Individually in terms of personal travel of the population, motor vehicles are an important element, but from an economic point of view, in any of the industries, whether it is transport where motor vehicles are the main element, whether it is production units where transport is connected, being responsible for the transport to the beneficiaries of the goods produced by the producers, then vehicles are indispensable.

We can emphasize this aspect by exemplifying the various activities of providing services to the population, where motor vehicles are essential to all service providers, without them, practically the modern services needed by

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the population cannot be provided or supported by their operators to perform without the possession or use of motor vehicles.

However, this branch of motor vehicle trade has an interesting peculiarity, because on the one hand there are motor vehicle manufacturers, where sales volumes are attributed to new motor vehicles, and on the other hand there are sellers, dealers, whose activity is the trade in used motor vehicles. Within these categories we can also include the services provided for the repair of motor vehicles and the activities of selling car parts and accessories. To underline the importance of this field once again, we can mention the insurance industry which derives a significant percentage of its revenues from the automotive market, from its size and mobility.

The authors, studying the data obtained from the National Institute of Statistics which they also correlated with other data provided by EUROSTAT, concluded that the turnover registered an increase over time if we take longer periods into comparative calculation, but there are periods of time, where for various reasons, either economic, or due to political or environmental, or social decisions, both in terms of motor vehicle trade and in terms of services provided to the population there are decreases, directly influenced by these reasons. As an example of the influence these events have on the turnover of the motor trade, we can mention the period of time affected by the COVID-19 pandemic in which the trade of motor vehicles decreased significantly.

#### **Literature review**

Anghelache, C. (2015), Anghelache, C. (2014) and Anghelache, C. (2012) make an exhaustive analysis of the economic state of Romania. Anghelache, C., Anghel, M. G., (2016), Anghelache C. (2008), Anghelache, C., Badea, S.G., Capanu, I., Wagner, P., (2005), Anghelache, C. (2004), Anghelache, C. (2002) deals with the issue of theoretical statistics accompanied by various case studies and examples. The topic of macroeconomic statistics and the system of national accounts is addressed by Anghelache, C., Mitruț, C., Voineagu, V. (2013). Anghelache, G. V., Lixandru (Bardașu), G. and others (2013) present in a paper the main indicators used in the analysis of commodity exchanges. Anghelache C. and others (2020) analyzed the evolution of the Gross Domestic Product starting with the resources and uses that this indicator had in obtaining the results. Another author, Hummels D. (2007) presented a paper dealing with the cost of transportation in international trade in the era of globalization. Mina-Raiu, L. (2014) highlights the impact that the relationship between the public sector and the business environment has on the process of economic and social development.

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### Methodology, data, results and discussion

We will approach the evolution of the motor vehicle trade starting from the current figures of the industry, comparing them with similar periods for a more accurate picture of this area of economic interest.

The data obtained comes from the National Institute of Statistics on the basis of the CA chapter and is of a selective type, being applied stratified survey methods with a simple random selection.

The volume indexes of the turnover in the trade of used cars and motorcycles are Laspeyres indexes, being calculated under comparable methodological and price conditions.

For the most correct expression of the values from the current period in the prices of the reference period, deflator price indices were used for correction.

In the series adjustment operation, the Jdemetra+ software package was used, which can estimate the effect of the calendar and the different number of working days of consecutive months. To obtain the adjusted series with the number of working days related to the respective months, correction coefficients were applied. To arrive at the result of a seasonally adjusted series, it is done by removing the seasonality component from the series adjusted by the effect of working days.

As for the adjustment of the aggregate levels, it is carried out by the direct method which is performed by the direct adjustment of the aggregate series, even if this may create some inconsistencies in the data series. Table number 1 shows the indicators of the volume of turnover in the trade in motor vehicles and motorcycles.

### Indices of the volume of turnover in the trade in motor vehicles and motorcycles

Table 1

		MAI 2024 în % față de :		1.1-31.V.2024/ 1.1-31.V.2023 -%-
		APRILIE 2024	MAI 2023	
Total comerț cu ridicata și cu amănuntul, întreținerea și repararea autovehiculelor și a motocicletelor	B	93,6	92,7	102,6
	S	88,2	96,7	102,4
Comerț cu autovehicule	B	94,4	94,2	103,0
	S	88,4	98,6	102,1
Întreținerea și repararea autovehiculelor	B	94,1	77,2	82,7
	S	90,3	79,5	84,1
Comerțul cu piese și accesorii pentru autovehicule	B	90,7	95,4	110,0
	S	91,8	98,3	109,4
Comerț cu motociclete, piese și accesorii aferente; întreținerea și repararea motocicletelor	B	113,8	108,4	116,0
	S	101,7	111,4	117,5

Notă: B= serie brută; S= serie ajustată în funcție de numărul de zile lucrătoare și de sezonabilitate

Source: INS-data processed by the authors

At the level of May 2024, the volume of turnover in the trade in motor vehicles and motorcycles as a gross series registered a decrease compared to April 2024 by a percentage of 6.4%, and as a series adjusted according to the number of working days and seasonality with a percentage of 11.8%.

Comparing the data of May 2024 of the volume of turnover in the trade in motor vehicles and motorcycles with the values of May 2023 we can observe a decrease, both as a raw series where the decrease is 7.3% and as a series adjusted according to the number of working days and seasonality where the decrease was in percentage of 3.3%

In a comparison made at the level of several months, i.e. a comparison made over a similar interval in consecutive years, such as the period between January 1-May 31, 2024 compared to the period January 1-May 31, 2023 we can see an increase of one percent of 2.6% as a raw series, but also in a growth percentage of 2.4% in the case of the series adjusted according to the number of working days and seasonality.

At a first glance we can consider that the current values represent a decrease, but as we stated before, the trade in motor vehicles and motorcycles is a competitive industry, closely linked to the general state of the economy, closely linked to the evolution and state of the services provided to the population, being at the same time and important constituent of the national GDP.

**Turnover from the trade in motor vehicles in the period May 2024 - May 2024 (corresponding month of the previous year = 100)**

*Chart 1*

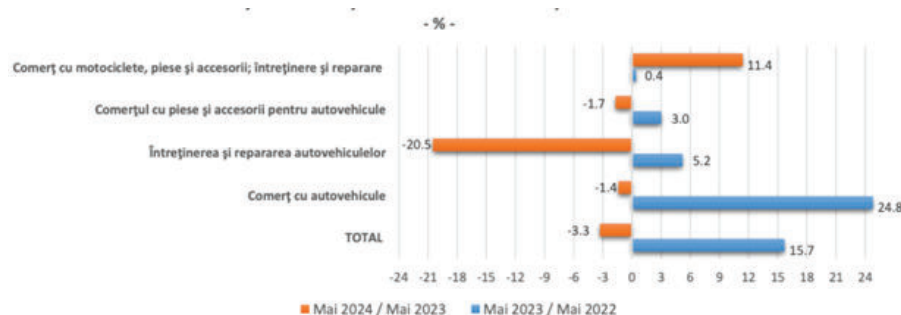


Going in detail, in the comparative framework of the period May 2024 - April 2024 where the indicators regarding the total volume of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, as a gross series, in May 2024, compared with the previous month, it registered a decrease of 6.4%.

This decrease was due to the decreases recorded by the indicators for the trade in parts and accessories for motor vehicles where the decrease had a value of 9.3%, the maintenance and repair activities of motor vehicles where it was a minus of 5.9% and the decrease occurred at trade in motor vehicles in percentage of 5.6%. Instead, trade in motorcycles, related parts and accessories; the maintenance and repair of motorcycles had a significant increase of 13.8%.

**Turnover in the trade in motor vehicles and motorcycles (series adjusted according to the number of working days and seasonality)**

*Chart 2*



As a series adjusted according to the number of working days and seasonality, the total volume of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, in the same comparative framework of the period May 2024 - April 2024, has recorded a decrease of 11.8%.

Moving forward in the comparison May 2024 compared to May 2023, the total turnover of the wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles as a gross series, in May 2024 compared to May 2023, a decrease of 7.3 percent was recorded, as a result of the decreases recorded by the maintenance and repair activities of motor vehicles, where there was a significant minus of 22.8 percent, in the trade of motor vehicles, where the minus was 5.8 percent and in the trade with parts and accessories for motor vehicles, where the minus was 4.6 percent. On the other hand, trade in motorcycles, related parts and accessories; maintenance and repair of motorcycles registered an increase of 8.4 percent.

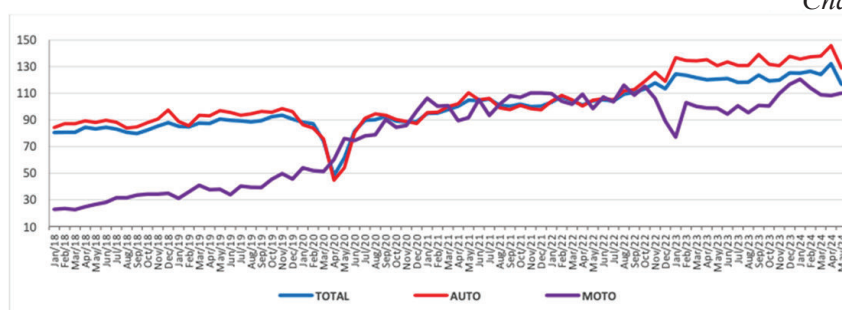
As a series adjusted according to the number of working days and seasonality, the indicators regarding the total volume of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, in

May 2024 compared to May 2023, also registered a decrease with a minus of 3.3 percent.

In graph 3 we can see an evolution of the turnover volume indices in the trade in motor vehicles and motorcycles in the period January 2018 – May 2024

**Monthly evolution of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles (series adjusted according to the number of working days and seasonality) January 2018 – May 2024**

*Chart 3*



In the comparative framework of the period January 1-May 31, 2024 compared to the period January 1-May 31, 2023, the volume of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles as a gross series, recorded a figure of of business growing by 2.6%, being influenced by the increase in turnover in the activities related to the trade in motorcycles, parts and related accessories; the maintenance and repair of motorcycles with an increase of 16.0%, the activities related to the trade in parts and accessories for motor vehicles where the increase was 10.0% and the trade in motor vehicles where there is an increase of 3.0%. On the other hand, there were also decreases recorded in the activities of maintenance and repair of motor vehicles, which decreased by a percentage of 17.3%.

As a series adjusted for the number of working days and seasonality, the volume of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles in the period January 1-May 31, 2024 compared to the period January 1-May 31 2023, saw a 2.4% increase.

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### Conclusions

Some conclusions can be drawn from this study. First of all, it must be taken into account that these developments presented and interpreted in this study must also take into account the decisions regarding the reduction of the carbon footprint imposed by national and European Union regulations, regulations that lead to major transformations of the motor vehicle manufacturing industry it also directly affects motor vehicle sales and repairs, and the transportation industry is also affected by these regulations.

The transport industry is one of the main consumers of motor vehicle manufacturers, being consequently a significant percentage of the total volume of turnover in the wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles.

At the same time, we will have to take into account the international economic contexts, an example being the microprocessor crisis that affected the entire car manufacturing industry, leading to a significant decrease in production, implicitly in sales that were delayed, with waiting periods for deliveries between 6- 12 months.

Last but not least, we can mention as a critical period for this industry, the entire period affected by the Covid-19 crisis, which left a negative mark on this motor vehicle industry, the trade in motor vehicles and motorcycles and the GDPs of countries, including that of Romania.

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