
STUDY ON THE DEVELOPMENT OF THE NUMBER OF BUSINESSES FROM THE COMMERCE OF MOTOR VEHICLES AND OF THE MARKET SERVICE PROVIDED TO THE POPULATION

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Abstract

Car Trade is one of the most profitable economic activities in Romania. It is noted that in 2017 as compared to 2016 there is a sustained increase in this activity. Also, the other services experienced a sustained pace during the reference period.

In developed countries, services have an increasing share in GDP formation. In Romania, services also get a higher share as a result of the development of general services provided to enterprises or the population.

The authors have proposed to highlight how these service activities evolved in 2017 compared to the previous year in our country.

Data are analyzed based on gross series and seasonally adjusted series, but also on nominal or real-time data by denomination.

In the study, the authors also focused on others (the monthly evolution compared to similar periods, etc.) which give the essence of the analysis undertaken.

Cuvinte cheie: *retail, wholesale, turnover, growth indices, evolution*

Clasificarea JEL: *L81, O40*

Introduction

The trade in motor vehicles and the market services provided to the population have, first of all, an important effect on the quality of life.

The increase in the number of vehicles sold, which ensures an increase in the number of vehicles in circulation, ensures better conditions for the population to travel for personal purposes but also for the purpose of economic activity from time to time.

The authors, studying the data provided by the National Institute of Statistics, correlated with some data provided by EUROSTAT, concluded that from time to time the turnover increased both in terms of trade with motor vehicles, and in terms of services rendered to the population.

When approaching the category of market services rendered to the population, we refer primarily to hotel and restaurant activities, which have grown significantly, as well as to other service activities carried out in order to satisfy the needs of recreation, beauty, cleaning, hygiene and more.

These activities have increased and the effect is seen in increasing the share of services provided to businesses, the population or those in the motor vehicle trade in the growth of gross domestic product.

Literature review

Anghelache, C. (2015), Anghelache, C. (2014) and Anghelache, C. (2012) make an exhaustive analysis of Romania's economic situation. Anghelache, C., Anghel, MG, (2016), Anghelache C., Anghelache, C., Badea, SG, Capanu, , Biji, M., Biji, EM, Lilea, E., Anghelache, C. (2002). The case of macroeconomic statistics and the system of national accounts is approached by Anghelache, C., Mitruț, C., Voineagu, V. (2013) and Dornbusch, R. Fischer, S. Startz, R., In the paper, Lixandru (Bardașu), G. et al. (2013) presents an analysis model for the analysis of commodity exchanges. the modeling methodology and the prognosis failure are the subject of a study by Clements, MP, and Hendry, DF (2002). Ark, M., (1998) and Croxton, F.E., Cowden, I.J. study the peculiarities of applied statistics.

Research methodology, results and discussion

In the following, we will address, in this order, how trade in motor vehicles and other market services offered to the population have evolved. We are considering retail, wholesale, but also other types of activities offered to the population. Thus, in 2017, the turnover from the trade in motor vehicles and the market services rendered to the population increased compared to 2016 by 11.1%, respectively 15.5%

Analyzing the evolution of the trade in motor vehicles and motorcycles, in December 2017 compared to the previous month, the turnover decreased as gross series by 6.0%. As series adjusted by number of working days and seasonality increased by 2.4%. Turnover for market services provided to the population over the previous month increased, both as gross series by 5.5% and as series adjusted by number of working days and seasonality by 3.3%.

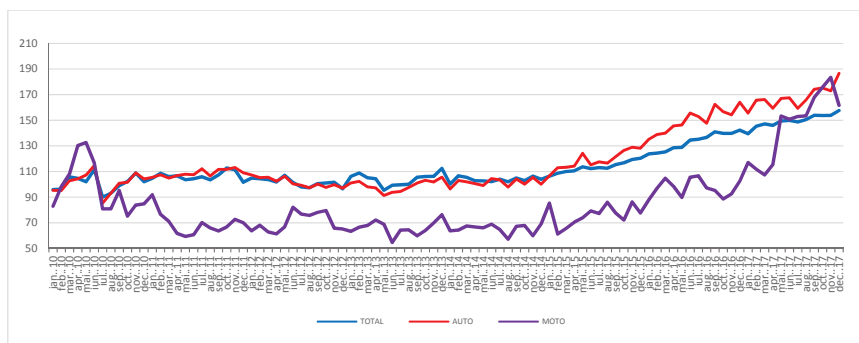
Even more relevant is the comparative analysis of the indicator under review, if we consider a 12-month period. In this respect, the level of the

indicator in the month considered will be compared with the same month of the previous year. In this respect, compared to the corresponding month of the previous year, the turnover volume for the trade of motor vehicles and motorcycles increased as gross series by 7, 1% and series adjusted by number of working days and seasonality by 10.7%. At the same time, the volume of turnover for market services rendered to the population, as compared to the corresponding month of the previous year, increased as gross series by 20.1% and as series adjusted by number of working days and seasonality by 19.6 %.

The year-over-year comparison of the year-over-year indicator shows that in 2017, the volume of turnover in the trade in motor vehicles and motorcycles grew by 11.1% compared to 2016 as gross series. Market services rendered to the population increased, as gross series, by 15.5%. In chart no. 1 we made a suggestive graphical presentation that highlights the evolution of the indicator under analysis for 2010-2017.

. Monthly evolution of turnover in wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles (series adjusted by number of working days and seasonality)

Chart no. 1
- January 2010 – December 2017 -
-2010=100-

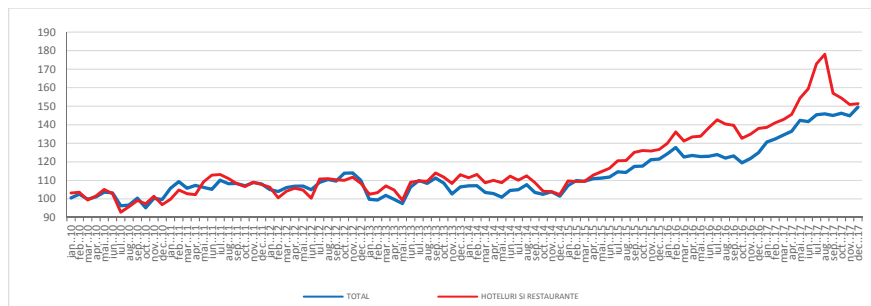


Source: INS / Press release 36 / 12.02.2018

Also, in chart no. 2 we presented the monthly evolution of the turnover for the market services rendered to the population.

**Monthly evolution of turnover for market services rendered to the population (series adjusted by number of working days and seasonality)
- January 2010 - December 2017 -**

Chart no. 2
-2010=100-



Sursa: INS/ Comunicat de presă 36/12.02.2018

În tabelul nr. 1 sunt prezentate datele privind indicii valorii cifrei de afaceri pe activitățile desfășurate, ca serii brute sau serii ajustate sezonier.

**Indicii volumului cifrei de afaceri pentru comerțul cu autovehicule și
motociclete și servicii de piață prestate populației**

Tabelul nr. 1

Activities	Series	December 2017 in % vs :		Year 2017/ Year 2016 -%-
		November 2017	December 2016	
Total wholesale and retail, maintenance and repair of motor vehicles and motorcycles	B	94,0	107,1	111,1
	S	102,4	110,7	-
Trade in motor vehicles	B	100,2	108,5	110,4
	S	108,0	113,8	-
Maintaining and repairing vehicles	B	93,9	109,2	122,9
	S	101,3	113,0	-
Trade of parts and accessories for motor vehicles	B	83,0	103,2	107,3
	S	100,6	106,8	-
Trade of motorcycles, parts and accessories thereof; maintenance and repair of motorcycles	B	83,2	142,7	150,6
	S	88,1	157,9	-
Market services provided to the population - total	B	105,5	120,1	115,5
	S	103,3	119,6	-
from which:				
Hotels and restaurants	B	99,5	107,9	113,9
	S	100,3	109,7	-
Gambling and other recreational activities	B	113,0	140,3	123,9
	S	107,4	141,3	-
Activities of travel agencies and tour operators; other booking and tourist assistance services	B	109,8	141,0	112,2
	S	106,7	132,8	-
Hairdressing and other beauty activities	B	138,2	89,7	82,5
	S	124,1	88,0	-
Washing, cleaning (dry) textiles and fur products	B	110,7	112,8	108,9
	S	112,4	112,9	-

Note: B = gross series; S = series adjusted by number of working days and seasonality

Source: INS / Press release 36 / 12.02.2018

Interpreting the data in this table shows that the volume of turnover for wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, gross series, in December 2017 compared to the previous month, registered a decrease by 6.0% due to the decreases registered in the trade with

parts and accessories for motor vehicles (-17.0%), trade in motorcycles, spare parts and related accessories; maintenance and repair of motorcycles (-16.8%) and maintenance and repair of motor vehicles (-6.1%). Trade in motor vehicles increased by 0.2%.

As series adjusted by number of working days and seasonality, the volume of turnover for wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, in December 2017, compared to the previous month, registered an increase of 2, 4%.

Deepening the analysis we find that the market services rendered to the population, gross series, in December 2017, compared to the previous month, the volume of turnover increased by 5.5% due to the increases registered for hairdressing and other beauty activities (+ 38.2%), gambling activities and other recreational activities (+ 13.0%), washing activities, cleaning and dyeing of textiles and fur (+ 10.7%) and activities of tour operators and tour operators + 9.8%). Hotel and restaurant activities declined by 0.5%.

As series adjusted by number of working days and seasonality, this indicator increased by 3.3% in December 2017 compared to the previous month.

Turnover volume for wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, gross series, in December 2017 compared to December 2016 increased by 7.1% due to increases in motorcycle trade, parts and accessories thereof; maintenance and repair of motorcycles (+ 42.7%), maintenance and repair of motor vehicles (+ 9.2%), trade in motor vehicles (+ 8.5%) and trade in parts and accessories for motor vehicles %).

Turnover volume for wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, series adjusted by number of working days and seasonality, in December 2017 increased by 10.7% compared to December 2016.

The market services rendered to the population, gross series, in December 2017 recorded a turnover of 20.1% higher compared to December 2016, coming from the activities of tour operators and tour operators (+ 41.0%), gambling activities and other recreational activities (+ 40.3%), cleaning and dyeing of textiles and fur (+ 12.8%) and hotel and restaurant activities (+ 7.9%) . Declines registered hairdressing and other beauty activities (-10.3%).

Market services provided to the population, adjusted by number of working days and seasonality, in December 2017 increased by 19.6% compared to December 2016.

For the full year 2017 compared to 2016, the volume of wholesale and retail trade, maintenance and repair of motor vehicles and motorcycles, gross series increased by 11.1% due to increases in trade in motorcycles, spare parts and related accessories ; maintenance and repair of motorcycles (+ 50.6%),

maintenance and repair of motor vehicles (+ 22.9%), trade in motor vehicles (+ 10.4%) and trade in parts and accessories for motor vehicles (+ 7.3%) .

Market services rendered to the population, gross series, in 2017 registered a turnover of 15.5% higher compared to 2016, coming from gambling activities and other recreational activities (+ 23.9%), hotel activities and restaurants (+ 13.9%), travel agency and tour operator activities (+ 12.2%) and laundry, cleaning and dyeing of textiles and fur (+ 8.9%). Hairdressing and other beauty services fell by 17.5%.

In table no. 2 are presented the synthetic data with the evolution of the turnover indices of the wholesale trade.

Turnover indices of wholesale

Table no. 2

Activities	Series	December 2017 in % vs:		Year 2017/ Year 2016 -%-
		November 2017	December 2016	
Total	B	93,0	106,8	107,5
	S	101,0	112,0	-
Wholesale trade intermediation activities	B	96,5	94,8	98,8
	S	99,5	97,9	-
Wholesale of agricultural raw materials and live animals	B	82,2	96,6	105,2
	S	96,9	99,1	-
Wholesale of food, beverages and tobacco	B	102,8	104,6	105,9
	S	99,8	107,0	-
Wholesale of consumer goods, other than food	B	97,8	108,5	106,8
	S	103,6	110,8	-
Wholesale of computer and telecommunication equipment	B	91,5	95,0	98,6
	S	97,5	91,2	-
Wholesale of other machinery, equipment and supplies	B	103,5	112,4	105,0
	S	103,7	111,0	-
Specialized wholesale of other products	B	80,9	119,0	114,6
	S	103,4	123,0	-
Non-specialized wholesale trade	B	87,6	116,6	116,5
	S	100,4	127,7	-

Notă: B= serie brută; S= serie ajustată în funcție de numărul de zile lucrătoare și de sezonabilitate
Sursă INS – Comunicat de presă nr. 40/14.02.2018

Comparing the level of turnover in wholesale trade (excluding trade in motor vehicles and motorcycles) as crude series in December 2017, compared to the previous month in nominal terms, we note that it decreased overall by 7.0% (-19.1%), wholesale of raw agricultural products and live animals (-17.8%), non-specialized wholesale trade (-12.4%), trade wholesale of IT and telecommunications equipment (-8.5%), wholesale trade intermediation (-3.5%) and wholesale of non-food goods (-2.2%) . Only wholesale of other machinery, equipment and supplies (+ 3.5%) and wholesale of food, beverages and tobacco (+ 2.8%) recorded increases.

Turnover in wholesale (excluding trade in motor vehicles and motorcycles), adjusted series according to number of working days and seasonality, in December 2017, compared to the previous month, in nominal terms, increased by a total of 1 , 0%, by the increase in the wholesale of other machinery, equipment and supplies (+ 3.7%), in the non-food goods (+ 3.6%), the specialized wholesale trade of other products (+ 3.4%) and non-specialized wholesale (+ 0.4%). Decreases were recorded in the wholesale trade of raw agricultural products and livestock (-3.1%), wholesale of information and telecommunications equipment (-2.5%), intermediation activities in wholesale trade (-0 , 5%) and wholesale of food, beverages and tobacco (-0.2%).

As gross series, turnover in wholesale (excluding trade in motor vehicles and motorcycles) in December 2017 compared to December 2016, in nominal terms, increased by 6.8% on the back of the increase in wholesale trade (+ 19.0%), non-specialized wholesale (+ 16.6%), wholesale of other machinery, equipment and supplies (+ 12.4%), (+ 8.5%) and wholesale of food, beverages and tobacco (+ 4.6%). Decreases were recorded in intermediation activities in wholesale (-5.2%), wholesale of IT and telecommunications equipment (-5.0%) and wholesale of agricultural raw materials and live animals (- 3.4%).

Turnover in wholesale trade (excluding trade in motor vehicles and motorcycles), seasonally adjusted and adjusted series, in December 2017 compared to December 2016, in nominal terms, increased overall 12.0%, as a result of the increase in non-specialized wholesale trade (+ 27.7%), the specialized trade of other products (+23.0%), the wholesale of other machinery, equipment and supplies (+ 0%), wholesale of consumer goods, non-food goods (+ 10.8%) and wholesale of food, beverages and tobacco (+ 7.0%). Decreases were recorded in the wholesale of IT and telecommunications equipment (-8.8%), brokering in wholesale (-2.1%) and wholesale of raw agricultural products and live animals (-0, 9%).

Turnover in wholesale trade (excluding trade in motor vehicles and motorcycles), gross series, in 2017 compared to 2016, in nominal terms,

increased by 7.5% due to the increase in non-specialized wholesale trade (+16,5%), wholesale of other products (+14.6%), non-food goods (+6.8%), wholesale of food, beverages and tobacco (+5.9%), wholesale of agricultural raw materials and live animals (+5.2%) and of other machinery, equipment and supplies (+5.0%). Decreases were recorded in the wholesale of IT and telecommunications equipment (-1.4%) and in wholesale trade intermediation (-1.2%).

Conclusion

Romania needs to gain more convincing European funds for activities in these areas of activity.

The relevance of the growth of activity, the turnover of the trade in motor vehicles and of the market services rendered to the population gives us the possibility to forecast that in the following period, the growth in this field will be uneven, with some areas that will not amount to the desired level.

We can also conclude that in 2017 compared to 2016, the increases (11.1% in the motor vehicle trade and 15.1% in the market services rendered to the population) are the highest in recent years.

It can be concluded that the damaging, rather powerful, effects that the economic and financial crisis has had on the evolution of the Romanian economy have passed and that these activities may increase in the coming period and contribute to a greater extent to increase Gross Domestic Product.

References

1. Anghelache, C. and Anghel, M.G. (2016). *Bazele statisticii economice. Concepte teoretice și studii de caz*, Editura Economică
2. Anghelache, C. (2015). *România 2015. Starea economică în continuă creștere*, Editura Economică, București
3. Anghelache, C. (2014). *România 2014. Starea economica pe calea redresării*, Editura Economică, București
4. Anghelache, C. (2012). *România 2012. Starea economică în criză perpetuă*, Editura Economică, București
5. Anghelache, C., Mitruț, C. and Voineagu, V. (2013). *Statistica macroeconomică. Sistemul conturilor naționale*, Editura Economică, București
6. Anghelache, C. (2008). *Tratat de statistică teoretică și economică*, Editura Economică, București
7. Anghelache, C., Badea, S.G., Căpanu, I. and Wagner, P. (2005). *Bazele statisticii teoretice și economice*, Editura Economică, București
8. Anghelache, C. (2004). *Statistică teoretică și economică - Teorie și aplicații*, Editura Economică, București
9. Anghelache, C., (1996). *Măsurarea și compararea dezvoltării economice*, Editura Economică, București

-
10. Anghelache, G.V. and Lixandru (Bardașu), G. și alții (2013). The Main Indicators Used in the Analysis of Commodity Exchanges. *Romanian Statistical Review Supplement*, 61(3), 47-52
 11. Biji, M., Biji, E.M., Lilea, E. and Anghelache, C. (2002). *Tratat de statistică*, Editura Economică, București
 12. Burridge, P., and Taylor, A.M.R. (2000). On the Properties of Regression-Based Tests for Seasonal Unit Roots in the Presence of Higher Order Serial Correlation, mimeo, City University, London
 13. Dornbusch, R. Fischer, S. Startz, R., (2007), „Macroeconomie”- traducere, Editura Economică, București
 14. Kuznets, S., (2001), „Economic Growth and Structura. Selected Essay”, Hainemann Educational Books Ltd, London
 15. Lixandru (Bardașu), G. și alții (2013). Raportul dintre cifra de afaceri și personalul din IMM–Model de analiza. *Romanian Statistical Review Supplement*, 61(1), 148-152
 16. *** Buletinul Statistic nr. 1-12/2017, editat de Institutul Național de Statistică (www.insse.ro)
 17. *** Institutul Național de Statistică – „Buletin Statistic de Industrie” nr. 1-12/2017, editat de Institutul Național de Statistică
 18. *** Institutul Național de Statistică – „Buletin Statistic de Prețuri” nr. 1-12/2017, editat de Institutul Național de Statistică
 19. *** Institutul Național de Statistică – „Buletin Statistic” nr. 1-12/2017, editat de Institutul Național de Statistică