### THE FUNDAMENTAL LANDMARKS ON THE EVOLUTION OF ROMANIA'S INDUSTRY IN 2018

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#### **Abstract**

Industry is the main branch of the national economy, making a substantial contribution to the formation of the Gross Domestic Product. In this paper, the authors focus on presenting the evolution of the turnover registered by the industry, as well as on the new orders from the manufacturing and industrial production for export.

In the first eleven months of 2018, the turnover increased month on month, the peak being in August (8.1%) compared to the same period of the previous year, the increase was 12.9%.

The structure of the industry shows that both the total and the sections (extractive and processing) as well as the large industrial groups (intermediate goods industry, capital goods industry, durable goods industry, current consumer goods industry and energy industry) there were increases. The most significant increase was in the entire period of 2018 in the capital goods industry group, which per total jumped by 15.9%.

Regarding the new orders from the manufacturing industry, we find that in this sector, compared to the similar period of 2017, there was an increase in nominal terms of 16.3%.

At the same time, industrial output has also increased, reaching the highest level since the 2007-2008 crisis.

The data show that the industry continues to have the most important weight in the formation of the Gross Domestic Product.

**Keywords**: industry, turnover, orders, export production, investment. **JEL Classification**: *L11*, *L70*.

#### Introduction

The branch of industry, since the beginning of Romania's organized economy, has been the main area in terms of participation in the formation of the Gross Domestic Product and other macroeconomic results indicators. And in 2018, industry was the main resource (branch) that secured a significant increase in GDP.

Industrial production, especially the manufacturing sector, continued to grow at a consistent pace.

Also, in the Centenary year, orders increased, and production for export increased substantially.

Note that industrial production prices in 2018 saw a monthly leap of between 4% and 7%, due to the rise in the price of imported raw materials and natural gas.

In the article, the authors conducted a study, based on data published by the National Institute of Statistics, using significant series of data and graphics.

#### Literature review

Anghel, Anghelache, Dumbravă, Mirea and Stoica (2018) carried out an analysis of the activity in industry and construction in Romania. Anghelache, Anghel, Lilea, Burea and Avram (2017) studied some aspects of the EU's industry strategy. Anghelache, Anghel and Badiu (2018) analyzed the historical evolution of our country's industry. Anghelache, Ursache and Lixandru (2013) showed industrial production indices. Anghelache (2008) is a reference work in the field of economic statistics, comprising the statistical indicators used in economic analyzes. Erosa and Cabrillana (2008) presented a number of issues related to the productivity gap between industry and economic rents. Lee, Shin and Stulz (2016) sought to identify why capital is not invested more in industries with the best growth opportunities. Pheng and Chuan (2006) investigated some aspects of the environmental factors and performance of project managers in the construction industry. Restuccia (2010) has dealt with important elements relating to the food industry. Testa, Iraldo and Frey (2011) showed the effect of environmental regulations on the performance of the construction sector in the EU. Tykkä et al (2010) referred to the development of woodworking companies in the construction sector.

#### Research methodology, data, results and discussions

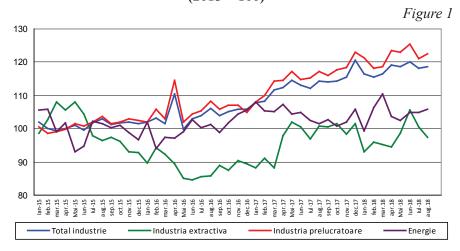
#### • Analysis of the evolution of industrial production in Romania

The industrial output in Romania declined in August 2018 compared with July 2018 by 9.1% in gross series. As series adjusted by number of

working days and seasonality, it increased by 0.4%. Compared to August 2017, industrial output grew both as gross series (+ 3.7%) and as series adjusted by number of working days and seasonality (+ 3.9%). Between January 1st and July 31st, 2018, compared with the same period of the previous year, industrial production was 4.5% higher as gross series and 5.5% respectively as series adjusted by number of days labor and seasonality.

In figure no. 1 shows the monthly evolution of industrial production between January 2015 and August 2018 as series adjusted by number of working days and seasonality.

# Monthly evolution of industrial production between January 2015 and August 2018, series adjusted by number of working days and seasonality (2015 = 100)



Source: National Institute of Statistics, Press release no. 266/12 October 2018

We note that the decrease of industrial production, gross series in August of this year compared to July 2018 by 9.1%, is due to the decrease of the manufacturing industry (-11.1%) and the extractive industry (-1.3%). The production and supply of electric and thermal energy, gas, hot water and air conditioning increased by 1.4%.

Compared to the previous month, industrial production, as series adjusted by number of working days and seasonality, was 0.4% higher, due to increases in manufacturing (+ 1.2%) and production and supply electricity, heating, gas, hot water and air conditioning (+ 0.9%). Extractive industry declined by 3.1%.

Taking a comparative analysis with August 2017, it is noted that gross industrial production increased by 3.7%, based on increases in the production

and supply of electricity and heat, gas, hot water and air conditioning (+4.4%) and manufacturing (+4.1%). And in this situation, mining and quarrying fell (3.2%).

As regards industrial production, as series adjusted by number of working days and seasonality, there is an increase (+3.9%), as a result of increases in manufacturing (+4.5%), as well as of of production and supply of electric and thermal energy, gas, hot water and air conditioning (+4.3%). Regarding the situation of the extractive industry, there is a decrease of 3.1%.

During the period 01.01 - 31.08.2018, compared with the same period of 2017, gross industrial production was higher by 4.5%, as a result of increases in manufacturing (+5.5%) and extractive industries (+1.9%). The production and supply of electricity, heating, gas, hot water and air conditioning decreased by 0.4%. As regards industrial production, as series adjusted by number of working days and seasonality, in the same period under review it is noted that it increased by 5.5%, due to increases in manufacturing (+6.8%), and extractive industries (+2.0%). A decrease of 0.2% was recorded in the production and supply of electric and thermal energy, gas, hot water and air conditioning.

In table no. 1 data on industrial production indices is synthesized in August 2018 compared to the previous month and the eight-month period of 2018 compared to the same period of the previous year. It also shows the industrial production index of August 2018 as compared to August 2017.

Indices of industrial production, total and sections of industry

Table 1

- percent –

Industrial Production		August 2018 as compared to:		01.01-31.08.2018/
Index		July 2018	August 2017	01.01-31.08. 2017
Extractive industry	G	98,7	96,8	101,9
	S	96,9	96,9	102,0
Manufacturing industry	G	88,9	104,1	105,5
	S	101,2	104,5	106,8
Energy	G	101,4	104,4	99,6
	S	100,9	104,3	99,8
Total	G	90,9	103,7	104,5
	S	100,4	103,9	105,5

Source: National Institute of Statistics, Press release no. 266/12 October 2018 Note: G = gross series; S = series adjusted by number of working days and seasonality

We find that manufacturing has seen increases over the same month of the previous year as well as eight months of the two analyzed years. As far as energy production is concerned, we see increases over the same month of the previous year, but also comparability over the extended eight-month period.

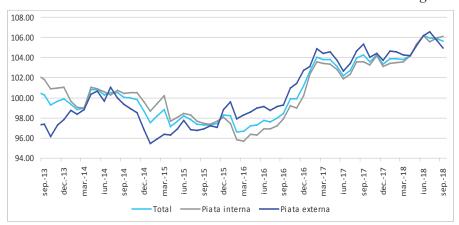
#### • The evolution of industrial production prices

Industrial production prices on the total domestic and foreign markets in September 2018 saw an increase of 0.3% compared to the previous month. Compared to September 2017, in September 2018, industrial production prices on the total domestic market and the foreign market recorded an increase (+ 5.6%).

In figure no. 2 graphically shows the indices recorded on the total economy, as well as on the domestic / external market, between September 2013 and September 2018.

## Evolution of the annual index of industrial production prices by total, domestic and external market, September-September 2018 (%)

Figure 2



Source: National Institute of Statistics, Press release no. 279 / November 2, 2018

In table no. 2 shows data on domestic and foreign market price indices in September 2018 compared to the previous month and the same month of 2017. We find that prices on the domestic market as well as on the foreign market in September 2018 grown on both markets.

#### Industrial production price index by total, domestic and external market

Table 2

Industrial Production Price Index	September 2018 as compared to		
industrial i roduction i rice index	August 2018	September 2017	
Domestic market	100,47	106,07	
Foreign market	99,93	104,92	
Total	100,27	105,64	

Source: National Institute of Statistics, Press release Nr. 279 / November 2, 2018 Note: Data for August 2018 are rectified and data for September 2018 are provisional

In table no. 3 we synthesized data on industrial production indices, by large industrial groups.

## Industrial production price index by total domestic market and external market, by large industrial groups

Table 3

Industrial Production Price Index	September 2018 as compared to:		
industrial Froduction Frice index	August 2018	September 2017	
Intermediate goods industry	99,96	105,57	
Capital goods industry	99,47	100,51	
Durable goods industry	100,16	102,33	
Current use goods industry	100,14	101,95	
Energy industry	101,58	115,59	
Total	100,27	105,64	

Source: National Institute of Statistics, Press release no. 279 / November 2, 2018 Note: Data for August 2018 are rectified and data for September 2018 are provisional

In table no. 4 we presented the data referring to indices of industrial production, by sections and divisions CANE Rev. 2.

### Industrial production price index on total domestic market and external market, by sections and divisions CANE Rev. 2

Table 4

Industrial Production Price Index	Septembrie 2018 comparativ cu:		
industrial Production Price Index	August 2018	Septembrie 2017	
Extractive industry	101,02	113,83	
Manufacturing industry	100,04	104,75	
Production and supply of electricity and heat, gas, hot water and air conditioning	101,49	109,19	
Water distribution; sanitation, waste management, decontamination activities	100,23	105,83	

 $Source: National\ Institute\ of\ Statistics,\ Press\ release\ no.\ 279/2\ November\ 2018,\ own\ systematization$ 

From the two tables it is concluded that the indices of the prices of industrial production increased, in different limits, in September compared to the other comparison periods.

#### Conclusion

From the interpretation of the data underlying the study, it is clear that industry continues to remain the main branch with a significant contribution to the formation of the Gross Domestic Product.

The oscillating evolution of production, orders and exports is determined by the lack of correlation between the main industrial branches.

Since 1990, Romania has undergone a process of deindustrialisation (by privatization, sometimes inefficient, the closure of sites for the exploitation

of natural resources or simply the renunciation of some industrial enterprises), in line with the Union directives European Union, Romania must return to a re-industrialization process, seeking to make effective use of the country's resources.

The rise in industrial producer prices is in line with the recent general price evolution. If in the period 2016-2017 inflation was apparently controlled, it was due to the reduction in the tax on the added value, with the possibility of administrative price reduction, and in 2018 inflation was in place. Thus, it is anticipated that in the Centenary year, we will see an increase in both the consumer price index and the harmonized price index.

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