

The Impact of Covid-19 Pandemic on Romania's Trade Balance

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Abstract

In the past year the whole world was affected by the Covid-19 pandemic, Romania was not excepted from that, the economy changed after being impacted by Covid-19 pandemic. Although the impact was visible in small business most and in the sanitary domain, Romania having a major sanitary crisis, the impact also affected the trade balance and enlarged the trade deficit even more. This paper plans to analyse the changes from before the pandemic and after, by observing the commercial balance fluctuations from 2010 until March 2021, with the latest data available.

Key words: import, export, commercial balance, trade balance

J.E.L. classification: F30, F14

1. Introduction

The trade balance represents the total of exports and imports for both goods and services, for a given period. The Balance of trade or BOT is the biggest component from Balance of payments or BOP. Balance of trade is also called commercial balance, or net exports. The formula for the calculation is: Exports-Imports. It is used to determine a country's relative strength. If a country imports more goods and/or services than it exports has a negative balance or also called trade deficit. The vice versa applies, a country that is exporting more than importing has a positive trade balance hence a stronger economy. The BOT alone is not a strong indicator about a country's economic health therefore it should be taken in consideration when regarding the business cycle. A country that has a large deficit, must borrow money to further buy goods and services (Investopedia, 2021).

In the past year Romania was also affected by Covid-19 Pandemic. The impact of this, is yet to be evaluated, but certain aspects can be seen already, the economy went through some irreversible changes both micro and macro. Some of the micro economically changes that are going to be analysed are:

- The growth of online commerce – hence the orientation of the small business to go digital.
- Working from home switch – most of the companies changed their work arrangements towards working from home.

As for the macro economical level – the commercial balance evolution for the period 2010-2021. Regarding 2021 – only the first three months will be taken in consideration, the data for the whole year being an estimation calculated by the authors, as there is no data available at the time being.

2. Theoretical background

Romania switched in the past 30 years from a communist regime towards a market-oriented economy. The question asked by many researchers is if the economy is ready to face further challenges. The Covid-19 pandemic came with many issues and struggles for the business sector.

This paper aims to analyse the changes that arose since the start of pandemic and how did Romania handle it.

3. Research methodology

This paper will analyse the effects of pandemic, using comparative methods, building a before and after the pandemic —by analysing the series of data from the Trade balance – 2010-2021. The data was collected by authors from National Institute of Statistics and compiled for further usage.

4. Findings

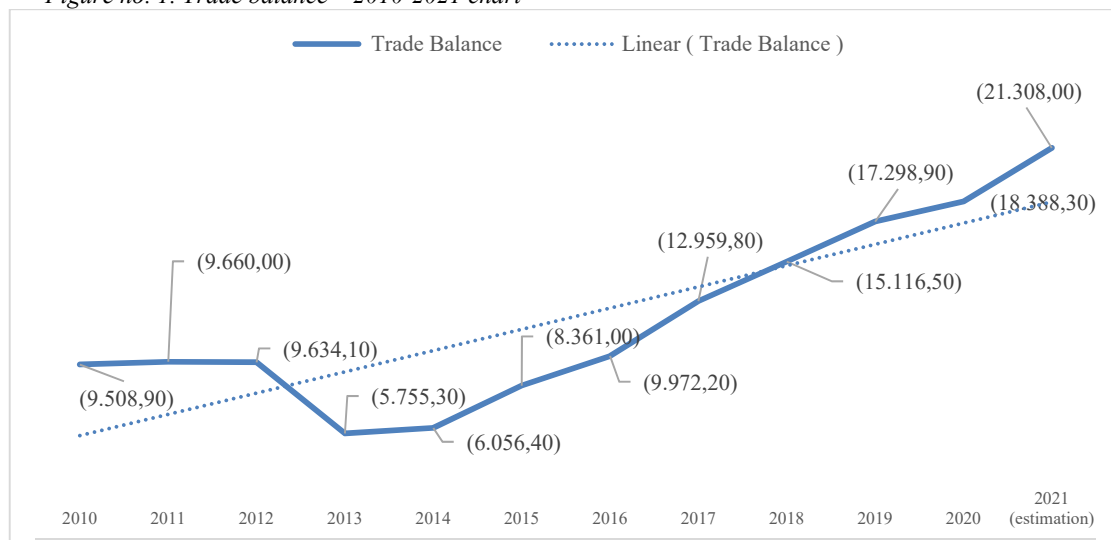
4.1. Analysis of the commercial balance

As the data compiled shows in figure 1 below, Romania has a negative trade balance since 2010, the yearly average for 2010-2019 being 11,155.58 million EUR.

The lowest value was in 2013 and totalled 5,755.3 million EUR.

The trend might look as positive, but the amounts are negative and show with every false growth an actual growth of imports for Romania. As it can be observed the peak year is 2021, but the data is still incomplete at time being.

Figure no. 1. Trade balance – 2010-2021 chart



Source: Authors' own work based on INSSE data

The value of exports has an ascending trend since 2010, the amounts going almost double in 2020. Compared to the imports that registered a growing trend also, the exports have smaller growing rate than imports. The peak for exports was in 2019 with almost 68,998.10 million EUR, unfortunately in that same year Romania registered the highest deficit for trade balance since 2010 – 17,298.9 million EUR.

In 2020 the value of exports had the first descending trend since 2010, the exports totalling only 62,175.6 million EUR, 6,822.50 less than in 2019. On the other hand, the value of imports decreased also with 5,733.10 million EUR.

Since for 2021 there is no data available for the whole year, the comparison with 2019 and 2020 will be made on an average. The average for 2021 is 5,906.5 for exports and 7,682.17 million EUR. If comparing just monthly, in March 2019 the imports value was 7,426.90 million EUR, in 2020 7,282.80 mil. EUR while in the same month of 2021 was 8,782.70 million EUR. March was chosen as it is the last value of 2021 and in 2020 it is the month when pandemic started. After following a statistic conducted by INSSE in the month of March 2020, where a number of 1796 companies were

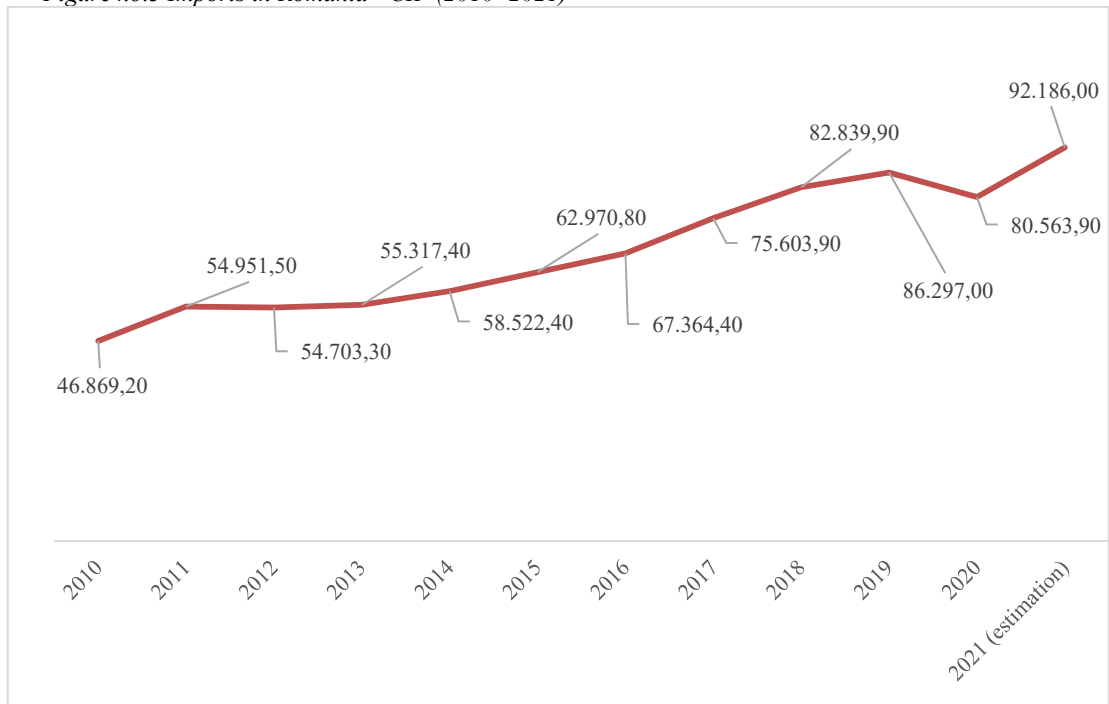
surveyed, and over 50% of responders that held almost 62% of exports (compared to march last year) had a decrease in exports. (INSSE, 2020)

Figure no. 2 Exports in Romania - FOB (2010-2021)



Source: Authors' own work based on INSSE data

Figure no.3 Imports in Romania - CIF (2010 -2021)



Source: Authors' own work based on INSSE data

Table no.1 Commercial balance 2010-2021 (January - June)

Year Month	2010					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	2,290.80	2,570.60	3,034.50	2,899.50	3,057.90	3,377.20
Imports (CIF)	2,781.40	3,217.30	3,974.90	3,780.60	4,011.50	4,300.00
Gap FOB-CIF	(490.60)	(646.70)	(940.40)	(881.10)	(953.60)	(922.80)
	2011					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,422.90	3,528.00	4,128.10	3,421.70	3,872.60	3,802.00
Imports (CIF)	3,628.80	3,932.60	4,991.10	4,387.20	5,048.80	4,687.90
Gap FOB-CIF	(205.90)	(404.60)	(863.00)	(965.50)	(1,176.20)	(885.90)
	2012					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,488.40	3,520.70	4,063.80	3,537.20	4,020.10	3,756.10
Imports (CIF)	3,948.20	4,032.40	4,813.20	4,463.60	5,053.10	4,696.90
Gap FOB-CIF	(459.80)	(511.70)	(749.40)	(926.40)	(1,033.00)	(940.80)
	2013					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,702.30	3,873.50	4,005.90	4,088.00	4,022.30	4,023.40
Imports (CIF)	4,004.80	4,082.00	4,576.40	4,689.20	4,514.30	4,392.40
Gap FOB-CIF	(302.50)	(208.50)	(570.50)	(601.20)	(492.00)	(369.00)
	2014					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	3,936.70	4,340.90	4,481.30	4,170.60	4,346.50	4,240.90
Imports (CIF)	4,189.40	4,655.90	5,031.70	4,814.30	4,878.60	4,796.80
Gap FOB-CIF	(252.70)	(315.00)	(550.40)	(643.70)	(532.10)	(555.90)
	2015					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,187.30	4,396.40	4,800.90	4,399.70	4,489.30	4,767.60
Imports (CIF)	4,364.30	4,782.20	5,613.80	5,047.90	5,037.60	5,490.00
Gap FOB-CIF	(177.00)	(385.80)	(812.90)	(648.20)	(548.30)	(722.40)
	2016					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,118.50	4,813.20	4,929.60	4,704.60	4,675.20	4,941.80
Imports (CIF)	4,498.30	5,425.10	5,895.00	5,547.90	5,663.60	5,637.60
Gap FOB-CIF	(379.80)	(611.90)	(965.40)	(843.30)	(988.40)	(695.80)
	2017					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	4,679.40	5,070.60	5,727.80	4,773.70	5,579.00	5,065.60
Imports (CIF)	5,284.40	5,724.60	6,768.00	5,822.10	6,682.20	6,433.90
Gap FOB-CIF	(605.00)	(654.00)	(1,040.20)	(1,048.40)	(1,103.20)	(1,368.30)
	2018					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,424.40	5,456.60	6,107.20	5,234.00	5,870.80	5,883.60
Imports (CIF)	6,201.40	6,339.00	7,166.10	6,250.30	7,143.40	7,185.80
Gap FOB-CIF	(777.00)	(882.40)	(1,058.90)	(1,016.30)	(1,272.60)	(1,302.20)
	2019					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,509.20	5,893.90	6,129.90	5,531.00	6,270.80	5,560.70
Imports (CIF)	6,782.30	7,048.20	7,426.90	6,924.40	7,753.70	6,692.10
Gap FOB-CIF	(1,273.10)	(1,154.30)	(1,297.00)	(1,393.40)	(1,482.90)	(1,131.40)
	2020					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,687.00	5,937.00	5,433.00	2,931.30	3,758.50	4,843.00
Imports (CIF)	7,005.40	7,232.70	7,282.80	4,569.70	5,015.20	6,166.00
Gap FOB-CIF	(1,318.40)	(1,295.70)	(1,849.80)	(1,638.40)	(1,256.70)	(1,323.00)
	2021					
	Jan	Feb	Mar	Apr	May	Jun
Exports (FOB)	5,407.10	5,786.20	6,526.20			
Imports (CIF)	6,586.40	7,677.40	8,782.70			
Gap FOB-CIF	(1,179.30)	(1,891.20)	(2,256.50)			

Source: (INSSE)

Table no.2 Commercial balance 2010-2021 (July- August)

Year	2010					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	3,392.40	2,792.90	3,535.10	3,515.60	3,626.70	3,267.10
Imports (CIF)	4,050.90	3,419.00	4,354.90	4,280.80	4,563.10	4,134.80
Gap FOB-CIF	(658.50)	(626.10)	(819.80)	(765.20)	(936.40)	(867.70)
	2011					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	3,823.30	3,475.00	4,217.40	4,138.80	4,165.50	3,296.20
Imports (CIF)	4,489.70	4,360.00	5,048.30	4,920.80	5,090.20	4,366.10
Gap FOB-CIF	(666.40)	(885.00)	(830.90)	(782.00)	(924.70)	(1,069.90)
	2012					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	3,795.80	3,504.00	3,835.30	4,196.80	4,202.30	3,148.70
Imports (CIF)	4,547.50	4,515.60	4,672.60	5,307.30	4,625.70	4,027.20
Gap FOB-CIF	(751.70)	(1,011.60)	(837.30)	(1,110.50)	(423.40)	(878.50)
	2013					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	4,482.20	3,829.10	4,454.20	4,701.70	4,523.80	3,855.70
Imports (CIF)	5,055.20	4,479.00	4,872.20	5,348.80	4,946.30	4,356.80
Gap FOB-CIF	(573.00)	(649.90)	(418.00)	(647.10)	(422.50)	(501.10)
	2014					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	4,775.60	3,864.30	4,906.50	4,932.90	4,665.90	3,803.90
Imports (CIF)	5,299.50	4,306.40	5,392.20	5,499.90	5,104.20	4,553.50
Gap FOB-CIF	(523.90)	(442.10)	(485.70)	(567.00)	(438.30)	(749.60)
	2015					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	5,043.30	3,923.50	4,915.10	4,993.40	4,751.30	3,942.00
Imports (CIF)	5,690.60	4,775.20	5,659.50	5,866.50	5,530.10	5,113.10
Gap FOB-CIF	(647.30)	(851.70)	(744.40)	(873.10)	(778.80)	(1,171.10)
	2016					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	4,811.00	4,445.90	5,241.10	5,086.70	5,311.40	4,313.20
Imports (CIF)	5,450.50	5,470.50	6,023.60	6,064.50	6,176.90	5,510.90
Gap FOB-CIF	(639.50)	(1,024.60)	(782.50)	(977.80)	(865.50)	(1,197.70)
	2017					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	5,226.10	4,920.90	5,557.10	5,762.90	5,785.80	4,495.20
Imports (CIF)	6,214.90	5,985.60	6,583.80	7,088.60	6,910.50	6,105.30
Gap FOB-CIF	(988.80)	(1,064.70)	(1,026.70)	(1,325.70)	(1,124.70)	(1,610.10)
	2018					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	5,899.10	5,130.70	5,839.70	6,336.90	5,937.50	4,602.90
Imports (CIF)	7,172.00	6,531.10	6,812.70	8,223.60	7,500.70	6,313.80
Gap FOB-CIF	(1,272.90)	(1,400.40)	(973.00)	(1,886.70)	(1,563.20)	(1,710.90)
	2019					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	5,849.50	5,000.50	6,104.10	6,328.00	5,995.50	4,825.00
Imports (CIF)	7,629.80	6,362.40	7,289.50	8,299.10	7,489.80	6,598.80
Gap FOB-CIF	(1,780.30)	(1,361.90)	(1,185.40)	(1,971.10)	(1,494.30)	(1,773.80)
	2020					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)	5,552.40	4,599.20	6,070.40	6,260.80	6,031.60	5,071.40
Imports (CIF)	6,876.50	6,113.30	7,612.30	8,060.70	7,605.40	7,023.90
Gap FOB-CIF	(1,324.10)	(1,514.10)	(1,541.90)	(1,799.90)	(1,573.80)	(1,952.50)
	2021					
Month	Jul	Aug	Sep	Oct	Nov	Dec
Exports (FOB)						
Imports (CIF)						
Gap FOB-CIF						

Source: (INSSE)

4.2. Analysis of Romania’s government debt from 2010 – 2021

A country debt is in tight connection with the trade balance, as it was stated before by Investopedia’s articles (Investopedia, 2021 and 2020). Romania’s debt had the smallest value in 2010 and since then is having an ascending trend, peaking one year after the pandemic with 506,755.88 million RON and almost half of PIB – 48 %, according to the data provided by the Ministry of Public Finance. (Ministry of Public Finance, 2021)

To further explain, the exchange rate is impacted by commercial balance, meaning that a country that has desirable good has a better exchange rate than one that relies more on imports. The appreciation and depreciation of currencies is based on the supply and demands value for a country’s good for a given period. Therefore, a country that has a lower demand for its goods, tends to import more than exports, decreasing the demand for its currency (Stucka, 2004; Lioudis, 2020).

Table no. 3 Public debt (2010 -2015)

Million/ RON						
Public Debt	2010	2011	2012	2013	2014	2015
Amount	157,410.40	191,035.30	219,761.53	238,882.31	262,195.22	269,151.30
% PIB	29.7%	34.0%	36.9%	37.5%	39.2%	37.8%

Source: (Ministry of Public Finance, 2021)

Table no. 4 Public debt (2016 -2021)

Million/ RON						
Public Debt	2016	2017	2018	2019	December 2020**)	March 2021**)
Amount	284,998.60	300,750.40	330,518.67	373,496.85	499,152.91	506,755.88
% PIB	37.3%	35.1%	34.7%	35.3%	47.3%	48.0%

Source: (Ministry of Public Finance, 2021)

In tables no. 3 and 4 above, there is the public debt as it is provided by Ministry of Public Finance.

In the charts below is it visible the connection between trade deficit, exchange rate and public debt. Public debt’s structure is mostly in EUR by the 2021 data, and for each year has been converted also to EUR by using the average exchange rate between EUR and RON. The data for the average exchange has be provided by National Bank of Romania.

To summarise the data the following table will be provided:

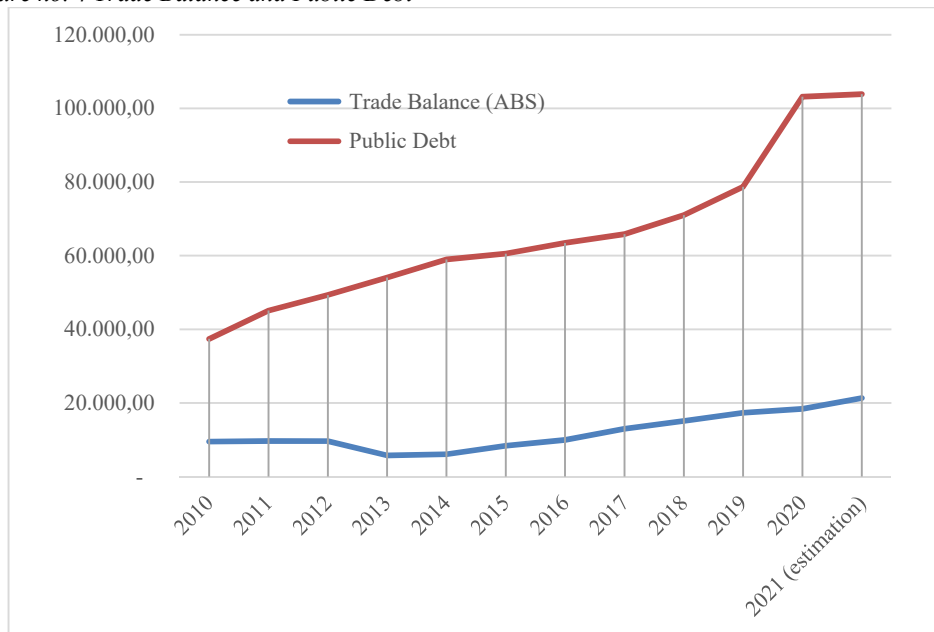
Table no. 5 Summarisation of data

Year	Trade Balance	Public Debt	Exports (FOB)	Imports (CIF)	Average EUR exchange rate
2010	(9,508.90)	37,390.53	37,360.30	46,869.20	4.2099
2011	(9,660.00)	45,077.82	45,291.50	54,951.50	4.2379
2012	(9,634.10)	49,318.12	45,069.20	54,703.30	4.456
2013	(5,755.30)	54,058.00	49,562.10	55,317.40	4.419
2014	(6,056.40)	58,991.86	52,466.00	58,522.40	4.4446
2015	(8,361.00)	60,551.47	54,609.80	62,970.80	4.445
2016	(9,972.20)	63,462.77	57,392.20	67,364.40	4.4908
2017	(12,959.80)	65,837.09	62,644.10	75,603.90	4.5681
2018	(15,116.50)	71,025.82	67,723.40	82,839.90	4.6535
2019	(17,298.90)	78,710.45	68,998.10	86,297.00	4.7452
2020	(18,388.30)	103,192.60	62,175.60	80,563.90	4.8371
2021 (estimation)	(21,308.00)	103,881.03	70,878.00	92,186.00	4.8782

Source: (Authors’ work of compiled data from all cited sources)

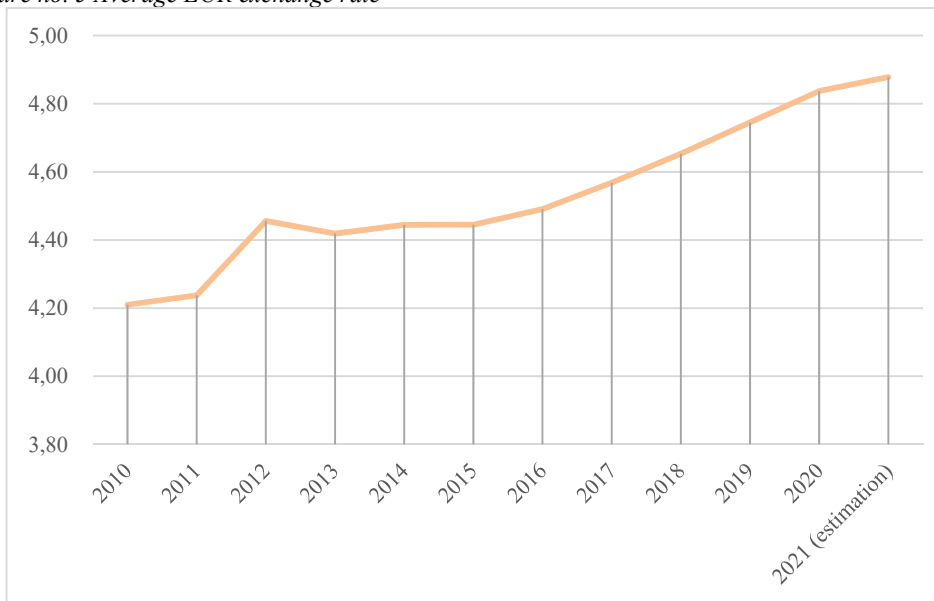
As figure no. 4 shows, the correlation between Trade balance (in absolute values) and public debt is the following – when the trade balance had a negative deficit, the public debt grew also. In figure no. 5 is the average exchange rate as per National Bank of Romania’s data, if compared both graphics, the conclusion is that when the public debt and commercial balance deficit grew, the yearly average exchange rate grew, or in other words the Romanian Leu depreciated.

Figure no. 4 Trade Balance and Public Debt



Source: (Authors’ work of compiled data from all cited sources)

Figure no. 5 Average EUR exchange rate



Source: (National Bank of Romania, 2021)

5. Conclusions

Since the value of imports also decreased in 2020 – being only 80,563.9 million EUR, compared to 2019 when the value totalled 86,297.00 million EUR, this can only mean that the request for imported goods and services decreased with the pandemic and the purchasing power of the population decreased against the background of the layoffs and Covid-19 crisis.

In 2020 both Trade balance and public debt peaked having the highest values since 2010, reaching negative 18,388.30 million EUR respectively 103,192.6 million EUR. The exchange rate for 2020 was 4.8371, the highest value until now. In 2021, the trends continue to ascend for the first three months of the year, the exchange rate having an average of 4.8782 EUR, also higher than 2020. This shows that Romania exported less and at lower prices than before the pandemic, and relied more on imports, this widening the public debt even more. Another cause for currency depreciation is the lack of investments and dependencies on foreign capital. This was aggravated by the pandemic and the bankruptcy or decrease in activity for many businesses due to lockdown measures and/or lack of demand. The population tendencies were to consume less and save more due to uncertainty of their jobs, many Romanians being laid off or sent in technical unemployment.

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