DOI: https://doi.org/10.53486/9789975155649.08
CZU: 339.743:339.137.2

CONSEQUENCES OF CHOOSING THE EXCHANGE RATE REGIME ON INTERNATIONAL TRADE

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Abstract: *In the context of significant global economic turmoil and increasing financial, political and social risks leading to a decrease in aggregate demand worldwide and beyond, external competitiveness becomes a key variable in terms of the resumption of economic growth in Romania as integrated process in the aggregate evolution of the European economy. This paper aims to analyze the link between the exchange rate regime and international trade, in order to demonstrate whether there is an influence of the choice of exchange rate regime on the volume of trade. It also analyzes the influence of exchange rate volatility on international trade. The objectives of this research were: knowing the options for choosing an exchange rate regime; distinguishing the factors that determine the choice of an exchange rate regime; understanding the theories presented on exchange rate regimes; analysis of the impact of choosing an exchange rate regime in the countries of Central and South-Eastern Europe All data used in the paper were collected from articles, reports, summaries, statistics, books, but also official sites such as the International Monetary Fund or the Eurostat website. The data used were selected after deepening and understanding the ideas underlying the choice and influences of exchange rate regimes.*
Key words*: exchange rate; trade, competitiveness; volatility.*

JEL CLASSIFICATION: C5, F31, F40

1. Introduction

The exchange rate is the value of a country's currency compared to the currency of another country or economic zone (Jianu et al., 2019). The exchange rate regime is the framework in which the price of a currency is determined. The exchange rate regime is the system by which the monetary authority of a country sets the exchange rate of the national currency against the currencies (Gaies et al., 2020). Each country is free to adopt the exchange rate it considers optimal for their political and monetary situation.

Since 1999, when the International Monetary Fund decided to verify the validity of government declarations with the help of its staff, we consider that it has gone from a de jure to a de facto classification system. This amendment found inconsistencies in the statements of governments and the regime they applied (Profiroiu et al., 2019).

In the de facto classifications are found a number of specific characteristics such as: the number of categories, differences in structure from the de jure classification and others (Chiu, 2020). However, the de jure classifications are not perfect, in which a variety of problems can be encountered (Burlacu et al., 2019).

The biggest problem with de jure classifications is the number of existing categories. Compatibility between classification schemes is a difficult aspect to control, because there are

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many differences between the criteria for classification in a certain type of regime, the classification may be different from one author to another (Negescu Oancea, et al., 2020).

Another considerable problem is the compatibility of these classifications over time, because if there is no continuity in the criteria used to fit into a particular regime, then discrepancies may occur in analyzes performed over different periods (Erdem, 2015).

Following Shambaugh's example, priority was given to the impact of exchange rate volatility on trade. We considered this factor to be one that needs to be focused on because we wanted to observe the exchange rate regime from the perspective of a trader. In theory, exchange rate volatility is the source of foreign exchange risk and has clear implications for the volume of international trade, and therefore for the balance of payments (Angheluta et al., 2019).

High exchange rate volatility is considered to lead to higher costs for traders and lower foreign trade (Kang & Dagli, 2018). This is because the exchange rate is set at the time of signing the contract with the trader, but payment is made only when the delivery is made. If exchange rate changes become unpredictable, this creates unpredictability in terms of profitability and therefore reduces the benefits of international trade (Bodislav et al., 2020).

In general, foreign exchange risk is not covered for all countries, as forward markets are not accessible to all traders (Born, 2014). Even if coverage could have been possible in all forward markets, there would still be limitations and some costs (Profiroiu et al., 2020).

2. The impact of exchange rate volatility on trade in emerging countries

Some economists argue that there are situations in which exchange rate volatility can have both negative and positive effects on trade volume (Keefe & Shadmani, 2020). That being said, the idea is that domination of income effects over substitution effects can lead to a positive relationship between trade and exchange rate volatility (Orzan et al., 2020). This is because when exports are sufficient compared to the risks, increases in exchange rate volatility will increase the expected marginal utility of export earnings and at the same time induce them to evolve (Sarbu et al., 2021). At the same time, the idea is supported that the effect of exchange rate uncertainty can influence foreign trade, in particular significant cost reductions are involved in international transactions.

The exchange rate can have a very large influence on trade, in many ways (Asteriou et al., 2016). The real exchange rate can encourage the allocation of resources between the goods-producing and consumer sectors. Competitiveness can also be measured through the real exchange rate, taking into account the relative prices, costs and productivity of each country and comparing it with the rest of the world.

Countries have monetary policies that are designed to maintain the exchange rate and adopt either a fixed or a flexible exchange rate regime (Cushman, 2017). At present, most countries have adopted a flexible exchange rate regime. As this mode of trade has become increasingly popular, countries have liberalized their economies, the effect of globalization has intensified and economic cooperation and trade between countries have intensified, as has exchange rate volatility. As a result, the role of exchange rate uncertainty in trade has become one of the biggest problems for economic policy makers (Alpopi et al., 2018).

The controversy surrounding this issue stems from the fact that there is no consensus on the effect of exchange rate volatility on foreign trade activity (Helísek, 2019). In order to determine the effect, a thorough analysis is needed, as it is difficult to establish the nature of the links, and the lack of clarity on the issue increases the likelihood of inadequate planning of export organizations or the implementation of suboptimal economic policies (Bodislav et al., 2019).

Emerging countries have also begun to be interested in the influence of exchange rate volatility on exports, as markets have as their main feature the high degree of exchange rate volatility compared to developed countries (Bosupeng, 2015).

It has been observed that in the long run the depreciation of currencies has a greater influence on trade than their appreciation, which is a pattern similar to the behavior of export firms when looking for rents. Exporters exercise their pricing power by transferring the depreciation of import prices, they keep their price (Gherman et al., 2013). By keeping import prices constant over the period of appreciation, exporters ensure only personal growth (Burlacu et al., 2018).

The magnitude of the asymmetry increases as imports become dependent on the target markets but is moderate when the importer enjoys greater trade freedom and a positive production gap. Some authors consider that the volatility of the exchange rate is not one of the causes of the problems of foreign trade, but that it is nevertheless a main consequence of local restrictions. Foreign trade imbalance and transition issues stemming from interest rate differences and other factors (Bahmani-Oskooee, 2017).

The most important cause of exchange rate fluctuations is inflation (Brun-Aguerre, R., et al., 2017). Inflation in each state was compared with inflation in the United States and it was found that these differences generally do not have a major effect on foreign trade as the exchange rate rises. Regarding the causality of price differences, it was said that inflation is not one of the triggers for economic stagnation. However, in general, these economic stagnations imply that demand pressure on supply is transferred to prices, not to production with inflationary effects. Therefore, monetary policies aimed at avoiding inflation must be correlated with policies that help avoid stagnation, otherwise they are useless because they would only have an effect on the symptoms and not on the problem itself, so it would not lead to healthy economic development.

Foreign exchange deviations from purchasing power parity generally do not have a positive impact on exports due to the ability of export prices to adapt to international prices (Elbadawi et al., 2021). However, the ability to import is affected because in the event of an exchange rate undervaluation it would mean that the value of exports will have the same value in local currency, but a lower value in US dollars.

2.2. Consequences of choosing the exchange rate regime on international trade

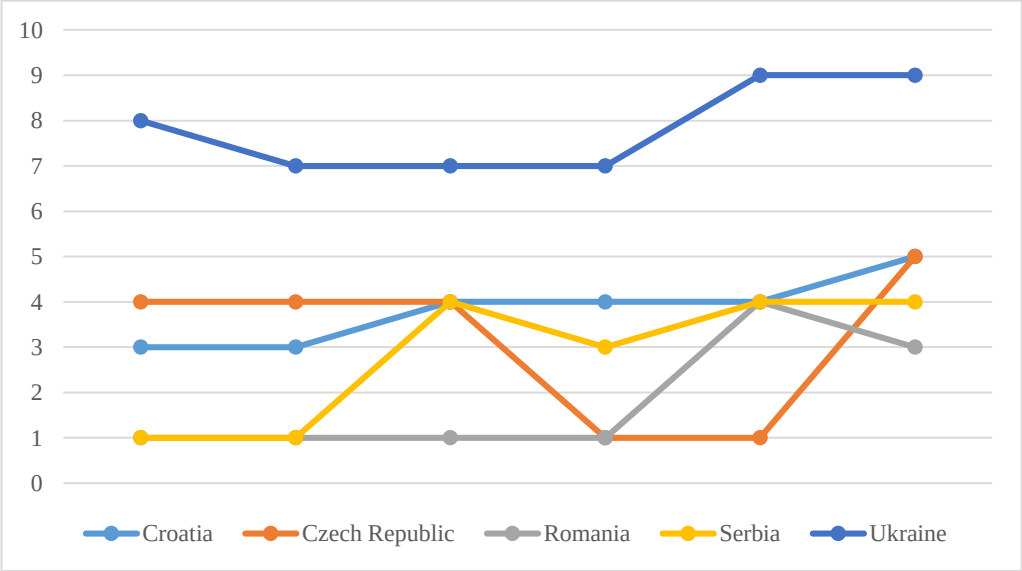

Figure 1. Fluctuations in exchange rate regimes by country (2014-2019)
Source: AREAER data

Studies related to the negative influence of exchange rate volatility on exports were carried out from 1987 to 2013, perhaps even more, by different specialists in different works, but most revolve around a main idea and that is: countries are influenced by exchange rate volatility, whether they are emerging or more developed, as insecurity is an unpleasant situation for traders, whether they are importers or exporters, keep the profit.

Within Serbia in 2014 and 2015, the adoption of a floating regime was declared, however the current decision on the dinar exchange rate regime was that it has a controlled floating.

Since the introduction of this regime in 2001 and in line with its commitment to liberalize the foreign exchange market, the National Bank of Serbia has tried to reduce its share of the foreign exchange market and adjust the exchange rate regime to a floating one, trying to pave the way for a free float regime. Because in 2017 the dinar experienced an upward trend against the euro, it went from a stabilized arrangement to creepy exchange rates, in 2018 returning to the status of a stabilized arrangement and thus remaining even in 2019.

In the case of Croatia, a relatively constant preservation of the foreign exchange regime can be noticed, in 2014 and 2015 being classified as creepy exchange rates, just like Serbia in 2016 being classified as having stabilized arrangements, only that unlike them, Croatia kept this classification until 2018, and from 2019 it managed to switch to a free float regime. The same can be said for the Czech Republic, which started in 2014 from a stabilized arrangement and started the changes in 2017, managing to fit into a floating regime, and in 2019 their de facto regime being free floating.

In the case of Romania, the de jure exchange rate regime is controlled floating in 2018, the exchange rate for the leu being determined on the interbank foreign exchange market. The National Bank of Romania (BNR) may intervene to mitigate excessive exchange rate fluctuations. There is no clear definition of excessive exchange rate fluctuations: taxation is based on national and international market circumstances and macroeconomic conditions prevail. The NBR intervenes either directly through market participants at their shares or through market makers, the NBR not publishing information about the interventions made.

Table 1. Flow of exports to Central and South-Eastern Europe on the international trade market translated into EUR million

Country	2014	2015	2016	2017	2018	2019	2020
Bulgaria	22,043	22,877	24,021	27,779	28,495	29,788	27,927
Czech Republic	131,798	142,364	146,979	161,213	171,260	177,903	167,701
Greece	27,085	25,753	25,445	28,863	33,472	33,864	30,770
Croatia	10,431	11,663	12,489	14,201	14,750	15,350	15,001
Hungary	83,266	88,846	92,073	100,752	105,572	110,578	105,136
Polond	165,714	179,532	184,171	207,385	223,213	238,178	236,841
Romania	52,500	54,620	57,392	62,615	67,424	68,663	61,777
Slovenia	27,075	28,792	29,742	34,007	37,423	40,147	39,216
Slovakia	64,913	67,764	69,606	73,790	79,136	79,962	75,748

Source: EUROSTAT data

Table 1 shows some of the monetary fluctuations of the countries of Central and South-Eastern Europe (Bulgaria, Czech Republic, Greece, Croatia, Hungary, Poland, Romania, Slovenia, Slovakia) and we observed the evolution and involution of period 2014-2020.

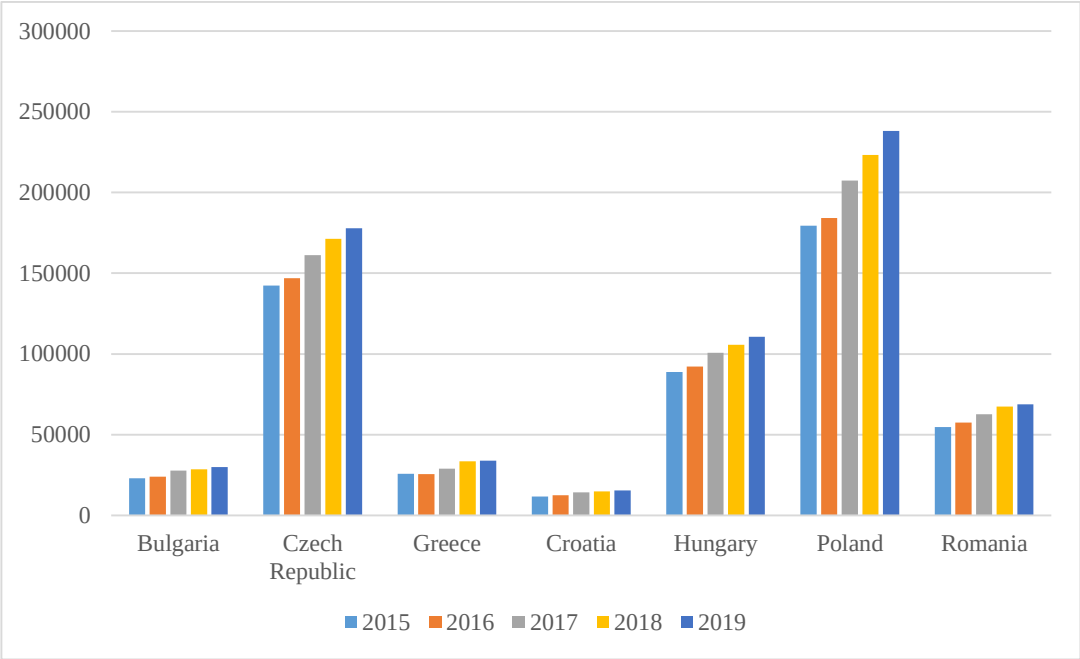

Figure 2. Export fluctuations from 2014-2020 for nine of the countries of Central and South-Eastern Europe
Source: EUROSTAT data

Figure 2 aims to analyze the evolution of exports over the period 2015-2019 for nine of the geographically framed countries in Central and South-Eastern Europe. From this chart we can point out that all countries reached the highest values in 2019 and the lowest were reached by most of the countries analyzed in 2014.

Bulgaria managed to reach the highest value in 2019, showing a steady rise in exports having at the beginning of the period under review, ie in 2014, an export value of EUR 22,043 million gradually increasing until 2019 to a value of EUR 29,788 million. Although we have observed an evolution in the case of exports, we cannot attribute this to the exchange rate regime because Bulgaria is one of the countries that has kept constant the regime, from 2014 to 2019 being in the category of Monetary Council.

The Czech Republic is one of the countries that has shown changes in the exchange rate regime. In 2014, 2015 and 2016 it was classified as having "stabilized arrangements"; in 2017 and 2018 floating courses; in 2019 "free float". Although the lowest value reached by the volume of exports was reached in 2014, a value of EUR 131,798 million and the highest in 2019 reaching EUR 177,903 million, if we make an average of the values of exports according to the exchange rate regime of that period we have notes that: in the period 2014-2016, exports had an average value of EUR 140,380 million, in the period 2017-2018 an average value of EUR 166,237 million.

Taking into account the average values depending on the exchange rate regime from 2014-2019, if we make a top three we would find that in the case of the Czech Republic in the free float has known the highest values of exports, ie in 2019; in second place would be the period in which it fell into the category of floating prices and the lowest volume of exports was reached in the period in which it addressed the "stabilized arrangements".

In the case of Hungary, the exchange rate regime was maintained, being a floating one, but also a constant evolution of exports gradually increasing from 2014 to 2019, from EUR 83,266 million to EUR 110,578 million.

Poland has a free floating exchange rate regime persevering in terms of exports from 2014 with a value of EUR 165,714 million until 2019 at a value of EUR 238,174 million.

Croatia is one of the countries that have changed their exchange rate regime by practicing creeping courses in the period 2014-2015, in the period 2016-2018 stabilized arrangements and in 2019 free floating. As in most cases, Croatia had the lowest value of exports in 2014, a value of EUR 10,431 million and the highest in 2019, a value of EUR 15,350 million.

During the analyzed period, for Romania we distinguish three exchange rate regimes, namely: floating exchange rate, stabilized arrangements and creeping exchange rates. In 2019, Romania had creeping exchange rates, registering the highest value of exports during this exchange rate regime, reaching EUR 68,663 million.

In 2018 it had switched from floating course to stabilized arrangements, but later changed its regime again to creepy courses. The lowest value of exports was reached by Romania in 2014, within the floating prices, providing this year a value of only EUR 52,500 million. So if we follow the relationship between the exchange rate regime and exports, in the case of Romania we could say that for this country the most favorable was the approach of creepy exchange rates.

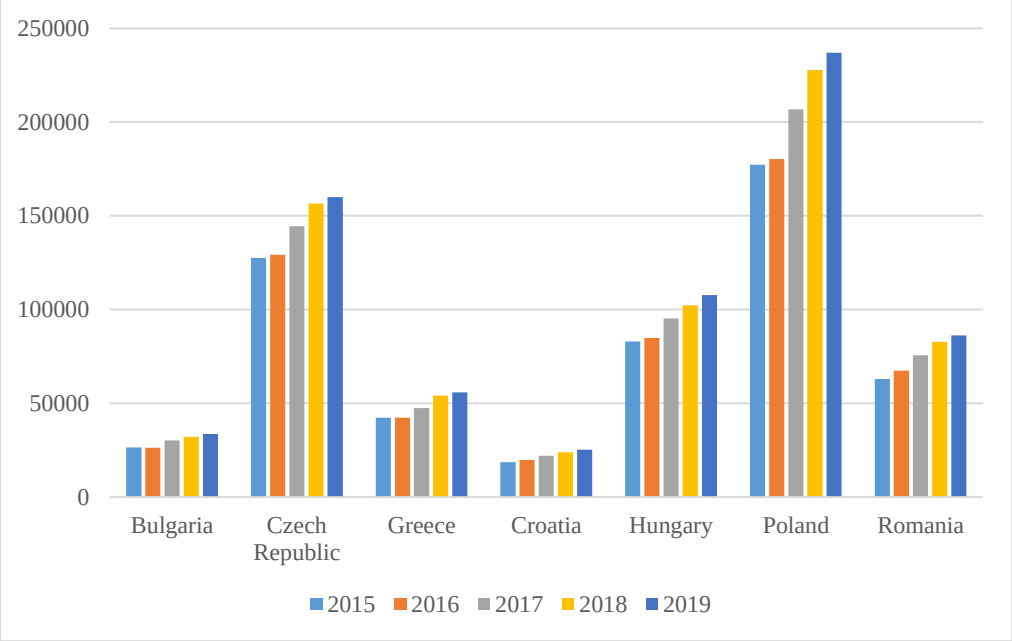

Figure 3. Fluctuations of imports from 2015-2019 for nine of the countries of Central and South-Eastern Europe
Source: EUROSTAT data

As can be seen in Figure 3, as in the case of exports, there is an upward trend in the case of imports in the period under review, except for 2020, when they decrease slightly. Each country that maintained its exchange rate regime during the analyzed period, ie Bulgaria, Greece, Hungary, Poland showed increases in the volume of imports in the period 2014-2019, except Greece which had a small decline in the period 2014-2015, but then increased steadily in terms of the volume of imports.

Although they kept the same regime throughout the period under review, this does not mean that all the countries listed had the same exchange rate regime, some kept their free float, others the monetary council, others floating exchange rates. In the case of those countries that have kept their exchange rate constant, if we were to compare their import values and assume that the volume of imports is influenced only by the exchange rate regime, we could say that free float is the best choice. Even if we extract the largest value from the whole sample, we notice that it is also reached by Poland, also within the free float.

Summarizing all the results obtained and following an analysis based on the accumulated knowledge, we can say that both imports and exports showed in the period 2015-2019 approximately the same trend, be it ascending or descending. But unfortunately we cannot say that we have reached conclusive results in terms of the link between international trade and the choice of exchange rate regime.

3. Conclusion

According to the research, it is concluded that there are a variety of options related to exchange rate regimes, but their effectiveness varies from country to country depending on exchange rate volatility, monetary autonomy or capital mobility. However, we cannot say that only these factors influence the fluctuations in the commercial market. Although it is obvious that there is a link between the exchange rate regime and international trade, we cannot say concretely how close the connection between them is because the results obtained from studies carried out over time have generated different results depending on the area. who conducted the research or the time period in which the study was conducted.

From our point of view, through the paper we can distinguish the categories in which countries can be included when we talk about the exchange rate regime, which would be the main factors that determine countries to adopt a specific exchange rate regime, why there are differences between the "de facto" classification, which are the main theories regarding the exchange rate regime, why there are several types of exchange rate classifications, how the current categories of the exchange rate regime were developed, but also why we cannot strongly supports the link between the exchange rate regime and international trade.

Gradually, the evolution of countries' preferences related to the exchange rate regime is followed over time, with an increase in the presence of floating regimes after the fall of the Bretton Woods regime. With the evolution of the countries, more and more significant results have been known regarding the link between exchange rate regimes and international trade and even if at this moment no definite conclusion has been reached, probably in the future, after conducting several studies in this area of research we will solve this dilemma.

From the obtained results it is concluded that in the geographical area of Central and South-Eastern Europe floating or free-floating regimes predominate, but we cannot claim that this is a general result valid if we refer to all existing countries, because as number of countries analyzed, our sample is too small to represent a consistent note in relation to the entire planet. Floating regimes predominated in our sample and we observed an evolution of international trade when countries had a floating or derivative regime, so we could say that this is the solution for a well-developed trade, but this would only be an assumption because if we want to be convinced of this statement, we should extend the study to at least the most important countries from a commercial point of view.

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