THE EXCHANGE RATE AND THE ECONOMIC COMPETITIVENESS
Abstract

#### **INTRODUCTION**

The history of economic thought highlights the fact that economics as a science always needs new approaches and explanations, needs to establish causal relations between certain phenomena and economic processes. The issue of the relationship between the exchange rate dynamic and the development of competitiveness follows the same trend.

In this scientific approach I advanced the issue of the currency in relationship with international trade. The central idea of this research is based on the question whether or not the exchange rate has a major role in stimulating economic competitiveness in Romania.

In Romania, the analysis of the impact of the exchange rate is necessary in the context of trade integration in the international market while price based competitiveness is the key to survival on the market. In the current context there are developed countries which support a relatively free regime of the exchange rates, these being determined at least partially by the market. The countries which don't have an important share of transactions in the international trade continue to establish the national currency according to the currency of another state, more powerful from a commercial point of view, or according to a coin "basket".

The purpose of the research is understanding the fact that the national's currency depreciation does not contribute and does not significantly explain the evolution of exports and imports and so, the mechanism of the exchange rate is not a growth lever of economic competitiveness. Therefore, the interventions to the exchange rate channel, meant to increase exports and to reduce imports in order to increase competitiveness are an illusion. This fact emerges from the empirical results obtained, as well as from the structure of the theoretical approach. This present paper highlights the idea that the notion of economic competitiveness is far too complex, with multiple meanings and approaches, being influenced by a series of factors and cannot be significantly influenced only by the evolution of the exchange rate.

The methodology used in this scientific research involves an interdisciplinary approach that unites the economic field with the statistical analysis. The applied research strategy is deductive.

The limitations of the scientific research consist in the divergent approaches of the specialists regarding the impact of the exchange rate on imports and exports, with different results according to the country on which the analysis was made and according to the frequency of the analysed data. Another scientific limitation encompasses the complexity of the quantitative studies which require a very good knowledge of statistical instruments and mathematical models. The different visions of the researches in shaping the concept of

economic competitiveness and its quantification is another limit hard to surmount which I encountered during this research.

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## <u>Chapter I. The healthy currency – an alternative to the stable currency</u>

In the first chapter, dedicated to the origins and nature of money, I have systematically analysed the evolution of the coin. During thousands of years money have known different forms from commodity-money, to coins, then to paper money and electronic money. The importance of money and the role they hold in the economy can be considered the foundation stone of the economic life. Through the monopole on coin issuing as a sign of state sovereignty, the authorities have released into circulation devalued coins at a higher legal course than the one formed on the market. The effects of this behaviour have affected the economic life, the coin issuing would have been better managed at a free market level through competing private mints. The classics as well as the neo-classics see money as a means of exchange whose variation does not influence the real economy.

The historical background of Keynesianism, more exactly the crisis from 1929-1933, and the operating mechanism of this doctrine, based on the stimulation of the effective demand, offer the currency an active role in the economy. The cure proposed by Keynes to give up the gold standard and to massively issue paper money in order to eliminate unemployment and stimulate economy, has worked for 40 years. The effect of inflationist economies has culminated with a new crisis in the 70s of last century which were characterised by massive unemployment and high inflation. Following this phenomenon, the Chicago School monetarism was born and it confronted the Keynesian thesis of stimulating the effective demand, by instead supporting the fact that through proper management of the monetary mass in circulation we would be able to adjust the distortions inside the real economy.

The monetary analysis from the Austrian School perspective supports the healthy currency which is born in the free market and originates in a commodity. By understanding the concept of monetary stability and, retrospectively, of the previous theories, we can deduce

that through the monopole on money issuing, the central bank will always generate inflation. Under these circumstances the only possibility suggested by the Austrian School is to change the "stable" currency managed by the central bank into a healthy currency.

Starting with the liberal positions we understand the concept of monetary stability as the possibility to maintain the purchasing power of the currency in time. The traditional economic theory explains the fact that the stability of the purchasing power is the same with the balance between the effective demand and the production of goods and services offered on the market. The common denominator of the two components is the price. This is why the preoccupation to insure the stability of the purchasing power of the currency depends on insuring the stability of the prices. The Austrians claim and demonstrate the fact that only by turning to the commodity currency, also known as healthy currency, we can truly maintain the stability of the currency. The economic cycles characterised by expansion and recession phases have emerged after the adoption of the fiduciary coin, which is nothing else than a fiction, a convention of the authorities. Under these conditions the economy is divided between the real economy and the nominal economy. Money must fulfil their role as a means of exchange in the real economy and this is why the nominal authorities' interventions through the confinement or monetary expansion won't manage to insure lasting economic stability.

### **Chapter II.** The exchange rate: conceptual delimitations and influential factors

In the second chapter, dedicated to the theoretical approach, I have analysed the literature regarding the exchange rate. The analysis begins with necessary conceptual delimitations and influential factors of the exchange rate, proposed and supported inside the International Monetary Fund.

The dynamic of trade depends on the *evolution of the gross domestic product* from the analysed country and from abroad. The second fundamental factor of influence of the exchange rate is the *price evolution*, known in the literature as the theory of the purchasing power parity. According to it, the exchange rate remains unchanged as long as the prices and taxes from the analysed countries don't change, or they change in the same direction and with the same intensity. The third major factor which determines changes in the dynamic of the exchange rate is *the evolution of the monetary mass*. The followers of the School of Chicago believe that prices vary between countries because of the movement of the active money

supply in each country. The forth factor that influences the evolution of the exchange rate is *the interest rate*, relation which can be analysed both in short and in medium term.

The fundamental models of the rate of exchange explain the dynamic of the exchange rate according to a series of analysed variables introduced in the models' structure. The first model of determining the exchange rate was founded on the criteria of the purchasing power parity. The result of this model is the exchange rate formation through the ratio between the internal price level and the external one, while the depreciation or appreciation of the exchange rate are functions which depend on the level of inflation. The Keynesian oriented theories have created the Mundell – Fleming model. It results in the forming of the exchange rate under the influence of the flows of the balance of payments, flows which evolve under the impact of the monetary balance and of the commodities' market balance. Promoting an expansionist policy, typical Keynesian, impacts the model differently when it is applied on the fixed and floating courses.

Results demonstrate that monetary expansion, in the case of floating courses, generates an increase of the national income and of the exchange rate and a decrease of the interest, which will reflect in an improvement of the trade balance account. The fiscal expansion determines an increase of the national income, of the income rate, a decrease of the exchange rate and a worsening of the current account situation. When practicing a fixed exchange rate regime, Keynes' followers demonstrate that the monetary expansion generates, in long term, a decrease of the foreign reserves, but does not cause alterations of the national income, of the interest rate or of the current account. Instead, the fiscal expansion produces an increase of the national income and an increase of the interest rate which will lead the deficit of the balance of payments towards zero. Monetarists centre the movements of the exchange rate in terms of the monetary mass dynamic. Rudiger Dornbusch has deepened the Mundell – Fleming model, thus developing his own model. The result of the Dornbusch model is that an increase of the monetary mass determines, in medium and long term, a proportional increase of the prices and of the exchange rate, while, in short term, only the exchange rate registers an increase which is necessary to compensate the lack of price elasticity.

The institution that monitors and recommends different types of exchange regimes is the International Monetary Fund. The main objective of the IMF, when it recommends a certain regime to the member states, targets the improvement of the commercial flows at an international level, as well as the economic increase.

# <u>Chapter III. The economic competitiveness: theoretical approaches and influential factors</u>

The third chapter presents the theoretical approach concerning the conceptual elements of the notion of economic competitiveness. In this section I have analysed, in the first part, the concept of competitiveness at a macroeconomic level, and in the second part, the competitiveness at a microeconomic level. This section ends with a presentation of factors and the dynamic of economic competitiveness in Romania.

The meaning of the economic competitiveness implies the increase in productivity of the companies in order to streamline and multiply international exchanges. The economic logic applied is simple: starting with the analysis of company productivity as a cell of the economic organism, by summing up the results, the national commercial flows stand out with the help of the balance of payments. The companies' productivity is the sum of input productivity, work or capital, combined with the development of technological progress and the specific management of each company. Economic competitiveness in its whole meaning belongs to the productive companies, who create value and promote innovation. The second meaning for economic competitiveness, used in literature, targets the macroeconomic aspect and it translates into the rise of the competitive location advantages which a state can have in order to stimulate the interest of the foreign investors to invest more in that specific country.

A fundamental model of analysis of competitiveness and its determinants is Porter's Diamond. The model of Porter's Diamond shows the importance of the four fundamental pillars of economic competitiveness: firstly there are the factors' conditions, also known as the supply conditions, the demands' conditions, the context for strategy and rivalry between the companies that analyses the intensity of the local competition and the existence of a stimulating competitiveness context in order to obtain the best financial and commercial results and the upstream and downstream industries represented by the local suppliers who, through the interaction with related industries, allow the vertical integration of the companies.

As exogenous factors of the diamond, Porter includes the opportunity and the governmental actions. Although Porter's diamond includes many important variables, we notice that it is not comprehensive enough to be used in explaining the current notion of economic competitiveness.

Along with the dynamic of the international trade and the increase of the competitiveness on the market, the role of the states as the main actors of the economy has been taken over by the companies. From a macroeconomic point of view, according to Global

Competitiveness Report, national competitiveness assumes the capacity of a state to produce an improvement of the life conditions or, in other words, as Smith would say: "the increase of a nation's wellbeing". This vision on economic competitiveness is supported by the European Union itself . The natural question to ask in this context is: how can a state contribute to fulfil these objectives? The European Union's vision gives us the answer: economic competitiveness depends on productivity and, therefore, on the performance and future of the industry and its capacity to structurally adjust.

In order to capture the dynamism and the Romanian economy perspectives in the last years, we have to analyse the factors that influence the business environment and the competitive advantages of Romania regarding the attraction of foreign investments. Alongside the main determinant factors of the economic competitiveness I find it elementary to analyse the evolution of the real rate of exchange in order to observe the results of the economic performance of the companies that carry out activities of imports and exports. This is a comparative study to illustrate Romania's place in relation to the other ex-communist countries, currently EU members, from Central and Eastern Europe: Poland, the Czech Republic, Hungary and Bulgaria.

In the category of growth strategies we envision the development of the competitive potential of agriculture of Romanian small and medium companies – sectors which are supported by the policies of the European Union and for which we can benefit from European funds in order to develop them.

### Chapter IV. The influence of the exchange rate on economic competitiveness

The forth chapter is built mostly from the empirical study meant to offer the response to the question of whether or not the exchange rate is a contributing factor to the increase of the economic competitiveness. The study begins with the presentation of the conceptual aspects concerning the connections between the exchange rate, the balance of payments and the economic competitiveness.

Literature has approached the issue of the connections established between the exchange rate, the dynamic of the commercial transactions and economic competitiveness. Regarding the studies completed up to date, which analyse the influence of the exchange rate on commercial trade, I have to mention there are different results depending on the stage of development of each country as well as the frequency of the analysed data.

In the second part I have conducted an empirical study divided into two segments. In the first part I have studied whether or not the exchange rate regime influences the dynamic of the trades and the economic competitiveness. So, I have researched the evolution from the point of view of the global competitiveness index, as well as the influence of the national currency on imports and exports in the case of the Monetary Council regime for Bulgaria, of free floating for the Czech Republic and of controlled floating in the case or Romania. The motivation of the study is given by the different evolutions of the three countries regarding the transition period up until the present day. Under these circumstances we ask ourselves if the exchange regime can influence the trade competitiveness, nationally quantified by the evolution of imports and exports.

In the second part of the empirical study I pursued the validation of the hypothesis according to which the depreciation of the exchange rate doesn't influence significantly the dynamic of Romania's exports and imports towards the European Union in the period 2007-2015. Using the quantitative and qualitative approaches, I tried to give an answer to the following question: Have competitive depreciations integrated or disintegrated the trade? The results of the study are statistically significant and they highlight the liberal optics, noninterventionist in what concerns the policy of the exchange rate.

The study has shown that the leu depreciation does not lead, in the medium term, to a substantial growth of the trade. As an influential mechanism of foreign trade, the exchange rate only stimulates in a very short term, structural reforms being necessary in the economy to stimulate the growth of the international competitiveness of goods and services. More than that, depreciations can alter foreign trades, especially the exports, through the loss of external partners and markets.

### **Conclusions**

This research aims to offer a viable solution to this important phenomena, in order to make the best decisions regarding the exchange rate policy and increase Romania's competitive potential.

For a better understanding of the principles on which the international trade is based, and the necessary instruments for their unfolding, I chose to begin the scientific analysis with the origins of money. Following the analysis of the currency as an institution of the free market, it is clear that the main role of money is to mediate the trade. In order for the healthy currency to fulfil its fundamental role as a means of exchange and evaluation of value, it has

to be established on the market by choosing the economic agents without the impositions and artificial interventions from the authorities.

During the research I emphasized that the notion of economic competitiveness was born along with the theories of international trade, by approaching the issue of competitiveness at a macro and microeconomic level. The companies' competitiveness is the one that offers the image of the national competitiveness of a country because, presently, on the market, the companies are working on the international trades and not the countries. The gradual approach from the micro to the macroeconomic of economic competitiveness is required in order to understand that the branch of microeconomics determines the ensemble of macroeconomics and not the other way around. The company's economic competitiveness means the productivity of the inputs involved.

The results of Romania's economic competitiveness have been showed following the synthesis of the main social and economic indicators that create the determinant factors of the global index of economic competitiveness. Regarding the analysis of the fundamental factors amongst which there are: the infrastructure, the primary education, the medical services and the level of taxation, the results show that Romania is below the European Union's average and it needs investments and reforms. The results of the analysis of the efficiency factors, which include the percentage of population with high education, the real work productivity per person, the level of the annual net salary and the unemployment rate, have placed Romania on a good position compared to the European Union's average and also compared to the other analysed states, but only regarding the work productivity per person and the unemployment rate; the other indicators had modest values. To observe the importance of innovation we analysed the percentage of governmental expenses assigned to the research and development sector, and the results rank Romania on the last place, reporting to the European Union and to the other states from Central and Eastern Europe which were taken into account. Regarding the competitiveness through the price, the results are conclusive by the evolution of the real rate of exchange whose decrease implies the increase of competitiveness and viceversa.

Adopting the strategies to increase competitiveness must take into consideration solving Romania's gaps and massive shortcomings regarding the infrastructure, access to financing, education, innovation and the sanitary system. If Romania will manage to handle some of these deficiencies, most certainly the investors' position will change and so our country will manage to attract foreign investments full of know-how and technological progress in order to increase the companies' productivity.

Following the first part of the empirical study applied for Bulgaria, the Czech Republic and Poland, the results were that in the countries with a floating exchange rate regime the increase by one unit of the exchange rate does not contribute to a significant increase or decrease of the trade. In other words, according to the regression equations obtained after processing the statistical data, the interventions made by means of the exchange rate channel applied to the floating regime does not significantly influence the dynamic of the trade.

Regarding the statistical study, by using the method of the autoregressive vector for Romania, for the period 2007-2015, the proposed hypothesis was validated: the exchange rate does not significantly influence the dynamic of exports and imports applied to groups of products in Romania. It's true that after a period of 2-3 months we notice a tendency of growth or decline of the commercial exchanges, but they are not statistically significant, except for the products from the categories of mineral fuels, lubricants and related products and cars and transportation equipment where the leu depreciation favours the increase of imports and exports respectively. The explanation is given by the progressive growth of the excises for these products and in what concerns the cars exports, their evolution is due to the elastic and high demands from abroad which significantly increased the sales volume. In the case of the other products, the interventions on the exchange rate in order to stimulate exports and reduce imports are not significant, showing fluctuations below 20%. The results of the empirical study validate the hypothesis suggested at the beginning of the research, which is that through the interventions on the monetary channel of the exchange rate is not causing a significant increase of the economic competitiveness and does not stimulate trade.