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# EFFECTS FROM THE INTERACTION BETWEEN EXCHANGE RATE REGIME AND ECONOMIC GROWTH: THE CASE FOR MACEDONIA

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## Abstract

Determining the equilibrium exchange rate and factors that determine it, will contribute for taking actions for increasing economic growth. Improving the terms of trade tends to increase the welfare of the country, its domestic demand and prices of non-traded goods, with real appreciation of the domestic currency (effect of welfare). According these, real exchange rate as a monetary instrument, can detect the performances for export growth, increase in aggregate demand, in this way increasing economic growth. Developed countries where increasing in economic growth rely on exports growth, could be example for Macedonia that exchange rate is not only instrument for maintaining price stability. Exchange rate is an instrument for improving exports performances, increasing economic growth as strengthening the stability of financial system. The research will examine the relationship between nominal effective exchange rate with other macroeconomic aggregates applying the ordinary least squares method. These estimations will underline the impact of exchange rate on economic growth in Macedonia.

**Key words:** Exchange rate, economic growth, Macedonia, MLS method, stability.

## 1. Introduction

The impact of exchange rates on trade in a given country, as in Macedonia, example for small and open economy, should be seen in the context of continued integration of supply chains. Exports generally include high import content and impact of foreign currency-exchange appreciation or depreciation on any finished product because it is complex. If the depreciation of the exchange rate makes its exports of finished products "cheaper", it makes imported components "expensive" for domestic producers.

Maintaining growth and reducing the unemployment in a small and open economy such as

Macedonia depends from improved performance of exports. Improving the performance of exports can also help to preserve macroeconomic stability by closing the gap in the current account to avoid wasting supplies and to stop the growth of external debt. Improving performance requires improving export competitiveness. In the short term, competition may be related to the level of the real exchange rate, which provides internal and external balance. The appreciation of the real exchange rate with respect to its equilibrium level reduces the incentives and the ability of manufacturers to compete in foreign markets, since a significant part of production costs paid in local currency. In the long run, real exchange rates are assumed to converge to its equilibrium level, and competitiveness is more related to the productivity of the economy.

The existence of the real exchange rate in Macedonia, the products whose price in the country is a low cost can be exported effectively and import products whose price is relatively higher in the country in terms of abroad. In addition to the events and challenges for Macedonia, membership in the EU can improve the industrial situation in Macedonia only if the access largely makes Macedonia location from which foreign investors can serve EU markets if the domestic industry, with aid of FDI, can take the necessary changes to its output, an issue explored in greater detail in the section of the industry. These long-term structural shifts in employment and output, which can be accelerated through accession of Macedonia to the EU, sectoral change can be an important driver of change in aggregate factor productivity and income of workers in different sectors of the economy (Boshkov and Bishev, 2015a).

Given the large gap in prices and income per capita between Macedonia and the EU, the price will be accepting an important source of inflationary pressure, and also facing the existing price distortions in the energy, municipal services, etc.. Before access can move this later inflationary factor as driver for access around the time when the effect of inflation on real convergence is combined with the negative short-term effects of EU accession on fiscal balance, falling interest rates and so on. This will require careful management of the exchange rate. That is, if the Macedonian real growth accelerates, Macedonia will be more attractive candidate for EU membership, and it will faces with intense pressures on the exchange rate regime and macroeconomic policies.

## 2. Literature Review

This section presents several studies that use the variable nominal effective exchange rate. Also, here is provided an overview of methods used by these studies (Table 1).

**Table 1. Review of methods used in studies which analyze nominal effective exchange rate.**

| Studies                              | Title  | Methods              |
|--------------------------------------|--|----------------------|
| Baxter, M., and Stockman, A. (1989). | <b>Business Cycles and the Exchange Rate Regime: Some International Evidence</b> | Correlation analysis |
| Bollerslev(1989)                     | <b>Modeling the coherence in</b>   | SUR, ARCH and GARCH  |

|                                    |  |   |
|------------------------------------|--|---|
|                                    | <b>short run nominal exchange rates: A multivariate generalized ARCH model</b>                           | model   |
| Flood,Rose(1992)                   | <b>Fixing exchange rates :A virtual quest for fundamentals</b>   | Ordinary least squares method   |
| Oskooee(2001)                      | <b>Nominal and real effective exchange rates of middle eastern countries and their trade performance</b> | Dickey-Fuller Unit Root Tests, Engle-Granger cointegration test and Johansen cointegration test |
| Lai, Lowinger(2002)                | <b>Nominal effective exchange rate and trade balance adjustments in South east Asia countries</b>        | VECM  |
| Tenreiro(2004)                     | <b>On the trade impact of nominal exchange rate volatility</b>   | Poisson pseudo maximum likelihood model   |
| HarbingerC, Albert Wijeweera(2005) | <b>Nominal Exchange Rate Neutrality: The Case of Australia</b>   | VAR model   |

### 3. Methodology

Building models with the presence of bilateral causal relationship between two variables, is more complex. The analysis uses the method of ordinary least squares. This method is used for estimation of unknown parameters in the ordinary linear model. This method minimizes the sum of squared vertical distances between observed responses in the data set and the answers provided by the linear approximation. This method characterized estimated ratios that are consistent when regressions are exogenous and there is no perfect multicollinearity. This method can examined linear dependence between phenomena and general model can have one dependent and one or more independent variables. Regressions with the method of least squares, produced highly statistically significant parameters, but the presence of autocorrelation question poses the question whether MNC models are robust.<sup>1</sup> (Bishev and

<sup>1</sup> While in the presence of autocorrelation of estimated coefficients by the method of least squares remain impartial, consistent and asymptotic normally distributed, they are no longer effective (Gujarati, 2003).



Boshkov, 2015a).

#### 4. Data

For analysis we use quarterly data which cover the period from 1993 the first quarter, to 2013, first quarter. Data are for the Macedonian economy. Time series are: the nominal effective exchange rate (neer)<sup>2</sup>, observations for this variable are 1993q1 to 2013q1, or 81 observations in total. For real effective exchange rate<sup>3</sup>, we have 81 observation, further Macedonian gross domestic product which also has quarterly observations from 1993 to 2013. Purchasing power parity<sup>4</sup> is included in the data but this variable has 78 observations for the period 1994q1, first quarter to 2013q1, first quarter. The interest rate as a time series for the Macedonian economy is represented by the rate of borrowing, and the cover data for it is from 1994q2 (second quarter) to 2013q1 (first quarter), or in total 77 observations. Exports and imports account maximum number of observations, i.e. 81. The data on monetary aggregates M2 and M4 are shorter series 2001 q1 (first quarter) to 2013q1 (first quarter). The data for the index of inflation or the consumer price index where 2005 = 100, all from 1993q1 to 2013 q1, or 81 observation in total. Data were collected from the databases of the International Monetary Fund (IMF) and EconStats<sup>TM</sup> (Boshkov and Bishev, 2015b).<sup>5</sup>

#### 5. Empirical Research and Results

For empirical analysis of the ratio of the nominal effective exchange rate with all other previously mentioned variables in the model, we use quarterly data for Macedonia covering the period from 1993 to the first quarter 2013, first quarter. All variables we put in logarithmic form (logneer, logreer, loggdp, logppp, logm2, logm4, logcpi, loginterestrate). This is done because the functional form of log-log can examine the elasticity of variables. We agree that coefficients estimated with the method of least squares can not consider statistically robust because MLS method has the ability to capture cointegrating ratio variables between two or more variables (Bishev and Boshkov, 2015b).

**Table 1. MLS models with logarithm of the nominal effective exchange rate as a dependent variable**

| MLS regressions/dependent variable logneer | t-statistics (of constant and independent variable) | Ramsey test | Breusch-Godfrey LM |
|--|---|-------------|--------------------|
|--|---|-------------|--------------------|

<sup>2</sup> The nominal effective exchange rate is unadjusted weighted value of the currency of the country to the currencies of all countries with which trade is usually expressed as an index, an index of the currency pool.

<sup>3</sup> The real effective exchange rate is the average of the country's currency to the index basket of other major currencies adjusted for inflation.

<sup>4</sup> PPP (Purchasing power parity) purchasing power parity is a technique used to detect the relative value of currencies which calculates how big is the change that is needed for the exchange rate to be equal to the purchasing power parity of each currency.

<sup>5</sup> Website for this quote: [http://www.econstats.com/ifs/NorGSc\\_Mac2\\_Q.htm](http://www.econstats.com/ifs/NorGSc_Mac2_Q.htm)

|    |   |                                 |        | test   |
|----|---|---------------------------------|--------|--------|
| 1. | $\log neer_t = 7.077 - 0.5497 * \log ree_t$       | t - value = { 8.71 -3.15 }      | 0.0003 | 0.0000 |
| 2. | $\log neer_t = 5.091 - 0.15083 * \log ppp_t$      | t - value = { 13.77 - 1.58 }    | 0.6077 | 0.0000 |
| 3. | $\log neer_t = 4.57 - 0.17 * \log GDP_t$          | t - value = { 63.19 - 0.85 }    | 0.0000 | 0.0000 |
| 4. | $\log neer_t = 3.2723 + 0.1200 * \log M2_t$       | t - value = { 23.9240 9.8070 }  | 0.3258 | 0.0000 |
| 5. | $\log neer_t = 3.3364 + 0.1089 * \log M4_t$       | t - value = { 62.29 23.85 }     | 0.0013 | 0.0000 |
| 6. | $\log neer_t = 5.1119 - 0.217 * \log interrate_t$ | t - value = { 161.029 - 19.63 } | 0.0000 | 0.0000 |
| 7. | $\log neer_t = 3.28 + 0.188 * \log imports_t$     | t - value = { 20.75 7.83 }      | 0.0000 | 0.0000 |
| 8. | $\log neer_t = 3.21 + 0.214 * \log exports_t$     | t - value = { 19.50 7.99 }      | 0.1303 | 0.0000 |
| 9. | $\log neer_t = 3.82 + 0.35 * \log cpi_t$          | t - value = { 13.69 2.49 }      | 0.0000 | 0.0000 |

Note: The null hypothesis in Ramsey RESET test is that the model hasn't rejected variables, while the null hypothesis in Breush-Godfrey test is that there is no serial correlation.

From Table 1 we notice that all models suffer from autocorrelation in whose presence the coefficients are still has the best linear unbiased coefficient (BLUE-BEST LINEAR UNBIASED ESTIMATOR), but they are not efficient, which means they have a great variance (standard error), although all coefficients and the constant are statistically significant. The functional form is the best model for the logarithm of the nominal effective exchange rate with the purchasing power parity and the monetary aggregate M2, which is consisted of financial assets that are less liquid than the aggregate M1. The coefficients are interpreted in the usual way, for example, for M2, if the money supply M2 (in Macedonia) grow by 1%, the nominal effective exchange will grow 0.12% (Boshkov and Bishev, 2015c).

**Table 2. MLS models with logarithm of the nominal effective exchange rate as a independent variable**

| MLS regressions/dependent variable logneer           | t-statistics (of constant and independent variable) | Ramsey<br>test | Breusch-<br>Godfrey<br>LM test |
|--|---|----------------|--------------------------------|
| 1. $\logreer_t = 5.57 - 0.203 * \logneer_t$          | t - value = { 19.15 - 3.15 }                        | 0.0000         | 0.0000                         |
| 2. $\logppp_t = 4.81 - 0.21 * \logneer_t$            | t - value = { 8.00 - 1.58 }                         | 0.0000         | 0.0000                         |
| 3. $\logGDP_t = 4.57 - 0.18 * \logneer_t$            | t - value = { 63.19 - 0.85 }                        | 0.9653         | 0.0000                         |
| 4. $\logM2_t = 3.2723 + 0.1200 * \logneer_t$         | t - value = { 23.92 - 9.81 }                        | 0.0000         | 0.0000                         |
| 5. $\logM4_t = 3.3364 + 0.1089 * \logneer_t$         | t - value = { 62.290 - 23.85 }                      | 0.0002         | 0.0000                         |
| 6. $\loginteres\ rate_t = 5.12 - 0.217 * \logneer_t$ | t - value = { 161.029 - 19.63 }                     | 0.0000         | 0.0000                         |
| 7. $\logimports_t = 3.28 + 0.188 * \logneer_t$       | t - value = { 20.75 - 7.83 }                        | 0.0000         | 0.0000                         |
| 8. $\logexports_t = -3.31 + 2.088 * \logneer_t$      | t - value = { 19.50 - 7.99 }                        | 0.0000         | 0.0000                         |
| 9. $\logcpi_t = 1.03 + 0.2055 * \logneer_t$          | t - value = { 2.77 - 2.49 }                         | 0.0000         | 0.0000                         |

Note: The null hypothesis in Ramsey RESET test is that the model hasn't rejected variables, while the null hypothesis in Breush-Godfrey test is that there is no serial correlation.

According Ramsey test, the best model is, where t statistics are t-вредности = { 63.19-0.85} (Table 2). All models also suffer from serial correlation. The coefficients are almost all highly statistically significant, but statistically ineffective because of the presence of serial correlation. In the following two tables we present the above functional forms but with differentiated variables (first difference) (Tables 3 and 4).

**Table 3 MLS models with first difference of logarithm of the nominal effective exchange rate as a dependent variable**

| MLS regressions/dependent variable logneer                        | t-statistics (of constant and independent variable) | Ramsey test | Breusch-Godfrey LM test |
|---|---|-------------|-------------------------|
| 1. $\Delta \log neer_t = 0.011 - 0.847 * \Delta \log reer_t$      | t - value = { 0.22 7.38 }                           | 0.0000      | 0.0000                  |
| 2. $\Delta \log neer_t = 0.0068 - 0.062 * \Delta \log ppp_t$      | t - value = { 11.79 - 0.74 }                        | 0.0067      | 0.9182                  |
| 3. $\Delta \log neer_t = -0.0029 + 0.0066 * \Delta \log GDP_t$    | t - value = { -0.42 0.47 }                          | 0.8553      | 0.0000                  |
| 4. $\Delta \log neer_t = 0.0039 - 0.004 * \Delta \log M2_t$       | t - value = { 2.76 - 0.35 }                         | 0.2384      | 0.4548                  |
| 5. $\Delta \log neer_t = 0.0033 + 0.016 * \Delta \log M4_t$       | t - value = { 2.07 0.70 }                           | 0.3055      | 0.5282                  |
| 6. $\Delta \log neer_t = 0.0060 - 0.072 * \Delta \log interest_t$ | t - value = { 1.90 - 4.32 }                         | 0.1538      | 0.0246                  |
| 7. $\Delta \log neer_t = -0.0022 - 0.02 * \Delta \log import_t$   | t - value = { -0.37 - 0.48 }                        | 0.0003      | 0.0000                  |
| 8. $\Delta \log neer_t = -0.0035 + 0.025 * \Delta \log exports_t$ | t - value = { -0.50 0.48 }                          | 0.8235      | 0.0000                  |
| 9. $\Delta \log neer_t = 0.011 - 1.53 * \Delta \log cpi_t$        | t - value = { 2.02 - 8.53 }                         | 0.0000      | 0.0000                  |

*Note: The null hypothesis in Ramsey RESET test is that the model hasn't rejected variables, while the null hypothesis in Breush-Godfrey test is that there is no serial correlation.*

**Table 4 MLS models with first difference of logarithm of the nominal effective exchange rate as a independent variable**

| MLS regressions/dependent variable logneer   | t-statistics (of constant and independent variable) | Ramsey test | Breusch-Godfrey LM test |
|--|---|-------------|-------------------------|
| 1. $\Delta \log \text{reer}_t = -0.0035 - 0.48 * \Delta \log \text{neer}_t$        | t - value = { -0.887.38 }                           | 0.0000      | 0.0246                  |
| 2. $\Delta \log \text{ppp}_t = -0.0023 - 0.1152 * \Delta \log \text{neer}_t$       | t - value = { -0.45 - 0.74 }                        | 0.1799      | 0.0316                  |
| 3. $\Delta \log \text{GDP}_t = -0.021 + 0.42 * \Delta \log \text{neer}_t$          | t - value = { -0.39 0.47 }                          | 0.8864      | 0.1155                  |
| 4. $\Delta \log \text{M2}_t = 0.0248 - 0.64 * \Delta \log \text{neer}_t$           | t - value = { 1.30 - 0.35 }                         | 0.2814      | 0.5973                  |
| 5. $\Delta \log \text{M4}_t = 0.033 + 0.629 * \Delta \log \text{neer}_t$           | t - value = { 3.24 0.70 }                           | 0.2827      | 0.8024                  |
| 6. $\Delta \log \text{interes rate}_t = -0.024 - 2.78 * \Delta \log \text{neer}_t$ | t - value = { -1.33 - 4.32 }                        | 0.0000      | 0.1718                  |
| 7. $\Delta \log \text{imports}_t = 0.024 - 0.143 * \Delta \log \text{neer}_t$      | t - value = { 1.33 - 0.48 }                         | 0.0843      | 0.0002                  |
| 8. $\Delta \log \text{exports}_t = 0.019 + 0.114 * \Delta \log \text{neer}_t$      | t - value = { 1.23 0.48 }                           | 0.8494      | 0.4061                  |
| 9. $\Delta \log \text{cpi}_t = 0.007 - 0.315 * \Delta \log \text{neer}_t$          | t - value = { 3.51 - 8.53 }                         | 0.0000      | 0.0000                  |

Note: The null hypothesis in Ramsey RESET test is that the model hasn't rejected variables, while the null hypothesis in Breusch-Godfrey test is that there is no serial correlation.

From the Table 3 it is notable that the functional form in regressions with differentiated series is much better than that when are in the level,  $p$  value is much greater than zero and this means that it's statistically significant. Also serial correlation 4 of 9 models is not a problem unlike the two previous tables where the serial correlation was a problem in any of the models. Table 4 presents models with the first difference of the nominal effective exchange rate. With models, where the nominal effective exchange rate is a dependent variable, in 6 of 9 models the functional form is good, which means models do not suffer from a bias to rejected variables. Serial correlation is a problem according Breusch-Godfrey LM test when the first difference of logarithm of the consumer price index is dependent variable and when the growth of exports is dependent variable. Other equations according this test don't suffer from serial correlation. In the table 5 based on the results of the above equations we present the causal tests of the nominal effective exchange rate with other variables for which we have data (Boshkov and Bishev, 2015d).

**Table 5. Models of causality in Macedonia based on the Method of Least Squares**

|  | Log-level  | First difference   |
|--|--|--|
| Nominal effective exchange rate (neer) and Real effective exchange rate (reer) | $\log neer_t \Leftrightarrow \log reer_t *$          | $\Delta \log neer_t \Leftrightarrow \Delta \log reer_t *$          |
| Nominal effective exchange rate (neer) and Purchasing Power Parity (ppp)       | $\log neer_t \Leftrightarrow \log ppp_t *$           | $\Delta \log neer_t \Leftrightarrow \Delta \log ppp_t$             |
| Nominal effective exchange rate (neer) and Gross Domestic Product (GDP)        | $\log neer_t - \log gdp_t$                           | $\Delta \log neer_t - \Delta \log gdp_t$                           |
| Nominal effective exchange rate (neer) and M2 Monetary aggregate (m2)          | $\log neer_t \Leftrightarrow \log m2_t *$            | $\Delta \log neer_t - \Delta \log m2_t$                            |
| Nominal effective exchange rate (neer) and M4 Monetary aggregate (m4)          | $\log neer_t \Leftrightarrow \log m4_t *$            | $\Delta \log neer_t - \Delta \log m4_t$                            |
| Nominal effective exchange rate (neer) and interest rate (interest rate)       | $\log neer_t \Leftrightarrow \log interest_rate_t *$ | $\Delta \log neer_t \Leftrightarrow \Delta \log interest_rate_t *$ |
| Nominal effective exchange rate (neer) and imports (imports)                   | $\log neer_t \Leftrightarrow \log imports_t *$       | $\Delta \log neer_t - \Delta \log imports_t$                       |

Note:  $\Leftrightarrow$  show bilateral causal ratio,  $-$  indicates lack of causality,  $*$  denotes statistical significance of the relationship between the variables of 10%.

**Table 5 (continued) Models of causality in Macedonia based on the Method of Least Squares**

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|   |  |  |
|---|--|--|
| Nominal effective exchange rate<br>(neer) and exports(exports)              | $\log neer_t \Leftrightarrow \log exports_t *$ | $\Delta \log neer - \Delta \log exports$             |
| Nominal effective exchange rate<br>(neer) and Consumer price<br>index (CPI) | $\log neer_t \Leftrightarrow \log cpi_t *$     | $\Delta \log neer \Leftrightarrow \Delta \log cpi *$ |

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Note:  $\Leftrightarrow$  show bilateral causal ratio,  $-$  indicates lack of causality,  $*$  denotes statistical significance of the relationship between the variables of 10%.

The previous tests of causality, we underline that emphasize that undermines confidence autocorrelation disrupts the confidence in coefficients estimated by the Method of Least Squares, even it can destroy. However, the purpose of the regressions with the Method of Least Squares is testing the ratio of nominal effective exchange rate as a variable with other variables in the model, and can be concluded that there is causality (Boshkov and Bishev, 2015e).

## 6. Discussion

The main goal of National Bank of Republic of Macedonia is the maintenance of the price stability. Regarding this, the National Bank is committed to apply a strategy for maintaining stable nominal exchange rate against the Euro. The role of the exchange rate as a nominal anchor derives from the characteristics of the domestic economy, as a small and open economy that is highly dependent on the import of primary commodities (European Commission, 2007). Also, Macedonian exchange rate can be used as an instrument for export performances of the country.

Risks are present and persist also in 2016, which was typical for 2013, 2014 and 2015. The main characteristic for these past years is that Macedonia has made apparent separation of the dynamics of growth compared to that imposed by the growth of the countries that are our major trade partners. Indicated by the arguments, real GDP growth for 2014 was 3.8%. This growth was due to investment (public investment and FDI) and exports (increased exports and reduced trade deficit) .In 2014 the unemployment rate decreased as a growth factor of labor productivity. Despite the complexity of the period, 2014 can be defined as the year with favorable monetary policy, especially with the trend of slowing inflation mainly due to the negative contribution of the prices of food and fuel. During 2014, monetary policy has maintained its flexibility in terms of the current environment and in terms of keeping the exchange rate stability and low inflation pressures determined by factors on the supply side, further endorsed credit growth, mainly through the use of non-monetary measures and changes in other instruments.

Although in terms of inherent risks and uncertainties, as the risk which stemming from internal political developments, last year, 2015, the Macedonian economy registered solid macroeconomic performance. Maintaining economic growth was due to structural changes in the domestic economy, the



successful implementation of monetary policy. 2015 also characterized by low inflation and stable foreign exchange market movements. Early this year showed room for continuity of monetary policy by further reducing deposit interest rates and creating conditions for greater targeting of the available bank assets for lending the private sector. Growth of 3.7%, which Macedonian economy keep due to domestic consumption and export, i.e. new companies with foreign capital in the country on the export side, public infrastructure and the decline in the unemployment rate. Inflation in 2015 was negative by -0.3% due to lower fuel prices, which determine the inflation and globally. The deficit can not be regarded as constant, since last year is about 2% of GDP. The narrowing of the trade deficit in 2015 due to the contribution of new companies in the free zones, as well as positive price effect on energy imports and remittances remain relatively stable. Banking regulation is improved in 2015 in accordance with the standards in statistics, payment systems, information structure and introducing a system for managing operational risks.

According to macroeconomic projections, 2016 is expected to end with solid macroeconomic performance, although these expectations are significantly burdened by constant threats from external and domestic environment. Monetary authorities are always ready to respond flexibly to all challenges in order to accomplish the objectives of monetary policy in terms of maintaining price stability and stable exchange rate, maintaining financial stability and support macroeconomic stability in the domestic economy.

## 7. Conclusion

In a situation where the competitive price is appropriate, further performance gains in exports may be hampered by structural factors. The real exchange rate depreciated steadily and Macedonian price level is low when it is compared to other countries with similar income. Although estimation of the equilibrium real exchange rate are challenging, measurements show that the exchange rate is generally in line with macroeconomic fundamentals. In contrast, direct comparison of wages between countries suggests problem with the cost competitiveness, while heterogeneity of data makes this comparison quite difficult. Macedonian producers fail to maintain or increase their share in exports (Boshkov and Bishev, 2015f).

According to results, we conclude that the test undermines confidence autocorrelation disrupts the confidence in coefficients estimated by the Method of Least Squares, even it can destroy. However, the purpose of the regressions with the Method of Least Squares is testing the ratio of nominal effective exchange rate as a variable with other variables in the model, and can be concluded that there is causality. The impact of exchange rates on trade in a country like Macedonia, small and open economy, can be seen in the context of continued integration of supply chains

With support of the estimation we showed that in a small and open economy such as Macedonia, using real exchange rate as an instrument could be realized the opportunity for growth of export performances, increase aggregate demand and increasing economic growth thus speeding the convergence process to EU. So, exchange rate can be seen not only as an instrument for maintaining price stability but also as an instrument that will contribute for economic stability of Macedonia and strengthening the stability of the

financial system.

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