COVID-19 CHALLENGES FOR EU EXTRA AND INTRA-REGIONAL TRADE

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ABSTRACT
The current COVID-19 crisis will take a severe toll upon the world and the EU economy. Exports and imports between member-states account for around 30.6% of EU GDP (average value for the period 2007-2018) and some EU economies are particularly exposed to the crisis due to their strong trade and value chain linkages. The trade with the rest of the world also decreased by mid-March 2020, and Rotterdam's traffic from China fell for 20% compared to the same period in 2019.
This paper estimates the different impact of the intra- EU trade and extra-EU trade on EU GDP growth. By separating extra-EU trade flows from intra-EU trade flows and using cross-section fixed method, panel least squares for the period 2008-2018, we obtained results that confirm that trade exchange within EU has significantly higher effect on per capita economic growth in comparison with trade exchange with countries outside the EU (taking in consideration the sample of EU-27 countries, excluding Great Britain).The findings prove that the current measures proposed by the EU institutions are essential for sustaining the function of the Internal Market and for EU growth prospects.
Despite all efforts to remain united against the rising global challenges under the COVID-19 crisis, the Union is growing further apart. The member-states are imposing restrains on the internal trade flows thus jeopardizing the achieved positive effects of trade liberalization. It is certain that the financial crisis from 2008 caused increased Euro scepticism. Therefore differences in national views and priorities must be taken into account in order to reach a democratic compromise within the EU that is going to be both effective and legitimate in order to confront the consequences of the COVID-19 pandemics. The solidarity among member-states is challenged once again.

Keywords: *European Union, intra EU -trade, extra EU-trade, economic growth, COVID-19 pandemics.*
JEL classification: *F13, F15, F43*

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1. INTRODUCTION

The European Union is the world`s biggest trader at present. The total EU-28 export (the trade exchange within the EU and with non-EU countries) accounted for 15.2%of the total world export and 15.1% of the world import in 2018. The EU is the top trading partner of 80 countries. For comparison the USA is the top trading partner of slightly over 20 countries (European Commission, 2020). The dominant position in the world market is a result of the process of European Economic Integration.

However, due to the current pandemics of COVID-19 the four freedoms of the EU Internal Market have been severely restricted. EU countries took precautionary measures in order to protect the health and safety of their citizens. Most of the businesses were shut down, the transportation was restricted and the movement of people across borders was banned. This situation created inconvenient trends within the intra-EU supply chains, as well as in intra EU-trade. Latest projections point out that the world health crisis will result in a decline of 9.2% in EU exports to and 8.8% in EU imports from third countries by the end of 2020, based on the estimated decline in GDP worldwide (European Commission, 2020).

The EU has been the dominant player in the world economy by creating an average share of 25% of real world GDP during the last 10 years (World Bank database). However EU`s average share of the world output is experiencing a declining trend. The new enlargements partly compensated this negative trend, but the main reason for the decline was the faster growth recorded by the emerging economies. Due to the current health crisis, the economic activity in the EU dropped by about one third at the beginning of June, 2020. The contraction of EU GDP in 2020 is expected to be 7.5%, far deeper than the one recorded in the period of the financial crisis in 2009. This assumption is based on the scenario where restrictive measures will be gradually relaxed (European Commission, 2020).

The research in this paper focuses on the question: *whether intra-EU trade contributes more to the economic growth of the regional integration than extra-EU trade?* It is divided in four sections: first, a brief analyses of intra-EU trade; second, literature overview; third, description of data and methodology used for the creation of the econometric model; and fourth, presentation of the results obtained from the model. The end of the paper provides final conclusions. .

2. INTRA-TRADE IN EU

An important indicator for assessing the intensity of regional economic integration for its member-states is the percentage share created by intra-regional trade in the total trade exchange of the integration. Deepening and strengthening the economic integration among EU member-states has certainly contributed to an increase in intra-EU trade flows. One of the reasons for the increased intra-trade was the enlargement process of the integration that significantly increased the scope of the Internal Market. The integration of new countries increased the opportunity to gain from specialisation within the European value chains, as well from easier achieving economy of scale in most of the industries throughout the region. The intra EU- trade created 63.9% of the total EU trade in 2018 (European Commission, 2019).Table 1 presents the individual share of each EU country in the total export and import of the region as well as in the total trade.

Table 1: Share of intra-EU trade in the total trade, 2018

Member State	Share of intra-EU exports in total exports	Share of intra-EU imports in total imports	Share of intra-EU trade in total trade
EU-28	64.3	63.5	63.9
Austria	71.4	77.5	74.5
Belgium	72.8	64.4	68.7
Bulgaria	68.6	63.6	65.9
Croatia	67.7	77.6	73.8
Cyprus	28.6	57.4	48.3
Czech Republic	84.4	76.5	80.6
Denmark	61.0	70.0	65.4
Estonia	68.0	76.6	72.5
Finland	59.0	70.1	64.6
France	59.0	69.1	64.4
Germany	59.0	66.4	62.3
Greece	52.8	51.4	52.0
Hungary	81.8	74.8	78.4
Ireland	50.2	64.1	55.7
Italy	56.3	59.0	57.6
Latvia	66.9	74.8	71.3
Lithuania	58.6	68.2	63.6
Luxembourg	84.1	87.7	86.2
Malta	57.7	72.2	67.5
Netherlands	74.4	45.8	60.9
Poland	80.3	69.3	74.8
Portugal	76.1	75.7	75.9
Romania	77.1	74.7	75.7
Slovakia	85.7	80.0	82.8
Slovenia	76.2	67.2	71.8
Spain	66.2	58.4	62.1
Sweden	59.5	69.8	64.7
United Kingdom	47.1	52.8	50.4

(Source: https://trade.ec.europa.eu/doclib/docs/2013/may/tradoc_151348.pdf)

Measuring the same indicator (intra-export and intra-import) of goods as a percentage of GDP shows that in the period from 2007-2018 intra EU-trade created 30.6% of EU GDP on average. However, from data presented in Table 2 it is evident that this percentage started to decrease in 2018.

The European integration process has not been even across the region and has led to a stronger relative concentration and spatial clustering of exporting activities between CEE countries and old member-states i.e. the core of the EU: Germany, Austria, Belgium, Luxemburg and the Netherlands (Stöllinger, 2016). For the other countries, bilateral trade intensities have increased less significantly or even remained more or less constant over the whole period. Within the EU, Germany is by far the biggest trader. In 2019, Germany's exports were worth over 57.5 billion Euro and its imports were valued at54.9 billion Euro. Combined, France, Italy, Belgium, and the Netherlands accounted for the bulk of the EU internal trade, with each country worth in net-trade of 30-50 billion Euros. These countries are the largest trading partners in the EU.

The top five products traded within EU are: Motor vehicles, trailers and semi-trailers: Chemicals and chemical products; Machinery and equipment; Computer, electronic and optical products and Food products. Together they account for almost half of all exports (47 %) for the period 2015-2019.Motor vehicles, trailers and semi-trailers is the most significant category with share of 13 p.p. Germany is the dominant exporter in regard of all observed categories.

Table 2:Intra EU trade (in goods as a percentage of GDP for the period 2007-2018

Year	Share
2007	33.0
2008	31,8
2009	31,4
2010	30.6
2011	30.4
2012	29.5
2013	30.0
2014	30.0
2015	30.2
2016	30.0
2017	30.3
2018	29.7

(Source: UN COMTRADE database)

Most of the academic papers (Vetter, 2013; Leitner, Sandra M. et al. 2016) confirm that EU integration and the functioning of the Internal Market contributed to an increase in intra-EU trade flows despite strong extra-EU trade growth. Prior to the financial crisis intra-trade was growing faster than the world trade. However, after 2009 the growth of intra-EU trade slowed down and in 2011 came to a standstill or to some extent to a decline. A similar pattern is also present for exports of non-EU countries towards the EU-28, i.e. EU-28 imports. Both trends reflect low growth and sluggish demand in EU compared to other economies (Leitner, Sandra M. et al. 2016).

The current threat is that the health crisis will lead to severe distortions within the Internal Market as governments introduced temporary restrictions to border traffic. The real threat however is the possibility of re-introducing tariff and non-tariff barriers. Route suspensions and delays on the roads caused problems in the supply chains, as well as considerate losses for the companies. This situation is threatening to suspend the functioning of the Internal Market that would create a real breakdown of the prospects of further economic growth. The EU leaders responded to this challenge by installing so called "Green Lanes (Corridors)" for traffic trucks at border crossings and for minimizing checks and screening of truck drivers. Also, the priority was given to essential goods, medical equipment and supplies. The Commission approved temporary suspension of the waived customs duties and VAT for these goods. The EU introduced Temporary Framework that will ensure food security within the EU, including measures such as aid of up to 100,000 Euros per farm and prolonged deadlines to apply for support. Also, the EU has put forward a package of540 billion Euros to support member-states, as well as ease access to structural funds. The European Investment Bank offered 40 billion Euros for small and medium size enterprises, while the European Central Bank has announced a 750 billion Euros worth of a pandemic emergency program for the purchase of private and public securities during the crisis. Due to the COVID -19, EU suspended all the austerity measures of the Stability and Growth Pact, allowing the counties to use their budgets according to their national needs. It is still uncertain how the countries will act, i.e. will they use the funds properly and towards the

strengthening of the Internal Market (European Council,2020)or will they protect their national industries and suspend the functioning of the Internal Market?

3. LITERATURE REVIEW

The objective of the European Economic Integration was to increase intra-trade and spur economic growth by increased competition, better possibilities for achieving economies of scale and significantly increased number of innovations. The process of European Economic Integration started in the 1960s and in the1970s and was in fact accompanied with high growth rates in the member countries of the regional integrations at that time, the European Economic Community (EEC) and the European Free Trade Area (EFTA). That created a belief that economic integration had an important effect on the level and growth of the economic activity (Robson, 1972).

This hypothesis was confirmed by classic theories on the effects of creation of a regional integration formulated by Viner (1950), Meade (1956) and Lipsey (1957). Viner (1950) introduced the static concept of trade creation and trade diversion. Regional integration can improve the welfare of the member-states by trade creation, but on the other hand it may have welfare-reducing effects for the integration and world welfare through the trade diversion. Balassa 1958; Lipsey, 1960 and Janssen, 1961 investigate the dynamic effects of regional integration. They implied that regional integration might increase investments, provide better opportunities for achieving economy of scale, enhance technological progress as the process of regional integration increases the competitive pressure and therefore contributes to higher economic growth. However, the main assumptions in these classic theories are that: trade is done with homogeneous goods; import-competing goods may be produced under increasing marginal cost conditions; export goods are produced under constant cost conditions; pure competition exists both on commodity and factor markets; there are no transportation costs; trade restrictions exists only in the form of specific or ad valorem tariffs; opportunity costs of production are fully reflected in prices and trade in goods is balanced at full employment of resources (Robson, 1998).

Static and dynamic effects of the creation of the custom union, the internal market and the monetary union were thoroughly analysed in the economic literature, confirming that positive effects of the economic integration within the EU prevail over the negative effects of the process (Grossman and Helpman, 1991; Sala-i-Martin and Barro, 1997).

Modern theories try to include the effects of imperfect competition (Baldwin, 1997; Page and Bilal, 2001 and Schiff and Winters (2003) and others). These theories highlight the effects of regionalism: from the static through to the dynamic and finally to open and developmental regionalism. Developmental integration theory was put forward in response to problems created by market integration (McCarthy, 1996). In the first instance, states must make a political commitment to integration, since such a commitment is seen as laying the foundation for cooperation. It is anticipated that this will contribute towards member-states' progress in implementing policies that will help resolve problems created because of the unequal distribution of benefits, one of the major causes of market failure within RTAs (McCarthy, 1996). The members need to introduce corrective policies (regional policy, social policy, etc.) in order to redistribute the benefits from the unperfected market competition. Many authors (Bhagwati and Panagariya, 1996) claim that development integration has proven more difficult to implement than market integration. This is mainly because institutions are associated with corruption and

rent-seeking. Additionally, the degree of state intervention in economic activities (particularly in trade) could negatively influence the process of integration.

4. DATA AND METHODOLOGY

The empirical model that we use in this paper is based on the Bassanini et al., 2002 and Wooster et al., 2006 which uses the basic determinants of output growth. The used variables in the empirical analysis are given in Table 3, along with data sources (data used on 27 member-states of EU, excluding Great Britain). We believed that excluding Great Britain would give us better perspective about the actual trade flows within the EU, and that would lead us to better conclusions and suggestions on present policy options. The main variables, intra and extra-EU merchandize trade, are retrieved from the EUROSTAT database for the period 2008-2018.
In order to get relative indicator to the size of the economy, the variables (intra and extra-EU trade) are expressed by percentage of GDP in each year for each member-state. In other words the extra-trade in million Euros was divided with the GDP value in million Euros. Data on GDP is also retrieved from the EUROSTAT statistics.

Table 3: Description of the data

Variable	Description	Source
GDP per capita growth (lnY)	GDP per capita growth (annual %)	World Development Indicators
Population growth (n)	The rate of growth in total population	World Development Indicators
Investment (k)	The percentage share of investment in GDP	World Development Indicators
Intra- EU trade (lnr)	The intra-EU trade (export+import) as a percentage of GDP	EUROSTAT
Extra-EU trade (lnw)	The extra-EU trade (export+import) as a percentage of GDP	EUROSTAT
Government Size (G)	Government consumption expenditure as a percentage of GDP	World Development Indicators
Inflation (π)	The rate of change of the GDP deflator	World Development Indicators

(Source: Athor`s calculations)

The dependent variable is the growth of the GDP per capita expressed in 2010 purchasing power parity. This data is retrieved from the World Bank Development Indicators database, along with the rest of the data for the independent variables. The analysed period is from 2008-2018 and the number of observation is 297, having in mind constrains in data availability. The method used is the fixed method; panel least squares with cross-section weight. We estimate only the long term growth effect of the respective explanatory variables.

The equation can be written as follows:

$$\Delta nY_{it}=\beta_0+\beta_1 k_{it}+\beta_2 n_{it}+\beta_3 lnr_{it}+\beta_4 lnw_{it}+\beta_5 g_t+\beta_6 \pi_{it} \quad (1)$$

where ***k*** is the share of investment in GDP, ***n*** is population growth, ***r*** is the ratio of intra-EU trade as percentage of GDP, ***w*** is the ratio of extra-EU trade to GDP, ***g*** is government consumption expenditure relative to GDP, ***π*** is inflation and β coefficients measure the long term growth effect on the explanatory variables.

The R2 in the estimated model is 62.7% showing that the independent variables explain the dependent variable in significant percentage. The Durbin-Watson statistics is 1.59 showing that there is no autocorrelation detected in the sample.

4. RESULTS OF THE ECONOMETRIC MODEL

The results of the econometric model we used indicate that all independent variables that we included in the analysis are statistically significant for the dependent variable, the growth of GDP. The coefficients of intra EU trade and investment have positive signs, and the other four variables: extra EU trade, population growth, government consumption expenditure and inflation have negative signs.

The main focus of our analysis is the influence of intra and extra EU trade over GDP growth. As the results indicate, the influence of intra EU trade on GDP is significant and with a positive sign. This confirms that intra EU trade is significant for EU GDP growth and 1% growth of intra EU trade could lead to 1.12% growth of EU GDP. On the other hand, extra EU trade appears to have negative influence over EU GDP growth. 1% Growth of extra EU trade could actually lead to a decrement of the EU GDP by 0.85%. These findings indicate the high importance of intra EU trade as trade creation is the recognized positive effect of the process of regional economic integration. It confirms that for the European Union intra EU trade is highly important factor for the functioning of the whole economic integration.

This, however, also points out that the trade diversion effect is strongly present in the case of the EU, meaning that EU is trading more with partners within the EU rather than with trade-partners outside the EU. EU members diverted their trade to partner countries, as most of them do not have lower comparative costs than the world average. The negative effect of extra-trade on the GDP per capita can also be indicating that EU is losing its positions on the world market due to lower competitive advantage.

The positive coefficient of investment is also expected and indicates that 1% growth of the investment shares in GDP could lead to 3.8% growth of EU GDP. The negative signs of the coefficients of government consumption expenditure and inflation growth are logical and expected. Higher growth of government consumption expenditure and higher inflation could lead to decrease of GDP growth rate.

Table 4. Results from the econometric model

Variables	Coefficient (t-statistics)
Intra-trade (lnintra)	1.122*** (2.058)
Extra-trade (lnextra)	-0.854*** (-2.350)
Investment (inv)	0.038*** (-2.027)
Population (pop)	-0.475 *** (-3.483)
Government consumption (gov)	-0.308 *** (-6.755)
Inflation (inf)	-0.1045*** (4.226)

(Notes: *** represents the p-value at 5% significance)

CONCLUSION

The European solidarity is challenged once again with the pandemic of COVID-19. One country`s implemented restrictive measures may affect the rest of the member-states within the regional integration. EU needs to act as one in order to deal successfully with the economic consequences of pandemics and sustain the functioning of the Internal Market and the Monetary Union.

The results from the model in this paper confirmed that intra-trade is much more important for EU growth prospects then extra-trade. On the other hand, extra-trade with third countries is lowering GDP per capita in the EU. Theory confirms that favorable conditions in the regional integration can cause the effect of trade diversion since the world trade is diverted to partner countries with comparative costs within the integration (Lipsey, 1957). Therefore EU is increasing the welfare of its members by trade creation (intra-trade), but on the other hand it has welfare-reducing effects through the effect of trade diversion. That can mean that the EU is losing its competitive strength hand is losing its dominant position on the global market, which might be a result of the inability to allocate its resources efficiently.

It is almost certain that the crisis will take a severe toll on the EU economies. How hard members' economies will be hit depends on the length of their lockdowns and aggregate undertaken countermeasures. Member-states are not united in their response to the COVID-19 crisis and do not have single opinion on the future prospects for EU. Unfortunately, this is not the first time. The members failed to find common approach during the financial crisis and the migrant crisis. For example, Hungary and Poland were introducing measures that EU is considering opposite to the fundamental democratic values of the Union.

We believe that (policy) measures and adjustments for re-accelerating economic growth in Europe should be designed to boost the strengths of the Internal Market. Most of the measures are proposed in order to repair and revitalize its functioning, ensure fair rules, support investments, as well as creative ideas and innovations. But there are certain risks that most of the measures instead of being implemented will be abandoned or suspended by the member-states.

The members still do not have common positions on the next multiannual framework (2021-2017). The Commission is proposing new financial instrument - Next Generation EU. The aim is to help the countries in their fight against COVID-19 and also to stimulate future investment by enforced digitalization and investment in green economy. Of course that needs strong political will and agreement among the countries for joint financing since the Commission is planning to raise the ceiling of their own resources as revenues in the budget up to 2% of the EU Gross National Income.

On the other hand, the EU is also temporary suspending all austerity measures related to the revised Stability and Growth Pack. The overall budget deficit of the euro area and the EU was projected to rise from 0.6% of GDP in 2019 to around 8.5% in 2020 (European Commission, 2020b). Countries with the limited fiscal space can be hit harder from the crisis. In times of crisis, national policies can turn to protectionism measures that would endanger the functioning of the Internal Market. There is a risk that uncoordinated national measures will create further economic, financial and social divergences among the EU members and could threaten the stability of the Economic and the Monetary Union. To some extent the different measures enacted in different member-states at their national could be justified with the different intensity and threat of the COVID-19 pandemics they were and are facing. Still, it is evident that the more organized approach at EU level in enacting economic packages that will secure economic stability at supranational level was lacking in the past months and is not present at the moment. Instead EU authorities redirect their focus on the latest announcements by the British government on abandoning the achieved deal on BREXIT and leaving the EU by the end of this year with no deal at all. All these issues overcome the scope of this paper, and are certainly topics for new research endeavor in near future.

There is no doubt that free trade and deeper economic integration provides long-term benefits for the members of the regional integration. However, it is important to recognize the possible short-term effects of the process and provide sustainable policies in order to eliminate or minimize the negative consequences. The current crisis might contribute to create additional risks upon the growing discrepancies between member-states. The European Union is facing a situation where unity and cooperation is needed more than ever. Internal strength of the Union is needed to face the external challenges. Thereforeit is important for the EU to have a common strategy to sustain the economic growth and the dominant position in the world market.

REFERENCES:

Bassanini, A., and Scarpetta, S., and Hemmings, P., (2001),*Economic Growth: The Role of Policies and Institutions. Panel Data Evidence from OECD Countries*, OECD Economics Department Working Paper No. 283, Washington. Available at SSRN: https://ssrn.com/abstract=265091 or http://dx.doi.org/10.2139/ssrn.265091

Baldwin, R. E. (1997). The causes of regionalism. *World Economy*, *20*(7), 865-888.

Bhagwati, J., & Panagariya, A. (1996). The theory of preferential trade agreements: historical evolution and current trends. *The American Economic Review*, *86*(2), 82-87.

European Commission (2020), *The impact of the Covid-19 pandemic on global and EU trade,* DG Trade, European Commission, Brussels, https://trade.ec.europa.eu/doclib/docs/2020/april/tradoc_158713.pdf

European Commision (2020a), *European Economic Forecast,* Institutional paper n.125,https://ec.europa.eu/info/sites/info/files/economy-finance/ip125_en.pdf

European Commission (2020b),

https://ec.europa.eu/commission/presscorner/detail/en/speech_20_822
European Commission (2019), *DG Trade Statistical Guide*, European Commission, Brussels, https://trade.ec.europa.eu/doclib/docs/2013/may/tradoc_151348.pdf
European Council (2020), https://www.consilium.europa.eu/en/policies/covid-19-coronavirus-outbreak-and-the-eu-s-response/
EUROSTAT Database, https://ec.europa.eu/eurostat/web/international-trade-in-goods/data/database
Grossman, G. M., & Helpman, E. (1991). Trade, knowledge spillovers, and growth. *European economic review*, *35*(2-3), 517-526.
Kimbugwe K., Perdikis N., Yeung M.T., Kerr W.A. (2012): *Regional Integration Theory. In: Economic Development through Regional Trade*. Palgrave Macmillan, London
Leitner, Sandra M. et al. (2016), *The Evolving Composition of Intra-EU Trade*, wiiw Research Report, No. 414, The Vienna Institute for International Economic Studies, Vienna.
Lipsey, R. G. (1957). The theory of customs unions: Trade diversion and welfare. *Economica*, *24*(93), 40-46.
Meade, J. E. (1956). *The Belgium-Luxembourg Economic Union, 1921-1939: Lessons from and Early Experiment* (No. 25). International Finance Section, Department of Economics and Sociology, Princeton University.
McCarthy, C. (1996). *Regional integration: part of the solution or part of the problem?*.
Page, S., and Bilal, S. (2001). Regional Integration in Western Africa. *Report prepared for and financed by the Ministry of Foreign Affairs, the Netherlands, ODI, London*.
Rossitza B. Wooster, Tepa M. Banda and Smile Dube (2008), The Contribution of Intra-Regional and Extra-Regional Trade to Growth: Evidence from the European Union, *Journal of Economic Integration,*Vol. 23, No. 1 (March 2008), pp. 161-182.
Robson, P. (1972). *International economic integration: selected readings*. Penguin Books.
Robson, P. (1998). *The economics of international integration*. Psychology Press.
Barro, R., & Sala-i-Martin, X. (1997). Technological diffusion, convergence, and growth. *Journal of Economic growth*, *2*(1), 1-26.
Schiff, M., & Winters, L. A. (2003). *Regional integration and development*. The World Bank.
Stöllinger, R. (2016). *Structural change and global value chains in the EU. Empirica,* 43(4), 801–829. doi:10.1007/s10663-016-9349-z
Viner, J. (2014). *The customs union issue*. Oxford University Press.
World bank database, https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=EU-US-CN
https://trade.ec.europa.eu/doclib/press/index.cfm?id=2138
https://ec.europa.eu/trade/policy/eu-position-in-world-trade/