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# Trade Reorientation and Restructuring towards Fast-growing Emerging Economies: Crisis Response of the EU Member States

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**ABSTRACT.** *This paper deals with the geographical reorientation and product restructuring of trade as a crisis-response strategy. We exploit the logic of constant market share analysis for decomposing the total change in export market shares into the contribution of the competitiveness effect and the structure effect in terms of geographical and product specialisation and apply it to the case of 2008/2009 global financial crisis (GFC) in the 'old' and 'new' EU member states. Constant market share analysis considering both gross and value-added trade data indicates lack of proactive reorientation towards the fast-growing emerging economies in either the EU-15*

*or the EU-10. The product structure effect played a relatively more positive role in the old EU members during the crisis, particularly on account of the mid-tech product group, but technology upgrading was more pronounced in the new EU member states. While the analysis in this paper provides lessons from 2008/2009 GFC with respect to export pattern adjustments, the Covid-19 pandemic crisis differs from the GFC mainly in that it led to major global value chain disruptions which may lead to a certain degree of domestication, diversification and regionalization of GVCs implying trade reorientation from more distant countries towards nearby ones.*

**KEY WORDS:** *trade structure, trade reorientation, crisis response, EU, emerging markets, Constant Market Share Analysis*

## 1. Introduction

Trade has long been recognised as one of the important aspects of a nation's ability to combat a crisis. There are several strains in the literature connecting trade to economic growth and providing theoretical arguments for the importance of trade-based crisis exit strategies. First, vast literature has studied the impact of trade openness or magnitude of trade flows on economic growth with a general conclusion that openness to international trade accelerates development. As stated by Dollar & Kraay [Dollar, Kraay 2004], this widely held belief is »one of the few things on which Nobel prize winners of the both the left and the right agree«. Further, the trade structure affects an economy's growth also independently of the level of trade itself. While this aspect of the link between trade and economic growth has received considerably less attention in the literature, there are few studies that have confirmed existence of the trade structure effects. Kali, Méndez and Reyes [Kali, Méndez, Reyes 2007], for example, show that the trade structure in terms of the number of trade partners and the concentration of trade among partners affects the economic growth of a country. While both the number of trading partners and trade concentration are positively correlated with growth, the former is prevailing in rich and the latter in poor countries. Lederman and Maloney [Lederman, Maloney 2003] find that natural resource abundance has a positive effect on growth whereas export concentration hampers growth.

Moreover, in a dynamic context the trade structure in terms of geographical and product composition has an important influence on future trade develop-

ments and, hence, economic growth due to strong trade persistence. Arora and Vamvakidis [Arora, Vamvakidis (1) 2005; Arora, Vamvakidis (2) 2005] show that trading partners' growth has a strong effect on domestic growth and conclude that countries benefit from trading with fast-growing and relatively more developed countries. Balia-moune-Lutz [Bali moune-Lutz 2011] provides evidence in the case of Africa's trade with China that the destination of exports matters for an exporting country's growth and development. For the EU member states, Kunčič and Tkalec [Kunčič, Tkalec 2016] confirmed the beneficial impact of their intense cooperation with the Growth Markets on economic growth in the 2004–2011 period.

European economies are highly open economies that were among the most severely hurt by the last 2008/2009 global financial crisis (GFC hereafter) that progressed into European sovereign debt crisis. They are therefore particularly suitable for studying geographical and product export patterns adjustments in the wake of the financial and economic crisis. As shown by Bussière et al. [Bussière et al. 2013] fall in trade and investment during 2008–09 crisis was exceptionally large and synchronized, reflecting significant export and investment losses surpassing the GDP drop due to the global nature of 2008 GFC and high import intensity of exports and investment compared to private and government consumption. It would be interesting to see whether the economic crisis has acted as a wakeup call for managers and governments to start looking at enhancing economic cooperation with fast-growing emerging economies either less affected by the crisis or being superior in their recovery. As pointed by Kawai and Petri [Kawai, Petri 2014] emerging economies have figured prominently in the recovery from the recent global economic crisis. Since the second half of the 1990s, there has been clear »growth trend decou-

pling” between the group of advanced and emerging economies. Furthermore, 90% of global economic growth by 2015 was expected to be generated outside Europe, a third of it in China alone<sup>1</sup>.

Projections about the dominance of emerging markets started with the BRICs<sup>2</sup> concepts introduced by the Goldman Sachs research unit [Wilson, *Purushothaman* 2003]. Subsequently, in 2011 when according to O'Neill, Stupnytska and Wrisdale [O'Neill, Stupnytska, Wrisdale 2011] the potential of BRICs' growth had already reached its peak, O'Neill 'invented' the Next-11 group of countries (N-11)<sup>3</sup> having the potential to achieve high growth rates [O'Neill, Stupnytska, Wrisdale 2011, p. 1]. Four countries from the N-11 group – Mexico, South Korea, Turkey and Indonesia (MIST)<sup>4</sup> – satisfied the condition to be classified as Growth Markets since they are economies “outside the Developed World that are responsible for at least 1% of current global GDP”.

In this paper, we study the trade patterns of old and new EU member states before and during different phases of 2008–09 GFC to assess whether trade reorientation and restructuring contributed to exiting the crisis and reducing its negative effects. More specifically, the paper focuses on the following aspects of the trade performance: (i) enhancing cooperation with less affected or better and timely adjusting fast-growing emerging economies; (ii) adjusting the product structure of trade flows; and/or by (iii) increasing competitiveness. By comparing the reaction of

trade to the fast growth of BRICS, the first group of fast-growing emerging markets, and the MIST countries, the paper initially tests how timely the trade reorientation response was. Second, the paper aims to examine whether they have responded to the crisis by restructuring and adjusting the product composition of their exports. We expect the EU to adjust faster in terms of the geographical reorientation of exports than in terms of the product export structure because evidence on exporters' behaviour suggests that a new product entry takes more time and higher sunk costs than entering a new export market [Freund, Pierola 2010]. Third, we expect that the competitiveness effect has not significantly contributed to an increase in European market shares. Some economists even argue that the deteriorating competitiveness of southern European periphery countries driven by the exceptional growth of unit labour costs is one of the major reasons behind the Eurozone crisis (see [Chen et al. 2013; Dadush, Stancil 2011]).

Further, the paper aims to test whether 'old' established developed economies such as old EU member states (EU-15) have performed differently to economies in transition which joined the EU at the big bang enlargement in 2004. Transition economies as new members (EU-10) of the EU are now all part of the same economic milieu but their (institutional) history is different, and they also vary in terms of their economic structures, level of development, human capital endowments and degree of integration into the global eco-

1 IMF (2012). World Economic Outlook, Coping with High debt and Sluggish Growth, Washington DC. <https://www.imf.org/external/pubs/ft/weo/2012/02/pdf/text.pdf>, accessed 30.04.2014.

2 Brazil, Russia, India, China and South Africa.

3 The Next-11 group includes, apart from BRICS, Bangladesh, Egypt, Indonesia, Iran, Korea, Mexico, Nigeria, Pakistan, the Philippines, Turkey and Vietnam.

4 MIST represents an even more heterogeneous group of countries than BRICS in terms of their development level. According to World Bank data (2014), GDP per capita ranges from USD 3,557 in Indonesia to USD 22,590 in South Korea with Mexico and Turkey in between, with USD 9,749 and USD 10,666 per capita, respectively. With the exception of Indonesia, they are all members of the OECD. Meanwhile, in the BRICS group India is an outlier with only USD 1,489 per capita GDP, followed by China with USD 6,091, Brazil USD 11,340 and Russia USD 14,037, respectively (World Bank (2014). Available at: <http://data.worldbank.org/indicator/NY.GDP.PCAP>. CD, accessed February 2014).

nomy. Gräbner et al. [Gräbner et al. 2019] showed that the ‘old’ and ‘new’ EU member states differ in their trade models (i.e. the ‘high-tech model’, the ‘periphery model’, the ‘flexible labour market model’ and the ‘finance model’ were identified in the former and ‘industrial workbench model’ and the ‘primary goods model’ in the latter group of the EU member states), and demonstrated their diverse implications for the economic development and income inequality. Hence, we expect that the two groups of member states differ in their trade responses to the crisis despite the common EU trade policy.

In order to test the above-mentioned hypotheses, we exploit the logic of constant market share analysis (CMSA) of trade flows which allows us to decompose the total change in export market shares into the contribution of the structure effect encompassing both geographical and product specialisation and a competitiveness effect resembling the price and non-price relative competitiveness of EU member states. CMSA therefore allows us to isolate the contribution of the geographical structure to the development of export market shares and compare it with other factors, e.g. export product structure and residual overall competitiveness. Although some shortcomings of CMSA such as its dependence on the level of product disaggregation are important, the most interesting feature of CMSA is its simplicity in identifying the key factors of the differentiated behaviour of a given variable, and in allowing cross-country comparisons. Cheptea, Fontagne and Zignago [Cheptea, Fontagne, Zignago 2014] recently showed that the results of CMS decomposition are comparable with the results based on an econometric shift-share decomposition.

CMSA is applied to EU-15 and EU-10 trade data before the onset and during the GFC, i.e. in the 2005–2012 period. Following the objectives of this paper, we only consider transition economies in the

group of new EU-10 member states; hence, we exclude Malta and Cyprus from the analysis. Croatia is also excluded because it entered the EU after our observation period. For the geographical breakdown where the focus is on the emerging markets we distinguish between two groups of emerging economies: BRICS (Brazil, Russia, India, China and South Africa) and MIST (Mexico, Korea, Turkey and Indonesia) and the residual “rest of the world” category, while for the product structure we consider broad product groups according to their technological intensity of production, i.e. low, medium and high-tech product groups, based on the 2-digit level of the Standard International Trade Classification (SITC.Rev3).

An important issue in most studies that link trade to economic growth relates to the fact they use gross trade data and link them to value-added-based economic growth. The increasing role of global and regional production networks and associated growing importance of supply-chain trade has led to gross trade flows being increasingly unrepresentative of value-added flows. In line with the global trend, the share of foreign content of European exports has been steadily increasing in the last few decades. In 2009, the foreign content of exports in new member states (EU-10) ranged between 25% and 45% as these countries began to specialise in stages of the electronic and automotive value chains revolving in large part around Germany where the foreign content of exports rose from one-fifth in 1995 to nearly one-third in 2009 [Ahmad, Ribarsky 2014]. The problem of gross export data is that we do not know how much domestic value added is generated by the exports and that bilateral gross exports do not capture how much value added a country sells in particular destinations. These two aspects are crucial for understanding the role of international trade for economic growth. It emerges directly from standard mac-

ro-models, as shown by Johnson [Johnson 2014], that value-added exports directly link foreign final expenditure with demand for domestic value added. Hence, we test the robustness of traditional CMSA results based on gross trade data by replicating the CMSA on value added in trade data. We use the OECD's TiVA database and consider EU-15 and EU-10 domestic value added embodied in foreign final demand for selected years in the 1995–2009 period.

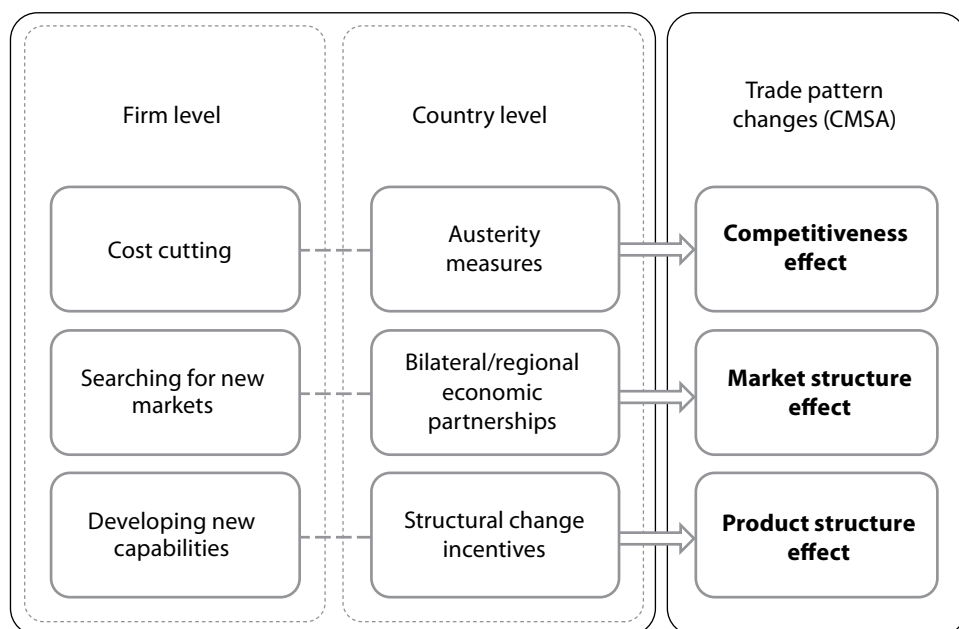
The article is structured in the following way. The second section presents the conceptual framework that links crisis response strategies to trade performance in terms of both competitiveness and structural aspects. The third section proceeds with a presentation of the CMSA methodology and description of the data. In the fourth section, we present the empirical results of the CMSA based on both gross and value-added trade data. The next chapter then discusses the results and provides im-

plications for policymakers and managers. The last chapter concludes.

## 2. Relating Crisis Response Strategies to Changing Trade Patterns

Svetličič and Jaklič [Svetličič, Jaklič 2012] indicated that at the firm level there are theoretically three major responses to a crisis that usually differ with respect to the timing of their occurrences. Initially, the reaction is usually more defensive (rationalisations of all kinds) while later firms may turn to more proactive reactions. Typically, when faced with a crisis what firms first do is rationalise their existing strategies, e.g. improving efficiency, cutting costs and employment; in short, they apply a cost-cutting strategy as a response to falling demand in the domestic market. Later, in the second stage, they start looking for new markets and rede-

**Figure 1:** Linking Crisis Response Strategies and Trade Pattern Dynamics



fining the implementation of their strategies. Finally, they develop new capabilities (products, services) or even development models. They may also combine all three approaches simultaneously. Some may even adjust in advance via proactive policies based on forecasting such changes.

The basic reaction typology could be similar when analysing governments' reactions to the crisis. Politicians are like managers; initially more defensive, they react basically only when forced to, under the pressures of reality, when there are no other options. More proactive or combined approaches are more an exception and could take place later on with escalation of the crisis. At first, governments try to reduce costs and implement austerity measures to reduce all kinds of deficits. With intensification of the crisis, such a short-term approach is supplemented by a more proactive approach focusing more on revising existing or even introducing new development strategies, including improving their implementation. The policy measures are targeted at sources of longer-term competitiveness, e.g. education and innovation systems, new bilateral and regional economic partnerships etc., aiming at providing incentives for structural changes and supporting firms in the search for new markets.

Implementation of the above-mentioned crisis response strategies at micro- and macro-level reflects in countries' trade patterns. Figure 1 links different crisis response strategies to a constant export market share decomposition, i.e. CMSA, of trade patterns. In the context of CSMA, initial rationalisation strategies would lead to an increased competitiveness effect. A geographical reorientation strategy towards exporting to fast-growing markets would result in a positive market structure effect, while favourable product restructuring and the adjustment of product structure to global demand developments would be reflected in a product structure effect.

### 3. Methodology and Data

#### CONSTANT MARKET SHARE ANALYSIS

The general idea behind CMSA is that the product and geographical structure of a country's exports can affect its total export growth which, in turn, influences economic growth in general. If a country or a group of countries is more (less) specialised in export products and destination markets where demand is strong (weak) in comparison to other products and markets, then its aggregate export market share will tend to grow. CMSA builds on this idea by decomposing a country's export performance into the contribution of the product and the destination market composition of its exports as well as competitiveness based on either price or non-price factors.

This method does not rely on a specific theoretical framework and does not provide any ultimate explanation of the changes in market shares. But its appeal lies in its elegance and usefulness for determining to which factors a gain or loss in a country's export market share is attributable. Moreover, it allows cross-country comparisons. CMSA has been refined into several different formulas since its introduction to trade analysis by Tyszynski [Tyszynski 1951] and further developments by Balassa [Balassa 1965], Houston [Houston 1967], Leamer and Stern [Leamer, Stern 1970] and Richardson [Richardson (1) 1971; Richardson (2) 1971] etc.

In principle, CMSA decomposes a change in the aggregate export market share (the *total effect* – TE) into two main parts [Di Mauro et al. 2005]: (i) a *structure effect* (SE), indicating the hypothetical change in the aggregate export market share which would have occurred if a country's share in world markets had remained constant in each product/destination market; and (ii) a *competitiveness effect* (CE), representing the difference between the actual change in the export share



and the above-mentioned structure effect. The SE is further decomposed into three terms: (i) a *product effect*, which measures whether the relative specialisation of the EU-15(EU-10) exports is directed to dynamic products in world demand; (ii) a *market effect*, which measures whether the export specialisation of the EU-15(EU-10) in terms of destination markets is directed to dynamic export market destinations; and (iii) a residual term called the *mixed structure effect* comprising the interaction effects between the product and market structure.

We follow the Di Mauro et al. (2005)'s CMSA formulation of decomposing the variation in the aggregate export market share of the EU-15(EU-10) between two periods (TE) in the following way:

$$g - g^* = [\Sigma_i \Sigma_j (\theta_{ij} - \theta_{ij}^*) g_{ij}^*] + [\Sigma_i \Sigma_j \theta_{ij} (g_{ij} - g_{ij}^*)], \quad (1)$$

where  $g = \frac{x_t - x_{t-1}}{x_{t-1}}$  and  $g^* = \frac{x_t^* - x_{t-1}^*}{x_{t-1}^*}$  denote a percentage change in EU-15(10) and world exports in period  $t$ , respectively.  $\theta_{ij} = \frac{x_{ij,t-1}}{x_{t-1}}$  and  $\theta_{ij}^* = \frac{x_{ij,t-1}^*}{x_{t-1}^*}$  represent the share of product  $i$  to destination market  $j$  in total EU-15(10) and world exports in period  $t-1$ , respectively. Meanwhile,  $g = \Sigma_i \Sigma_j \theta_{ij} g_{ij}$  and  $g^* = \Sigma_i \Sigma_j \theta_{ij}^* g_{ij}^*$ , where  $g_{ij}$  and  $g_{ij}^*$  indicate a percentage change in EU-15(10) and world exports of product  $i$  to destination market  $j$ , in period  $t$ , respectively.

The first term in square brackets in equation (1) is the *structure effect*. It is positive if the EU-15(10)'s export structure is more concentrated on high-growth products/markets than the world structure. This effect can be further decomposed into three terms:

$$i. \text{ product effect} = \Sigma_i (\theta_i - \theta_i^*) g_i^* \quad (2)$$

$$ii. \text{ market effect} = \Sigma_j (\theta_j - \theta_j^*) g_j^* \quad (3)$$

$$iii. \text{ mixed structure effect} = \Sigma_i \Sigma_j [(\theta_{ij} - \theta_{ij}^*) - (\theta_i - \theta_i^*) \frac{\theta_{ij}^*}{\theta_i^*} - (\theta_j - \theta_j^*) \frac{\theta_{ij}^*}{\theta_j^*}] g_{ij}^*, \quad (4)$$

where  $\theta_i = \Sigma_j \theta_{ij}$  and  $\theta_i^* = \Sigma_j \theta_{ij}^*$  indicate the share of product  $i$  in total EU-15(10)

and world exports in period  $t-1$ , respectively;  $\theta_i = \Sigma_j \theta_{ij}$  and  $\theta_i^* = \Sigma_j \theta_{ij}^*$  represent the share of market  $j$  in total EU-15(10) and world exports in period  $t-1$ , respectively. Meanwhile,  $g_i^* = \frac{\Sigma_j \theta_{ij}^* g_{ij}^*}{\theta_i^*}$  and  $g_j^* = \frac{\Sigma_i \theta_{ij}^* g_{ij}^*}{\theta_j^*}$  denote the growth of world exports of product  $i$  (to market  $j$ ) in period  $t$ .

The *mixed structure effect* is a residual and its interpretation is not entirely straightforward. Given that it is impossible to completely dissociate product and geographical structures, the residual will comprise the interaction effects between them. The fact that the two structures are not independently distributed, i.e. for a specific product (market) the geographical (sectoral) distribution of exports differs from the geographical (sectoral) distribution of total exports, is one of the factors affecting the magnitude of this effect. The second term in square brackets in equation (1) is the *competitiveness* or 'pure' *market share effect*. It gives the aggregated impact of changes in market shares of each product/destination market [Di Mauro et al. 2005].

Although some aspects of the technique have been improved, several shortcomings of the CMSA methodology remain (see [Bowen, Pelzman 1984; Fagerberg, Sollie 1987; Simonis 2000; Loveridge, Selting 1998]). For example, CMSA results depend on the level of product disaggregation that is used. In addition, CMSA calculations should ideally be based on volume data of trade flows [Milana 1988]. However, due to the unavailability of such volume data we are unable to distinguish between the volume and price components in a direct manner. Instead, we base our analysis on the values of the trade flows. In order to minimise the potential deficiencies of applying this methodology, we follow the refinements of Simonis [Simonis 2000], Foresti [Foresti 2004] and the Di Mauro et al. [Di Mauro et al. 2005]. Accordingly, the calculations are performed annually in order to minimise the risk of violating the assumption of constant export struc-

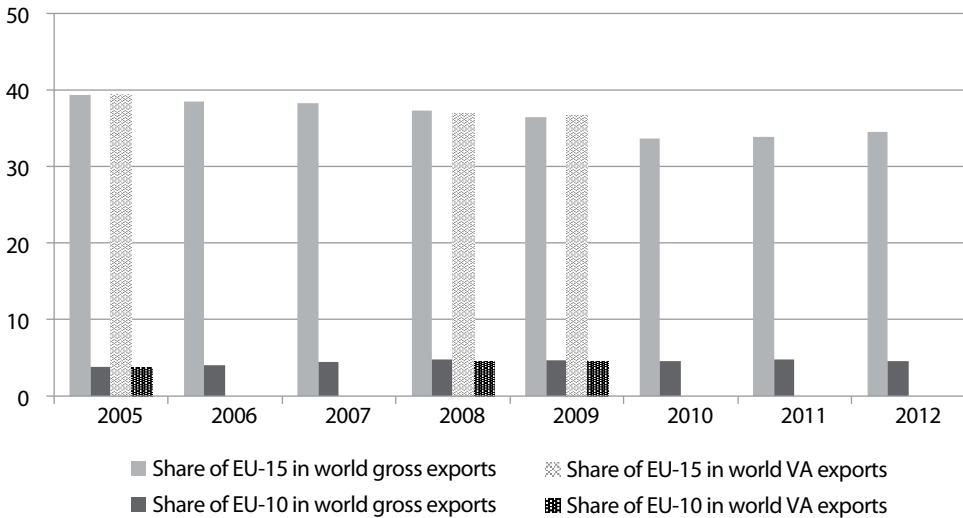
tures. Further, in contrast to using the initial structure for a multi-year analysis, we instead use the average of the annual effect over the studied period.

### 3.2 THE DATA AND PRODUCT AND GEOGRAPHICAL DISAGGREGATION

Our analysis is based on annual export-of-goods data for two groups of EU member states (MS), the groups of old MS (EU-15) and new MS (EU-10) in the 2005–2012 period obtained from the United Nations Commodity Trade Statistics Database (UN Comtrade). Since the share of trade of an individual member state with other member states (intra-EU trade) is larger than with non-members for all MS and at the same time the importance of intra-EU trade varies considerably among MS, we want to consider both intra- and extra-EU exports in our analysis of the response to the crisis.<sup>5</sup> Namely, an important part of

geographical reorientation in the case of the EU-10 has taken place in intra-EU trade. Trade data are in current USD and disaggregated to the 2-digit level of the Standard International Trade Classification (SITC.Rev3) and following Di Mauro et al. [Mauro et al. 2005] further grouped according to their technological intensity of production into three broad categories, i.e. low, medium and high-tech product groups. See notes below the Table 2 for the sector grouping according to technology levels used in the analysis.<sup>6</sup> In terms of geographical breakdown, exports cover three destinations: BRICS (Brazil, Russia, India, China and South Africa), MIST (Mexico, Korea, Turkey and Indonesia) and the rest of the world. EU-15 and EU-10 trade data in terms of value added are obtained from the OECD's TiVA database measured as domestic value added embodied in foreign final demand for selected years in the

**Figure 2:** EU-15 and EU-10 Export Market Share Developments (in Per Cent) Including Intra-EU Dispatches, 2005–2012 Period



<sup>5</sup> Other studies based on CMSA usually exclude intra-EU trade.

<sup>6</sup> However, the technological intensity of some individual products might be classified somewhat differently if the classification would be carried out at higher digit level.



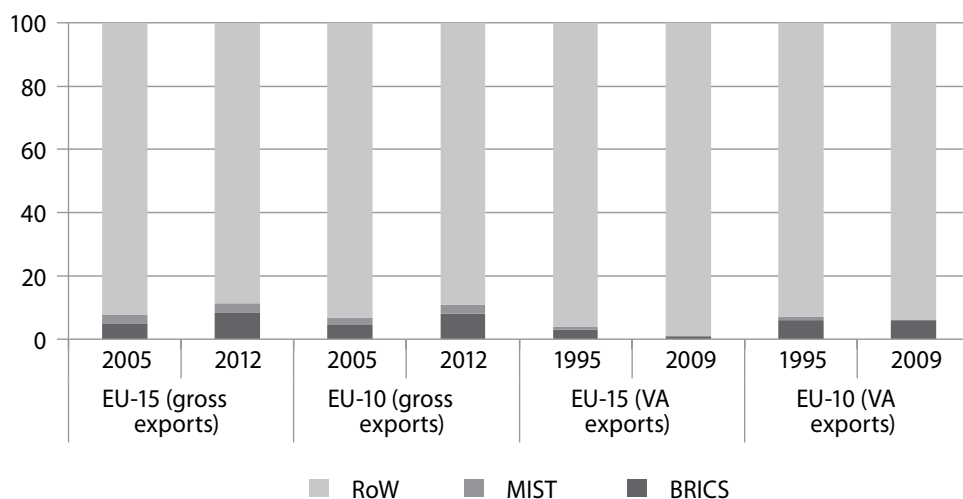
1995–2009 period. We use the same geographical breakdown for both types of data while the product classification is different due to data availability. The value-added trade data are aggregated to 18 economic activities, including both products and services.

In Figure 2 we present export market share developments, while Figure 3 depicts the geographical structure of exports for two groups of EU member states, the EU-15 and EU-10. As shown in Figure 2, throughout the observed period the EU-15's market share in world exports dropped from 39.3% in 2005 to 34.5% in 2012 as a result of below-world-average growth of exports in the 2005–2010 period. The most substantial market share deterioration in 2010 when exports grew almost 50% slower than world exports. On the other hand, the EU-10's share increased from 3.8% to 4.6% throughout the observed period. Export growth rates of the EU-10 were substantially higher than the world average before the onset of the crisis, most likely a result of the still ongoing transition effect and improved access to the EU-15 market

after their accession to the EU. Their market share started to deteriorate in 2009 and then successfully recuperated in 2011. In 2012 it fell again below the average world growth of exports as a result of the deteriorating situation in most of the EU-10 (a delayed crisis effect). Interestingly, in 2005 the share of both groups of EU member states in world value-added (VA) exports was practically the same as their share in world gross trade, while later in 2008 and 2009 the difference between the gross and VA shares increased slightly. The fall in export share during the initial year of the crisis (2009/2008) was smaller in terms of value added than the gross trade data for both the EU-15 and EU-10, which indicates the improving export structure in terms of value added.

During the investigated period, the noticeable changes in market shares were accompanied by important changes in the structure of the trade flows. The regional structure of EU member states' gross exports (Figure 3) changed noticeably and in a similar manner for both groups of EU MS. The share of BRICS, although very

**Figure 3:** The Regional Structure of EU-15 and EU-10 Exports (Intra- and Extra-EU) in Selected Years



small, almost doubled for both groups of EU member states throughout the observed period and, by the end of the period, represents slightly more than 8% of exports for both the EU-10 and EU-15. The rise in the importance of MIST as a European export destination was less significant than of BRICS, i.e. 13% and 19% throughout the period observed for the EU-10 and EU-15, respectively. When we use the VA trade data, additional changes in export patterns are revealed. The share of VA exports to MIST is practically negligible, suggesting that the prevailing share of exports to MIST countries is vertical in nature, either containing low domestic VA or not intended for final consumption in those countries. To a certain extent, this observation also holds for BRICS but with an important difference. While the share of BRICS remained practically unchanged for the EU-10 and roughly corresponded to the share in terms of gross trade, the importance of BRICS in the EU-15's export structure was significantly lower in VA terms compared to gross trade and decreased from 3% in 1995 to only 1% in 2009. This suggests that a dominant and increasing part of EU-15 exports to BRICS is supply-chain trade while for the EU-10 BRICS countries are relatively more important as final markets with a 6% share of domestic EU-10 value added embodied in BRICS' final demand. This observation suggests a different type of trade specialisation between the two groups of EU member states and BRICS.

Based on the above facts about trade dynamics and patterns, the question arises as to what extent the countries' trade performance can be linked to the product and regional composition of the trade flows on one hand and the competitive position on the other. We attempt to answer this question in the following section by applying the CMSA methodology to export data for two groups of EU member states, i.e. the EU-15 and the EU-10.

## 4. Empirical Results of the CMSA

### 4.1 CMSA OF GROSS TRADE DATA

In this section, we present and discuss the results of the CMSA for the old EU-15 and new EU-10 member states based on 'conventional' gross trade data. Particular attention is given to the relative importance of the market effect to highlight the role of the geographical reorientation of exports during the economic crisis in the two groups of EU MS.

The results in Table 1 indicate a decreasing average market share of the EU-15 in world gross exports throughout the period considered since the difference between the export growth rate of the EU-15 and the growth rate of world total exports, i.e. the total effect (TE), is negative in both sub-periods. This negative TE was mainly driven by the competitiveness effect (CE), while the contribution of the structure effect (SE) with respect to both the product and market effect was positive in the pre-crisis period and became disadvantageous during the crisis. However, a positive trend can be observed in post-crisis-eruption years; in 2011 on account of a favourable structure effect in terms of both geographical and product composition while in 2012 the positive TE was driven by significantly improved competitiveness along with the positive geographical structure of the exports.

For the group of new EU member states (EU-10) the results of the CMSA on the contrary reveal an overall positive total effect where the highly positive TE in the pre-crisis period outweighs the negative total effect during the crisis. The pre-crisis TE was driven by the competitiveness effect which was very high before the crisis started. However, the structure effect turned into a negative direction in 2007; hence its contribution to the TE in the second crisis period was negative due to the unfavourable product and regional structure combined with the negative contri-

bution of the competitiveness effect. The competitiveness of new EU MS namely deteriorated considerably in 2010 and 2012.

Looking more closely at the product structure effect in Table 2, the contribution of the product groups according to the technology intensity shows more stability in product composition for the old members where the medium-tech group contributes positively to the product effect, while for the new MS the shift from labour-intensive towards medium- and high-tech-intensive products is observed when comparing the product effect in the pre-crisis and crisis periods. For the old EU members, the top three product groups with the most favourable contribution to the product effect were the medium-tech product groups of *chemical products, rubber and plastic products*

(CHE), *manufactures of transport equipment* (MTR) and *manufactures of agricultural and industrial machinery, except electrical machinery* (MAI). For the EU-10, the product groups with the most advantageous contribution to the structure effect were low-tech, resource-based *wood and wood products, including furniture* (WOD) and *fabricated metal products, except machinery and transport equipment* (BMA), mid-tech *manufactures of transport equipment* (MTR) and the high-tech group of *manufactures of electrical machinery, apparatus, appliances and supplies* (MEL). The results suggest that the new member states (EU-10) were relatively more successful in increasing the technology intensity of their exports during the period observed, while in the EU-15 structural reforms were too slow to reorient production further to-

**Table 1:** Main Results of the Constant Market Share Analysis of EU-15 and EU-10 Gross Exports: Structure and Competitiveness Effects

	2005	2006	2007	2008	2009	2010	2011	2012	2005-12	2005-08	2009-12
<b>EU-15</b>											
<b>Total effect (TE)</b>	<b>-3.63</b>	<b>-2.46</b>	<b>-0.61</b>	<b>-2.77</b>	<b>-1.83</b>	<b>-9.20</b>	<b>0.55</b>	<b>2.02</b>	<b>-2.24</b>	<b>-2.37</b>	<b>-2.12</b>
<b>Structure effect (SE)</b>	2.34	-0.31	0.69	0.21	-0.79	-1.44	0.96	0.15	0.23	0.73	-0.28
product effect (PE)	-0.04	-0.18	0.81	0.65	-0.35	-0.56	0.69	-0.01	0.13	0.31	-0.06
market effect (ME)	1.37	-0.23	-0.16	-0.65	-0.38	-1.10	0.34	0.33	-0.06	0.08	-0.20
mixed effect	1.01	0.10	0.04	0.20	-0.06	0.22	-0.08	-0.17	0.16	0.34	-0.02
<b>Competitiveness effect</b>	<b>-5.98</b>	<b>-2.16</b>	<b>-1.30</b>	<b>-2.98</b>	<b>-1.05</b>	<b>-7.75</b>	<b>-0.41</b>	<b>1.87</b>	<b>-2.47</b>	<b>-3.10</b>	<b>-1.84</b>
<b>EU-10</b>											
<b>Total effect (TE)</b>	<b>3.79</b>	<b>7.16</b>	<b>13.36</b>	<b>8.11</b>	<b>-1.28</b>	<b>-3.69</b>	<b>6.37</b>	<b>-4.58</b>	<b>3.65</b>	<b>8.11</b>	<b>-0.80</b>
<b>Structure effect (SE)</b>	2.31	0.16	-0.07	-0.93	-1.43	-0.85	-0.08	0.71	-0.02	0.37	-0.41
product effect (PE)	-0.14	0.34	0.25	-0.40	-0.86	0.25	-0.38	0.39	-0.07	0.01	-0.15
market effect (ME)	1.55	-0.26	-0.19	-0.84	-0.46	-1.38	0.46	0.50	-0.08	0.07	-0.22
mixed effect	0.90	0.08	-0.13	0.32	-0.11	0.28	-0.16	-0.17	0.13	0.29	-0.04
<b>Competitiveness effect</b>	<b>1.48</b>	<b>7.00</b>	<b>13.43</b>	<b>9.04</b>	<b>0.15</b>	<b>-2.84</b>	<b>6.45</b>	<b>-5.30</b>	<b>3.68</b>	<b>7.74</b>	<b>-0.38</b>

wards more high-tech sectors, resulting in the still dominant effect of the ‘old’ product structure.

The contribution of the market effect to the SE shown in Figure 4 is negative for both groups of emerging economies, i.e. the BRICS and MIST groups, and this holds for both old and new EU mem-

ber states<sup>7</sup> in both sub-periods. However, due to the small share of exports going to these two groups of countries the overall impact cannot be so substantial. Nevertheless, it can lead to the conclusion that both groups of countries have in this regard not exploited the potential of enhancing trade with BRICS and MIST as an effective cri-

**Table 2:** Contribution of Products to the Structure Effect in the EU-15 and EU-10

		EU-15			EU-10		
		2005-2012	2005-08	2009-2012	2005-2012	2005-08	2009-2012
<b>Low-tech</b>		-0.02	-0.04	0.00	0.27	0.63	-0.09
<b>products</b>	FOD	0.09	0.12	0.07	-0.18	-0.25	-0.11
	TEX	-0.12	-0.15	-0.08	-0.03	0.03	-0.08
	WOD	-0.01	-0.01	-0.01	0.22	0.34	0.10
	PAP	0.03	0.05	0.01	0.02	0.02	0.01
	MNM	-0.01	0.00	-0.02	-0.02	-0.02	-0.03
	BMI	-0.05	-0.11	0.00	0.09	0.18	-0.01
	BMA	0.03	0.06	0.01	0.17	0.32	0.03
<b>Medium-tech</b>		0.90	1.28	0.53	-0.08	-0.18	0.01
<b>products</b>	CHE	0.47	0.64	0.29	-0.40	-0.58	-0.22
	MAI	0.26	0.40	0.13	0.07	0.16	-0.02
	MTR	0.17	0.23	0.12	0.25	0.24	0.25
<b>High-tech</b>		-0.55	-0.69	-0.42	-0.09	-0.25	0.07
<b>products</b>	MIO	-0.15	-0.18	-0.12	-0.24	-0.35	-0.13
	MEL	-0.40	-0.51	-0.30	0.15	0.10	0.21
<b>Other products</b>		-0.20	-0.23	-0.17	-0.17	-0.19	-0.15

**Note:**

**Low-tech**, resource-based sectors comprise: food, beverages and tobacco (FOD); textile, leather apparel and leather industries (TEX); wood and wood products, including furniture (WOD); paper and paper products, printing and publishing (PAP); non-metallic mineral products (MNM); basic metal industries (BMI); fabricated metal products, except machinery and transport equipment (BMA).

**Medium-tech** product groups comprise: chemical products, rubber and plastic products (CHE); manufactures of transport equipment (MTR); and manufactures of agricultural and industrial machinery, except electrical machinery (MAI).

**The high-tech group** includes: professional, scientific, measuring and controlling equipment, photographic and optical goods, office and data processing machines (MIO); and manufactures of electrical machinery, apparatus, appliances and supplies (MEL).

Other goods excluding all of the above and fuels and “other goods not elsewhere specified”.

7 However, it turned from negative throughout the period 2005–2008 and 2010–2011 to positive only in 2012 in both groups of countries. It seems that the crisis has, with a certain time lag, some positive effects.

sis exit strategy. Somewhat unexpectedly, the rest of the world contributed positively to SE effects throughout the entire period in the case of both groups of EU MS. The positive effect of cooperation with the rest of the world in the case of the EU-15 can be interpreted firstly in terms of the high share of trade with other industrial coun-

tries, particularly the USA<sup>8</sup> and in the light of Arora and Vamvakidis' [Arora, Vamvakidis (1) 2005; Arora, Vamvakidis (2) 2005] conclusions that trade with highly developed countries can stimulate one's growth.

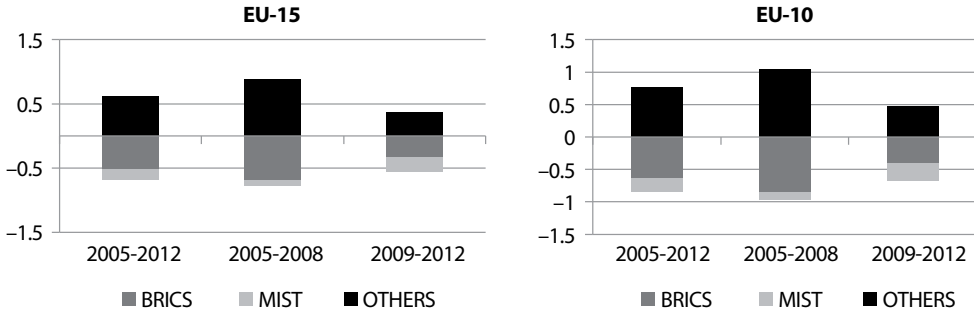
When exploring the competitiveness effect in Table 3, we find a negative contribution of all four technology groups to

**Table 3:** Contribution of Products and Markets to the Competitiveness Effect in the EU-15 and EU-10

		EU-15			EU-10		
		2005-2012	2005-2008	2009-2012	2005-2012	2005-2008	2009-2012
<b>Low-tech</b>		-0.50	-0.62	-0.37	0.48	1.05	-0.09
<b>products</b>	FOD	-0.17	-0.18	-0.16	0.38	0.57	0.19
	TEX	-0.04	-0.08	0.01	-0.23	-0.27	-0.19
	WOD	-0.04	-0.02	-0.06	0.03	0.18	-0.12
	PAP	-0.03	-0.03	-0.03	0.10	0.15	0.05
	MNM	-0.08	-0.11	-0.05	0.02	0.10	-0.07
	BMI	-0.08	-0.13	-0.03	0.08	0.05	0.11
	BMA	-0.06	-0.06	-0.06	0.11	0.27	-0.05
<b>Medium-tech</b>		-0.82	-1.00	-0.64	1.99	3.91	0.06
<b>products</b>	CHE	-0.35	-0.35	-0.36	0.60	0.91	0.30
	MAI	-0.16	-0.15	-0.16	0.37	0.81	-0.07
	MTR	-0.31	-0.51	-0.12	1.01	2.19	-0.17
<b>High-tech</b>		-0.61	-0.61	-0.61	1.29	2.91	-0.33
<b>products</b>	MIO	-0.22	-0.24	-0.21	0.42	0.78	0.07
	MEL	-0.38	-0.37	-0.40	0.87	2.13	-0.40
<b>Other products</b>		-0.54	-0.88	-0.21	-0.08	-0.14	-0.02
<b>BRICS</b>		0.12	0.01	0.24	0.62	0.77	0.46
<b>MIST</b>		-0.05	-0.01	-0.09	0.14	0.19	0.09
<b>Other markets</b>		-2.54	-3.10	-1.98	2.92	6.78	-0.94
<b>Total CE</b>		-2.47	-3.10	-1.84	3.36	7.94	-1.22

8 In this light, we can understand the start of negotiations on a Transatlantic Trade and Investment Partnership (TTIP) in Washington in July 2013.

**Figure 4: Contribution of Markets to the Structure Effect in the EU-15 and EU-10**



the competitiveness effect of the EU-15 in both sub-periods. Moreover, the EU-15 experienced decreased competitiveness in practically all product groups except for textile products in the second sub-period. To some extent, this also holds for the EU-10 in the second sub-period (the exception is the mid-tech product class) while the EU-10 was gaining competitiveness in all four groups before the onset of the crisis. The contribution of the geographical orientation of European exports to the competitiveness effect was positive in BRICS countries for both the EU-15 and EU-10. This may indicate that in both groups of countries enhancing trade with BRICS has helped improve their competitiveness. The contribution of the MIST group of emerging economies was positive but weak in new EU members (EU-10) and negative in old members (EU-15). The negative CE in the case of MIST for the EU-15 reinforces our argument that trade with this group of countries is basically developing on traditional, past North-South patterns resulting in a deterioration of relative competitiveness and decreasing market shares. The MIST countries have simply not yet attracted the attention of policymakers and businessmen in European countries. Before the crisis, the positive CE in the EU-10 was also driven by growing competitiveness in the group of other countries.

#### 4.2 CMSA BASED ON VALUE-ADDED TRADE DATA

The CMSA based on value-added trade data in Table 4 confirms the negative total effect for the EU-15 in the pre-crisis period 2005–2008. The decrease in the EU-15's world market share in terms of value added is even more pronounced than the one identified based on gross data and is driven not only by negative competitiveness but also to a large extent by the unfavourable structure effects in terms of both markets and products. Further, such a trend is not limited to the recent pre-crisis period but is also identified in the 1995–2000 period. However, the negative structure effect disappeared at the start of the crisis.

On the contrary, but in line with the gross data results, the EU-10 exhibits an increasing market share in world value-added exports throughout the 1995–2008 period as a result of both a positive competitiveness and structure effect which was exclusively driven by the market structure, while the contribution of industry structure was negative. Like in the case of gross trade, the competitiveness of the new EU MS deteriorated with the emergence of the crisis.

Looking more closely at the market structure effect in Table 5, the findings based on gross trade are also largely confirmed in the case of VA trade. The contribution of the market effect to the



**Table 4:** Main Results of the Constant Market Share Analysis of EU-15 and EU-10 Value-Added Exports: Structure and Competitiveness Effects, 1995–2009

	1995-2009	1995-2000	2000-2005	2005-2008	2008-2009
<b>EU-15</b>					
<b>Total effect (TE)</b>	<b>–18.97</b>	<b>–12.69</b>	<b>3.63</b>	<b>–9.57</b>	<b>–0.33</b>
<b>Structure effect (SE)</b>	–17.88	–14.99	4.94	–8.00	0.17
product effect (PE)	–0.78	–1.36	0.68	–1.48	1.38
market effect (ME)	–19.50	–14.98	3.79	–8.73	0.41
mixed effect	2.41	1.35	0.48	2.20	–1.62
<b>Competitiveness effect</b>	–1.09	2.29	–1.32	–1.56	–0.50
<b>EU-10</b>					
<b>Total effect (TE)</b>	<b>122.46</b>	<b>13.60</b>	<b>77.41</b>	<b>32.36</b>	<b>–0.92</b>
<b>Structure effect (SE)</b>	73.04	2.00	51.31	19.00	0.73
product effect (PE)	–5.27	–3.20	–0.54	–2.07	0.54
market effect (ME)	74.99	2.62	51.20	20.21	0.95
mixed effect	3.32	2.58	0.65	0.85	–0.76
<b>Competitiveness effect</b>	49.41	11.59	26.11	13.37	–1.65

**Table 5:** Contribution of Goods and Services to the Structure and Competitiveness Effects in the EU-15 and EU-10 Based on Value-Added Exports, 1995–2009

	<b>EU-15</b>				<b>EU-10</b>			
	1995-2000	2000-2005	2005-2008	2008-2009	1995-2000	2000-2005	2005-2008	2008-2009
<b>Contribution to SE</b>								
<b>BRICS</b>	–2.24	–7.82	–10.04	2.71	–1.34	–3.08	–5.93	1.65
<b>MIST</b>	–2.18	–3.09	–2.46	0.83	–2.18	–3.03	–2.32	0.73
<b>Other markets</b>	–10.56	15.85	4.5	–3.36	5.57	57.41	27.25	–1.65
<b>Contribution to CE</b>								
<b>BRICS</b>	0.01	0.56	–0.59	–0.34	–0.28	3.81	0.75	–1.09
<b>MIST</b>	0.21	–0.04	–0.01	–0.07	0.62	1.24	0.99	–0.01
<b>Other markets</b>	2.07	–1.84	–0.95	–0.07	6.93	21.05	11.63	–0.55

**Notes:**

Goods include the following industries: Agriculture, hunting, forestry and fishing; Mining and quarrying; Food products; beverages and tobacco; Textiles, textile products, leather and footwear; Wood, paper, paper products, printing and publishing; Chemicals and non-metallic mineral products; Basic metals and fabricated metal products; Machinery and equipment, nec; Electrical and optical equipment; Transport equipment; Manufacturing nec, recycling.

**Services include:** Electricity, gas and water supply; Construction; Wholesale and retail trade; Hotels and restaurants; Transport and storage, post and telecommunication; Financial intermediation; Business services; Other services.

structure effect shown in Table 5 is negative for both groups of emerging economies, i.e. the BRICS and MIST groups, and this holds for both old and new EU member states throughout the 1995–2008 period, but turned positive in the initial year of the crisis (2008/2009). Moreover, for the EU-15 the contribution of the geographical orientation of EU-15 exports to the competitiveness effect was also negative in both BRICS and MIST countries after 2005, while the contribution of BRICS and MIST to the competitiveness of the EU-10 was positive in the 2000–2008 period.

Taking value-added trade in both goods and services into consideration, the difference in the contribution of the product structure to the CE and SE between the two groups of EU member states proves to be significant. In the period before the crisis, both goods and services industries contributed positively to the SE and CE in the new EU-10, while in the old EU-15 only services contributed positively to the SE whereas goods exhibited a negative impact on both the SE and CE (Table 6). However, in the first year of the crisis, goods took on a more positive role in the structure effect of trade in both groups of EU member states.

## 5. Discussion of the Results and Implications

### 5.1 DISCUSSION OF THE RESULTS

The CMS analysis reveals that, before the crisis, the EU-15 and the EU-10 followed divergent trends in developing their export market shares. On one hand, the EU-10 was gaining in world export share, while the EU-15 was losing its share in world exports in both gross and value-added terms. Before the crisis, the biggest driver of EU-10 market share gains was competitiveness coupled with a favourable regional structure, while the old MS were losing export market shares

mostly due to a negative competitiveness effect. The decrease in the EU-15's world market share in terms of value added is even more pronounced than the one identified based on gross data and is driven not only by negative competitiveness but also to a large extent by unfavourable structure effects in terms of both markets and products. At the onset of the crisis (2008–2012), however, both groups of member states experienced a negative total effect that resulted in a drop in their world export shares which was more pronounced in the EU-15.

Further, we find significant differences in the competitiveness and structural contributions to export performance between 'old' and 'new' MS, which is in line with our presumption that the two groups of MS might differ in their abilities to combat the crisis with export restructuring and reorientation. The adjustments made before the onset of the crisis were faster in terms of the product composition of exports than in terms of the geographical reorientation of exports in the EU-15, as is suggested by the more positive product than market effect while the opposite was the case in the EU-10. After the crisis started, neither the group of old nor new MS were able to adjust through a geographical reorientation towards fast-growing economies relative to the other countries, as suggested by the mostly negative contribution of the market and competitiveness effect. Hence, we failed to find evidence of the EU's proactive enhancement of cooperation with the fast-growing BRICS economies and later with those taking their place, i.e. the MIST countries. Moreover, the contribution to the structure effect is even more negative for BRICS than MIST which also contradicts our hypothesis that the rapid growth of BRICS had been observed and exploited prior to that of the MIST. Nonetheless, in the two most recent years of our analysis there are certain signs of a favourable geographical reorientation of exports for both

groups of EU MS (a positive market effect in 2011 and 2012). However, a longer observation period is needed to confirm the consistency of the trend.

Concerning export restructuring in terms of the product composition of exports, the results suggest that even though technology upgrading was more pronounced in the EU-10, the product effect played a relatively more positive role in old EU members during the crisis, particularly on account of the mid-tech product group. These results are not a surprise since the old EU members were closer to the technological frontier than the new EU members. Moreover, given the level of development of emerging markets, their capacity to absorb high-tech exports that before the crisis EU countries had been selling mostly internally or to other developed economies is limited. In line with our fourth hypothesis, we find a negative competitiveness effect on export market shares for both the EU-15 and EU-10 during the crisis which confirms Cheptea, Fontagne and Zignago's (2014) conclusion about the competitiveness losses of EU exports, in particular during the early phase of the crisis.

A further analysis of the export market orientation suggests that, as discussed above, the BRICS markets exhibit a negative contribution to the structure effect but a positive contribution to competitiveness, indicating that while EU member states were unable to reorient towards these fast-growing economies to a sufficient extent compared to their competitors they have on average been gaining in competitiveness in these markets. This holds for both groups of EU member states at least based on gross trade analysis; however, the BRICS's contribution to the CE was

stronger for the new EU-10. For this group of new MS we also find a positive contribution of competitiveness in MIST countries to market share gains. Let us look into the EU trade policy framework as regards both groups of countries, BRICS and MIST, to see how the bottom-up economic drivers in economic actors themselves have been supported by regional and bilateral policies.

## 5.2 EU TRADE POLICY TOWARDS BRICS AND MIST COUNTRIES

BRICs are politically considered by the EU as strategic partners. Strategic partnerships with China, Russia and India were established during summits in the 2003–2004 period, while with Brazil and South Africa a few years later in 2007 (see [European Parliament 2011, p. 23])<sup>9</sup>. The institutional framework concerning trade relations differs substantially among the BRICS countries. Of these countries, only South Africa enjoys reciprocal free trade with the EU.<sup>10</sup> The framework for EU–Russia trade relations since 1997 has been the Partnership and Cooperation Agreement that grants non-reciprocal preferential access of Russian products in the EU market. Negotiations on a new agreement with Russia started in 2008 but stopped in 2010 due to a lack of progress in the trade and investment part of the agreement. Trade negotiations with India were launched just before the crisis in 2007 in the context of the “Global Europe” strategy from late 2006 but brought to a *de facto* standstill in 2013 due to a gap in the level of ambition between the EU and India. Brazil was eligible for trade preferences with the EU under the Generalised Scheme of Preferences up until 2014 when a new scheme entered

9 See Tkalec and Svetličič [Tkalec, Svetličič 2014] for a discussion on the EU's economic and institutional ties with BRICS and MIST countries.

10 South Africa–EU trade relations are governed by the Trade, Development and Cooperation Agreement signed in 2000. Following completion of the liberalisation schedule by 2012, around 90% of EU–South Africa trade has been subject to preferential rates [European Commission 2016].

into force that excluded Brazil from the list of beneficiary countries. As part of Mercosur, it is currently negotiating the EU–Mercosur Association Agreement aiming at removing tariff and non-tariff barriers to trade and FDI. An agreement in principle was reached on the trade part in June 2019. Whereas, in the case of China, an investment agreement is expected to precede a trade agreement. Negotiations on a comprehensive EU–China Investment Agreement were launched at the 16th EU–China Summit held in November 2013 [European Commission 2020].

The institutional framework for European cooperation with the MIST countries, compared to BRICS, exhibits even greater diversity. Mexico and South Korea became strategic partners of the EU in 2010, which is later than BRICS countries.<sup>11</sup> However, with respect to free-trade arrangements, two of the MIST countries, i.e. Turkey and Mexico, have had free trade established for a relatively long period. The Association Agreement between Turkey and the then EEC entered into force already back in December 1964. Since 1996 the EU and Turkey have been linked by a Customs Union agreement, while accession negotiations were opened in October 2005 [European Commission 2020]. Mexico signed an Economic Partnership, Political Coordination and Cooperation Agreement with the EU in 1997, which included trade provisions that were developed in a comprehensive Free-Trade Agreement that entered into force in October 2000 for the part related to trade in goods, and in 2001 for that related to trade in services. The process of modernisation of the EU–Mexico Global Agreement started in 2016 and was “in principle” reached in April 2018 [European Commission 2020].

The Republic of Korea was the first Asian country to sign one of the new gen-

eration of deep and comprehensive free-trade agreements (FTA) with the EU in 2009. The agreement has provisionally been in force since 1 July 2011 when the majority of import duties were removed [European Commission 2016]. Indonesia currently enjoys trade preferences with the EU under the Generalised Scheme of Preferences whereas negotiations for an EU–Indonesia free trade agreement were launched in July 2016 [European Commission 2020].

It can be concluded that the regional institutional framework for developing trade relations with both BRICS and MIST countries is being created, but in fact it is relatively weak and was initiated relatively late. Before the crisis, it was more on a very general level with the exceptions of South Africa from the BRICS group and Turkey and Mexico from the MIST group. Only later was it complemented by more concrete trade and, in the case of China, investment agreement talks. It can therefore be concluded that such a regional institutional base has not been very instrumental for enhancing EU trade with BRICs. It appears that bottom-up economic drivers were thus decisive in creating trade flows between the EU and the emerging markets.

### 5.3 POLICY AND MANAGERIAL IMPLICATIONS

The analysis reveals the relatively slow and modest reorientation of European trade towards fast-growing industries and markets and, in the new EU-10 MS, also relatively slower vertical specialisation within global value chains. This points to the need for a more decisive and timely response in EU policymaking to support market and product trade restructuring and guarantee the requisite flexibility of the economy.

11 See European Strategic Partnerships Observatory. Available at: <http://strategicpartnerships.eu/database/>, accessed January 2016.

### Policy implications

A trade-based crisis exit strategy may concern three aspects of trade performance: competitiveness in terms of both price and non-price factors, reorientation towards faster-growing markets and restructuring towards those product groups with dynamic demand developments. As follows from the divergent trend observed between the development of gross trade and value-added trade patterns it is increasingly the case that the emphasis should shift from where exports are booked towards where value is added to products.

What is the role of trade policy in supporting trade-based crisis exit strategies? It can be reasonably expected that due to the lack of progress in the multilateral format regional and bilateral agreements will continue to play a crucial role in the years to come, especially as far as supporting the EU's place in global value chains is concerned. There are two aspects of these regional and bilateral agreements that hold important implications for firms' ability to adjust their trade to global demand and supply trends: one is the geographical scope of bilateral and regional agreements, while the second one is the type of these agreements.

On one hand, there is a need for deep and comprehensive FTA agreements that would include not only trade provisions but also disciplines necessary to foster international production sharing. Such deep and comprehensive agreements contribute to the increased competitiveness of firms not only by granting them preferential access to the partner markets but also by enforcing more effective protection of the intellectual property rights (IPR) and decreasing exposure to various sources of regulation-related risks, which are perceived as important factors in building comparative advantages based on creativity, research, design and quality.

On the other hand, the EU needs to constantly review the set of strategic part-

ners foreseen for opening up trade and investment negotiations. As pointed out by Gaulier et al. [Gaulier et al. 2013, p. 2], with the global economy evolving continuously and rapidly, countries must pay close attention to their positioning on the map of global trade and production. The analysis points to the need to include the remaining fast-growth emerging economies in the free-trade and investment framework, whereby fast growth is not only linked to the size of the domestic market but increasingly on the position of a country in global and regional chains.

In order to ensure the effectiveness of bilateral and regional partnerships there is a need to increase awareness within the business sphere of how firms can leverage free-trade and investment agreements and take advantage of the opportunities offered by such agreements more effectively. Moreover, timely building of an appropriate institutional framework should be supported by policy measures targeting the building of competencies in cross-cultural management and language learning, e.g. by designing special training programmes or their inclusion in regular curricula, due to significant and continuous shifts and spreads of the global economic centres towards culturally very diverse areas.

### Managerial implications

Implications for managers at the firm level are manifold. First, managers should recognise the potential of the bilateral and regional agreements and leverage them in their internationalisation and supply chain strategies. FTAs are far from being simply a tool to eliminate tariff duties upon the importing of a good originating in a partner country but are also designed to create opportunities by granting preferential access to the partner market, allowing firms to reduce the landed costs to their customers. Since in many cases agreements include provisions beyond trade measures, e.g. in the area of IPR protection, the right

to establish operations, ease of market access etc., they also open investment opportunities and increase the predictability of the policy environment in the partner country. Moreover, the business sphere should be more active in communicating the benefits of opening the doors to the new markets by liberalising trade and investment regimes.

Further, the 2008 GFC provides several lessons for firms' internationalisation practices also in wake of Covid-19 pandemic crisis. One of them is the importance of diversifying trade patterns beyond the EU in mitigating the negative effects of the crisis; an excessive EU orientation has to be complemented by "walking on two legs", i.e. European and global ones. Moreover, to resist a crisis faster adjustments to changing conditions in the global markets are needed by acting ex-ante, elaborating B plans etc. In addition, intensified diversification requires the enhancement of business intelligence and competencies to manage risk in international activities. Finally, not only the geographical but also the product structure matters. Constant product and process innovation activity, including new applications for old products and services and customer-focused innovations, seems crucial to promote export restructuring.

While the analysis in this paper provides lesson from 2008 GFC with respect to export pattern adjustments, the Covid-19 crisis differs from the GFC mainly in that it involves lockdown and social distancing which has led to major GVC disruptions. Trade is likely to fall more steeply in sectors characterized by complex value chain linkages, particularly in electronics and automotive products. Moreover, as pointed out by Evenett [Evenett 2020], a troubling trade policy dimension is now coming to light. Over 80 countries have introduced export prohibitions or restrictions as a re-

sult of the COVID-19 pandemic, predominantly on medical supplies, pharmaceuticals and medical equipment, but also on additional products, such as foodstuffs and toilet paper<sup>12</sup>. At the same time, politicians' calls for "sovereign" or "national" supply chains and for re-thinking of domestic companies' approaches to international outsourcing of production are becoming louder [Serič, Görg, Mösele, Windisch 2020]. These processes and developments may lead as well to a certain degree of domestication, diversification and regionalization of GVCs and trade readjustment mostly on the sourcing (import) part. Cost rationalisation is expected to be downgraded on account of greater emphasis on risk management considerations. Trade reorientation is likely to be motivated by the possibilities of enhancing reliability of supply sources and reducing an exposure to risk of supply-chain disruptions which implies less trade with more distant countries and more with nearby ones.

## Conclusions

The constant market share analysis indicates that neither the EU-15 nor the EU-10 have reaped the potential benefits of enhancing cooperation with fast-growing countries like BRICS and MIST. However, while the markets of BRICS exhibited a negative contribution to the structure effect, their contribution to competitiveness was positive. Although EU member states were unable to reorient towards these fast-growing economies to a sufficient extent compared to their competitors, enhancing trade with BRICS has helped both the EU-15 and EU-10 improve their competitiveness. Yet a comparison of gross and VA trade with BRICS suggests that the type of specialisation in trade with BRICS

12 More on this. Available at: [https://www.wto.org/english/tratop\\_e/covid19\\_e/export\\_prohibitions\\_report\\_e.pdf](https://www.wto.org/english/tratop_e/covid19_e/export_prohibitions_report_e.pdf), accessed 25.08.2020.



differs between the old and new groups of member states where it is more vertical in nature in the case of the EU-15 and relatively more horizontal in the case of the new EU-10 MS.

Concerning export restructuring in terms of the product composition of exports, the results suggest that, even though technology upgrading was more pronounced in the EU-10, the product effect has played a relatively more positive role in old EU members during the crisis, particularly on account of the mid-tech product group. In line with our third hypothesis, we find a negative competitiveness effect on export market shares for both the EU-15 and the EU-10 during the crisis.

The relatively slow adjustment of European trade patterns to the export opportunities in fast-growing markets and industries points to a need for a more decisive and timely response in EU policymaking to support market and product trade restructuring and guarantee the requisite flexibility of the economy.

Like all studies, this one has certain limitations. Besides shortcomings of the method applied, as discussed in the paper, it was impossible at this point to robustly test the role of the policies and institutional set up in EU member countries as an instrument for designing policies to promote the kind of crisis exit strategies we have been examining. Being aware of these limitations, it would be instructive in future research to look for similar historical situations and examine the relation between trade pattern adjustments and smoothness of exiting the crisis.

## References

- Ahmad N., Ribarsky J. (2014) *Trade in Value Added, Jobs and Investment*. 33rd General Conference of the International Association for Research in Income and Wealth, Rotterdam, Netherlands.
- Arora V., Vamvakidis A. (1) (2005) Economic Spillovers – Exploring the Impact Trading Partners Have on Each Other's Growth. *Finance and Development-English Edition*, vol. 42, no 3, pp. 48–50. Available at: <https://www.imf.org/external/pubs/ft/fandd/2005/09/arora.htm>, accessed 25.08.2020.
- Arora V., Vamvakidis A. (2) (2005) How Much Do Trading Partners Matter for Economic Growth? *IMF Working Papers*. Available at: <https://www.imf.org/external/pubs/ft/wp/2004/wp0426.pdf>, accessed 25.08.2020.
- Balassa B. (1965) Trade Liberalization and “Revealed” Comparative Advantage”. *The Manchester School of Economic and Social Studies*, vol. 33, no 2, pp. 99–123. DOI: 10.1111/j.1467-9957.1965.tb00050.x
- Baliamoune-Lutz M. (2011) Growth by Destination (Where You Export Matters): Trade with China and Growth in African Countries. *African Development Review*, vol. 23, no 2, pp. 202–218. DOI: 10.1111/j.1467-8268.2011.00281.x
- Bowen H.P., Pelzman J. (1984) US Export Competitiveness: 1962–77. *Applied Economics*, vol. 16, no 3, pp. 461–473. DOI: 10.1080/00036848400000051
- Bussière M., Callegari G., Ghironi F., Sestieri G., Yamano N. (2013) Estimating Trade Elasticities: Demand Composition and the Trade Collapse of 2008–2009. *American Economic Journal: Macroeconomics*, vol. 5, no 3, pp. 118–151. DOI: 10.1257/mac.5.3.118
- Chen R., Milesi-Ferretti G.M., Tresselt T. (2013) External Imbalances in the Eurozone. *Economic Policy*, vol. 28, no 73, pp. 101–142. DOI: 10.1111/1468-0327.12004
- Cheptea A., Fontagné L., Zignago S. (2014) European Export Performance. *Review of World Economics*, vol. 150, no 1, pp. 25–58. DOI: 10.1007/s10290-013-0176-z
- Dadush U., Stancil B. (2011) Is the Euro Rescue Succeeding? *VoxEU*, February 6, 2011. Available at: <https://voxeu.org/article/euro-rescue-succeeding>, accessed 25.08.2020.

Di Mauro F., Anderton R., Ernst E., Torres J., Lecat R., Cassidy M., Breda E. (2005) Competitiveness and the Export Performance of the Euro Area. *ECB's Occasional Paper Series*. No. 30. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=752090](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=752090), accessed 25.08.2020.

Dollar D., Kraay A. (2004) Trade, Growth, and Poverty. *The Economic Journal*, vol. 114, no 493, pp. F22–F49. DOI: 10.1111/j.0013-0133.2004.00186.x

European Commission (2013). The EU's Bilateral Trade and Investment Agreements – Where Are We? Available at: [http://europa.eu/rapid/press-release\\_MEMO-13-734\\_en.htm](http://europa.eu/rapid/press-release_MEMO-13-734_en.htm), accessed 25.08.2020.

European Commission (2020). Negotiations and Agreements. Available at: <https://ec.europa.eu/trade/policy/countries-and-regions/negotiations-and-agreements/>, accessed 25.08.2020.

European Parliament (2011). The EU Foreign Policy towards the BRICs and Other Emerging Powers: Objectives and Strategies. Available at: <http://www.europarl.europa.eu/committees/en/studies/download.html?languageDocument=EN&file=49151>, accessed 25.08.2020.

Evenett S. (2020) Sickening Thy Neighbour: Export Restraints on Medical Supplies during a Pandemic. *VoxEU*, March 19, 2020. Available at: <https://voxeu.org/article/export-restraints-medical-supplies-during-pandemic>, accessed 25.08.2020.

Fagerberg J., Sollie G. (1987) The Method of Constant Market Shares Analysis Reconsidered. *Applied Economics*, vol. 19, no 12, pp. 1571–1583. DOI: 10.1080/00036848700000084

Foresti G. (2004) An Attempt to Explain the Italian Export Market Share Dynamics during the Nineties. *CSC Working Paper*. No. 47, Centro Studi Confindustria, Italy.

Freund C.L., Pierola M.D. (2010) Export Entrepreneurs: Evidence from Peru. *World Bank Policy Research Working Paper*. No. 5407.

Gaulier G., Santoni G., Taglioni D., Zignago S. (2013) In the Wake of the Global Crisis: Evidence from a New Quarterly Database of Export Competitiveness. *World Bank Policy Research Working Paper*. No. 6733.

Gräbner C., Tamesberger D., Heimberger P., Kapelari T., Kapeller J. (2019) Trade Models in the European Union. *ICAE Working Paper*. No. 95.

Houston D.B. (1967) The Shift-share Analysis of Regional Growth: A Critique. *Southern Economic Journal*, vol. 33, no 4, pp. 577–581. DOI: 10.2307/1055653

Johnson R.C. (2014) Five Facts about Value-added Exports and Implications for Macroeconomics and Trade Research. *The Journal of Economic Perspectives*, vol. 28, no 2, pp. 119–142. DOI: 10.1257/jep.28.2.119

Kali R., Méndez F., Reyes J. (2007) Trade Structure and Economic Growth. *The Journal of International Trade & Economic Development*, vol. 16, no 2, pp. 245–269. DOI: 10.1080/09638190701325649

Kawai M., Petri P.A. (2014) Asia's Role in the Global Economic Architecture. *Contemporary Economic Policy*, vol. 32, no 1, pp. 230–245. DOI: 10.1111/j.1465-7287.2012.00331.x

Kunčič A., Tkalec S. (2016) New Transition Member States of the European Union: (How) Do They Respond to Current Changes in the Global Economy? *International Journal of Sustainable Economy*, vol. 8, no 1, pp. 1–17. DOI: 10.1504/IJSE.2016.073682

Leamer E.E., Stern R.M. (1970) *Quantitative International Economics*, Boston, MA: Allyn and Bacon.

Lederman D., Maloney W.F. (2003) Trade Structure and Growth. *World Bank Policy Research Working Paper*. No. 3025.

Loveridge S., Selting A.C. (1998) A Review and Comparison of Shift-share Identities. *International Regional Science Review*, vol. 21, no 1, pp. 37–58. DOI: 10.1177/016001769802100102

Milana C. (1988) Constant-market-shares Analysis and Index Number Theory. *European Journal of Political Economy*, vol. 4, no 4, pp. 453–478. DOI: 10.1016/0176-2680(88)90011-0

O'Neill J., Stupnytska A., Wrisdale J. (2011) It Is Time to Re-define Emerging Markets. *Goldman Sachs Asset Management Strategy Series*. No. 31.

Richardson J.D. (1) (1971) Constant-market-shares Analysis of Export Growth. *Journal of International Economics*, vol. 1, no 2, pp. 227–239. DOI: 10.1016/0022-1996(71)90058-4

Richardson J.D. (2) (1971) Some Sensitivity Tests for a “Constant-Market-Shares” Analysis of Export Growth. *The Review of Economics and Statistics*, vol. 53, no 3, pp. 300–304. DOI: 10.2307/1937978

Serič A., Görg H., Mösele S., Windisch M. (2020) Managing COVID-19: How the Pandemic Disrupts Global Value Chains. *Green Growth Knowledge*, April 17, 2020.

Available at: <https://www.greengrowth-knowledge.org/blog/managing-covid-19-how-pandemic-disrupts-global-value-chains>, accessed 25.08.2020.

Simonis D. (2000) *Belgium's Export Performance: A Constant Market Shares Analysis*, Federal Planning Bureau.

Svetličič M., Jaklič A. (2012) Reactions of Slovene Multinational Firms to the Global Crisis. *Emerging Economies and Firms in the Global Crisis* (eds. Marinov M.A., Marinova S.T.), Basingstoke, New York: Palgrave Macmillan, pp. 259–291.

Tkalec S., Svetličič M. (2014) Can Cooperation with the BRICs and Other Growth Markets Help EU Member States Exit the Crisis? *Post-Communist Economies*, vol. 26, no 2, pp. 176–200. DOI: 10.1080/14631377.2014.904106

Tyszyński H. (1951) World Trade in Manufactured Commodities, 1899–1950. *The Manchester School*, vol. 19, no 3, pp. 272–304. DOI: 10.1111/j.1467-9957.1951.tb00012.x

Wilson D., Purushothaman R. (2003) Dreaming with BRICs: The Path to 2050. *Global Economic Paper*. No. 99.

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# Переориентация и реструктуризация торговли в сторону быстрорастущих развивающихся экономик: кризисное реагирование государств – членов ЕС

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**АННОТАЦИЯ.** В данной статье рассматривается географическая переориентация и товарная реструктуризация торговли как стратегия антикризисного реагирования. Мы используем логику анализа методом постоянной доли рынка (CMS) для того, чтобы вычислить в общем изменении доли экспортного рынка вклад эффекта конкурентоспособности и структурного эффекта с точки зрения географической и производственной специализации. Дан-

ный метод применяется при анализе глобального финансового кризиса 2008–2009 годов в «старых» и «новых» государствах – членах ЕС. Анализ методом постоянной доли рынка (CMS) с учетом как валовых данных, так и данных о торговле с добавленной стоимостью указывает на отсутствие активной переориентации на быстрорастущие развивающиеся экономики как в ЕС-15, так и в ЕС-10. Товарная структура играла относительно более по-

зительную роль в старых членах ЕС во время кризиса, особенно в связи со средне-технологической группой продуктов, но технологическая модернизация была более выражена в новых государствах – членах ЕС. Хотя анализ, проведенный в статье, содержит уроки кризиса 2008–2009 годов в отношении корректировки структуры экспорта, сегодняшний пандемический кризис отличается от того кризиса главным образом тем, что он привел к крупным нарушениям глобальных цепочек создания стоимости, которые могут привести в определенной степени к локализации, диверсификации и регионализации глобальных цепочек, что предполагает переориентацию торговли из более отдаленных стран в соседние.

**КЛЮЧЕВЫЕ СЛОВА:** структура торговли, переориентация торговли, антикризисное реагирование, ЕС, развивающиеся рынки, анализ методом постоянной доли рынка (CMS)

## Список литературы

- Ahmad N., Ribarsky J. (2014) Trade in Value Added, Jobs and Investment. 33rd General Conference of the International Association for Research in Income and Wealth, Rotterdam, Netherlands.
- Arora V., Vamvakidis A. (1) (2005) Economic Spillovers – Exploring the Impact Trading Partners Have on Each Other's Growth // Finance and Development-English Edition, vol. 42, no 3, pp. 48–50 // <https://www.imf.org/external/pubs/ft/fandd/2005/09/arora.htm>, дата обращения 25.08.2020.
- Arora V., Vamvakidis A. (2) (2005) How Much Do Trading Partners Matter for Economic Growth? // IMF Working Papers // <https://www.imf.org/external/pubs/ft/wp/2004/wp0426.pdf>, дата обращения 25.08.2020.
- Balassa B. (1965) Trade Liberalization and “Revealed” Comparative Advantage” // The Manchester School of Economic and Social Studies, vol. 33, no 2, pp. 99–123. DOI: 10.1111/j.1467-9957.1965.tb00050.x
- Baliamoune-Lutz M. (2011) Growth by Destination (Where You Export Matters): Trade with China and Growth in African Countries // African Development Review, vol. 23, no 2, pp. 202–218. DOI: 10.1111/j.1467-8268.2011.00281.x
- Bowen H.P., Pelzman J. (1984) US Export Competitiveness: 1962–77 // Applied Economics, vol. 16, no 3, pp. 461–473. DOI: 10.1080/00036848400000051
- Bussière M., Callegari G., Ghironi F., Sestieri G., Yamano N. (2013) Estimating Trade Elasticities: Demand Composition and the Trade Collapse of 2008–2009 // American Economic Journal: Macroeconomics, vol. 5, no 3, pp. 118–151. DOI: 10.1257/mac.5.3.118
- Chen R., Milesi-Ferretti G.M., Tresselt T. (2013) External Imbalances in the Eurozone // Economic Policy, vol. 28, no 73, pp. 101–142. DOI: 10.1111/1468-0327.12004
- Cheptea A., Fontagné L., Zignago S. (2014) European Export Performance // Review of World Economics, vol. 150, no 1, pp. 25–58. DOI: 10.1007/s10290-013-0176-z
- Dadush U., Stancil B. (2011) Is the Euro Rescue Succeeding? // VoxEU, February 6, 2011 // <https://voxeu.org/article/euro-rescue-succeeding>, дата обращения 25.08.2020.
- Di Mauro F., Anderton R., Ernst E., Torres J., Lecat R., Cassidy M., Breda E. (2005) Competitiveness and the Export Performance of the Euro Area // ECB's Occasional Paper Series. No. 30 // [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=752090](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=752090), дата обращения 25.08.2020.
- Dollar D., Kraay A. (2004) Trade, Growth, and Poverty // The Economic Journal, vol. 114, no 493, pp. F22–F49. DOI: 10.1111/j.0013-0133.2004.00186.x
- European Commission (2013). The EU's Bilateral Trade and Investment Agree-

ments – Where Are We? // [http://europa.eu/rapid/press-release\\_MEMO-13-734\\_en.htm](http://europa.eu/rapid/press-release_MEMO-13-734_en.htm), дата обращения 25.08.2020.

European Commission (2020). Negotiations and Agreements // <https://ec.europa.eu/trade/policy/countries-and-regions/negotiations-and-agreements/>, дата обращения 25.08.2020.

European Parliament (2011). The EU Foreign Policy towards the BRICs and Other Emerging Powers: Objectives and Strategies // <http://www.europarl.europa.eu/committees/en/studiesdownload.html?languageDocument=EN&file=49151>, дата обращения 25.08.2020.

Evenett S. (2020) Sickening Thy Neighbour: Export Restraints on Medical Supplies during a Pandemic // VoxEU, March 19, 2020 // <https://voxeu.org/article/export-restraints-medical-supplies-during-pandemic>, дата обращения 25.08.2020.

Fagerberg J., Sollie G. (1987) The Method of Constant Market Shares Analysis Reconsidered // *Applied Economics*, vol. 19, no 12, pp. 1571–1583. DOI: 10.1080/00036848700000084

Foresti G. (2004) An Attempt to Explain the Italian Export Market Share Dynamics during the Nineties // CSC Working Paper. No. 47, Centro Studi Confindustria, Italy.

Freund C.L., Pierola M.D. (2010) Export Entrepreneurs: Evidence from Peru // World Bank Policy Research Working Paper. No. 5407.

Gaulier G., Santoni G., Taglioni D., Zignago S. (2013) In the Wake of the Global Crisis: Evidence from a New Quarterly Database of Export Competitiveness // World Bank Policy Research Working Paper. No. 6733.

Gräbner C., Tamesberger D., Heimberger P., Kapelari T., Kapeller J. (2019) Trade Models in the European Union // ICAE Working Paper. No. 95.

Houston D.B. (1967) The Shift-share Analysis of Regional Growth: A Critique //

*Southern Economic Journal*, vol. 33, no 4, pp. 577–581. DOI: 10.2307/1055653

Johnson R.C. (2014) Five Facts about Value-added Exports and Implications for Macroeconomics and Trade Research // *The Journal of Economic Perspectives*, vol. 28, no 2, pp. 119–142. DOI: 10.1257/jep.28.2.119

Kali R., Méndez F., Reyes J. (2007) Trade Structure and Economic Growth // *The Journal of International Trade & Economic Development*, vol. 16, no 2, pp. 245–269. DOI: 10.1080/09638190701325649

Kawai M., Petri P.A. (2014) Asia's Role in the Global Economic Architecture // *Contemporary Economic Policy*, vol. 32, no 1, pp. 230–245. DOI: 10.1111/j.1465-7287.2012.00331.x

Kunčič A., Tkalec S. (2016) New Transition Member States of the European Union: (How) Do They Respond to Current Changes in the Global Economy? // *International Journal of Sustainable Economy*, vol. 8, no 1, pp. 1–17. DOI: 10.1504/IJSE.2016.073682

Leamer E.E., Stern R.M. (1970) *Quantitative International Economics*, Boston, MA: Allyn and Bacon.

Lederman D., Maloney W.F. (2003) Trade Structure and Growth // World Bank Policy Research Working Paper. No. 3025.

Loveridge S., Selting A.C. (1998) A Review and Comparison of Shift-share Identities // *International Regional Science Review*, vol. 21, no 1, pp. 37–58. DOI: 10.1177/016001769802100102

Milana C. (1988) Constant-market-shares Analysis and Index Number Theory // *European Journal of Political Economy*, vol. 4, no 4, pp. 453–478. DOI: 10.1016/0176-2680(88)90011-0

O'Neill J., Stupnytska A., Wrisdale J. (2011) It Is Time to Re-define Emerging Markets // Goldman Sachs Asset Management Strategy Series. No. 31.

Richardson J.D. (1) (1971) Constant-market-shares Analysis of Ex-



port Growth // *Journal of International Economics*, vol. 1, no 2, pp. 227–239. DOI: 10.1016/0022-1996(71)90058-4

Richardson J.D. (2) (1971) Some Sensitivity Tests for a “Constant-Market-Shares” Analysis of Export Growth // *The Review of Economics and Statistics*, vol. 53, no 3, pp. 300–304. DOI: 10.2307/1937978

Serič A., Görg H., Möslle S., Windisch M. (2020) Managing COVID-19: How the Pandemic Disrupts Global Value Chains // *Green Growth Knowledge*, April 17, 2020 // <https://www.greengrowthknowledge.org/blog/managing-covid-19-how-pandemic-disrupts-global-value-chains>, дата обращения 25.08.2020.

Simonis D. (2000) Belgium’s Export Performance: A Constant Market Shares Analysis, Federal Planning Bureau.

Svetličič M., Jaklič A. (2012) Reactions of Slovene Multinational Firms to the Glob-

al Crisis // *Emerging Economies and Firms in the Global Crisis* (eds. Marinov M.A., Marinova S.T.), Basingstoke, New York: Palgrave Macmillan, pp. 259–291.

Tkalec S., Svetličič M. (2014) Can Cooperation with the BRICs and Other Growth Markets Help EU Member States Exit the Crisis? // *Post-Communist Economies*, vol. 26, no 2, pp. 176–200. DOI: 10.1080/14631377.2014.904106

Tyszynski H. (1951) World Trade in Manufactured Commodities, 1899–1950 // *The Manchester School*, vol. 19, no 3, pp. 272–304. DOI: 10.1111/j.1467-9957.1951.tb00012.x

Wilson D., Purushothaman R. (2003) Dreaming with BRICs: The Path to 2050 // *Global Economic Paper*. No. 99.