

## IS CZECH EXPORT STILL BIASED TOWARDS THE EASTERN MARKETS?

Lucie Coufalová<sup>1</sup>, Libor Židek<sup>1</sup>

<sup>1</sup>Faculty of Economics and Administration, Masaryk University, Lipová 41a, 602 00 Brno, Czech Republic

### Abstract

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There were special relationships among the COMECON members during the period of the centrally planning system. Czechoslovak trade/export was naturally biased towards these countries. The goal of this paper is to find out if there still exists any export bias towards the Russian or the ex-COMECON markets. In our research approach we use gravity models. We revealed that taking into consideration growth in GDP, geographical distance and institutions there is no bias towards the Russian or the CIS markets. But we discovered a bias towards the ex-COMECON contemporary members of the EU.

Keywords: Czech exports, COMECON, Russia, gravity model.

### INTRODUCTION

In the recent years, there has been a lively debate about Czech dependence on the Eastern (and foremost on Russian) markets due to political and economic risks in this territory. This debate has been even deepened after the application of economic sanctions on the Russian Federation in 2014. The relationships during the period of centrally planned economy were naturally enormously intense. After the fall of the communist regime the Czech trade links quickly re-orientated towards the Western markets. However there could still be a bias towards the ex-Soviet Union or the ex-COMECON (Council of Mutual Economic Assistance) markets that could have negative consequences in case of political or economic crises (eg. economic sanctions against Russia).

The aim of the paper is to find out whether the postcommunist legacy has any impact on the contemporary Czech export pattern. In specific, we try to investigate if, controlling for the geographical distance and the partner's GDP, there is any export bias toward the ex-COMECON countries. We divided the ex-COMECON countries

into three subgroups – the first is just the Russian Federation, the second consists of the members of the Commonwealth of Independent States (CIS) and the third of the contemporary members of the EU that used to be members of COMECON. All together we embraced 45 major European and CIS import destinations.<sup>1</sup> We used the gravity model approach to achieve our goal. The studied period covers years between 2000 and 2015. We decided for this period to distinguish the study period from centrally planned period and thus avoid contamination of contemporary data. As far as we are aware, this specific approach has not yet been applied to the issue.

The paper is organized as follows. First of all, we sum up the historical trading patterns of the former Czechoslovak Republic. The next section refers to the trade evolution in the studied period, which is 2000–2015. Then we review literature on the trade disintegration and gravity models. Section four discusses our model and results. The last section concludes.

<sup>1</sup> The 45 countries in our sample accounted in the selected period in average for 91.4% of the total Czech exports (Czech Statistical Office, 2016).

I: Territorial orientation of Czechoslovak trade in 1928 and 1989 (in %)

	Imports		Exports	
	1928	1989	1928	1989
Western Europe	54.79	15.37	43.92	16.46
USA	5.94	0.32	5.56	0.56
Japan	0.07	0.33	0.19	0.76
Eastern Europe	16.67	16.66	20.55	16.45
Soviet Union	1.04	45.58	1.32	43.14
the rest	21.49	21.74	28.46	22.64

Source: Collins, Rodrik, Eastern Europe and the Soviet Union in the World Economy (1991).

### Historical excursion into export relations with the eastern markets

The communist coup in Czechoslovakia (1948) was followed by speedy re-direction of Czech (at that time Czechoslovak) trade towards other centrally planned economies. This development was deepened by creating of the Council of Mutual Economic Assistance (COMECON) in 1949. The reason for this re-direction was entirely political because at that time Czech goods were able to compete on the international markets. In 1948, 60.3% of Czech trade was realized with market economies (ME) and only 39.7% with the centrally planned ones (CPE). Two years later, the former group absorbed only 44.4%, whereas the latter 55.6%. In 1960, trade with ME reached only 28% of the total amount of trade in Czechoslovakia. The rest was realized within CPEs (Nezval, 1997).

Czech trade was realized, therefore, nearly absolutely with the COMECON markets. Estimations say that up to 70% of traded goods were dealt within this territory. However, with lasting centrally planned system Czechoslovak goods became less and less internationally competitive on the world (Western) markets.<sup>2</sup> It means that the orientation towards the (soft) COMECON markets was eventually not a political but simply the only option. As can be seen from the following table, at the end of the communist reign the Soviets markets occupied much bigger share of trade than was Czechoslovak historical experience.<sup>3</sup>

We can conclude that at the end of the communist reign Czech trade was artificially biased towards the Eastern and foremost towards the Soviet markets.

The collapse of the communist regimes was followed by quick territorial re-direction back towards the Western markets (e.g. Žídek, 2011). At present, vast majority of Czech trade takes place within the European Union. For example, in 2015, 83.3% of Czech exports went to the EU

member countries (Czech Statistical Office, 2016). Any drop in exports to Russia and neighbouring countries should therefore not significantly affect the economy of the Czech Republic. In spite of this, there were worries about the impact of the sanctions against Russia on the Czech exports and the Czech economy as a whole.

### Exports in period 2000–2015

In 2000, exports toward Russia and the CIS countries represented 1.32 and 2.5% of the Czech exports (Czech Statistical Office, 2016). In the following years, several efforts were made to enter a more intense trading partnership with the Russian Federation. For periods 2006–2010 and 2012–2020, the Czech government approved an Export Strategy focused, among others, on the support of exports to the Russian Federation in order to diversify Czech trade (Ministry of Industry and Trade, 2006; 2012). There are therefore some efforts of the Czech diplomacy to restore the old economic relationships with the former COMECON countries, mainly with Russia, which absorbs the largest share of Czech exports. The biggest part in Czech exports to the CIS countries and Georgia consist of machinery and transportation equipment. For example, in the year 2013, 69.5% of Czech exports to the region were engineering products. The second category was manufactured goods classified chiefly by material with 10.7% and the third most exported one was chemicals and related products (8.9%). The same applies to Russia, in which case the engineering products comprised in 2013 71%, as can be seen in Tab. II.

In the last two years since 2014, however, the bilateral trade between the Czech Republic and the Russian Federation has declined. Consequently, the debate about the harmful effects of the economic sanctions imposed by the EU on Russia state arose. From 2014 to 2015, the year-on-year fall in Czech exports to his former hegemon reached

2 Půlpán claims that only 3–5 percent of Czechoslovak products were estimated to be worldclass in the 1980s (Půlpán 1993).

3 Socialist Czechoslovakia avoided (on the contrary to other centrally planned economies) imbalances but it should be mentioned that trade was subject to planning as any other aspects of the economy. The balance was achieved only after application of serious restrictions on imports from developed countries at the beginning of the 1980s.

II: Annual Czech trade volumes to Russia according to the SITC classification. Stat. Value CZK (mil.)

SITC1	2000		2006		2013		2014		2015	
	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
0	863.5	63.1	1123.5	64.4	1586.3	254.3	1994.0	366.2	1576.3	241.9
1	49.8	2.6	392.2	13.0	583.8	67.0	600.0	82.9	378.3	82.5
2	200.7	3672.3	444.2	7931.8	544.8	5136.8	662.2	5208.3	661.4	4288.0
3	68.9	64316.3	243.8	102912.2	276.1	125784.4	275.0	103412.4	174.2	75815.3
4	0.6	0.0	2.0	2.2	9.3	13.3	7.2	5.9	5.3	22.1
5	2435.4	1736.3	5528.9	4420.6	8938.4	5507.5	9922.8	5339.2	8219.8	4561.0
6	2998.4	6210.9	8850.9	7790.6	11763.7	9780.9	10944.7	10376.9	9617.5	10915.4
7	6624.7	4119.8	21482.9	2464.3	82440.4	5062.1	75783.4	4215.1	49265.1	6266.6
8	1672.7	115.3	4520.8	574.9	10044.8	504.0	12827.7	487.0	8913.7	1522.5
9		0.1			0.4	0.1	1.1	0.0	0.8	0.1
	14914.7	80236.7	42589.1	126174.1	116188.1	152110.3	113017.9	129494.0	78812.4	103715.3

The corresponding SITC1 categories are: 0 – Food and live animals; 1 – Beverages and tobacco; 2 – Crude materials, inedible, except fuels; 3 – Mineral fuels, lubricants and related materials; 4 – Animal and vegetable oils, fats and waxes; 5 – Chemicals and related products, n.e.s.; 6 – Manufactured goods classified chiefly by material; 7 – Machinery and transport equipment; 8 – Miscellaneous manufactured articles; 9 – Commodities and transactions n.e.c. in the SITC.

Source: Czech Statistical Office (2016).

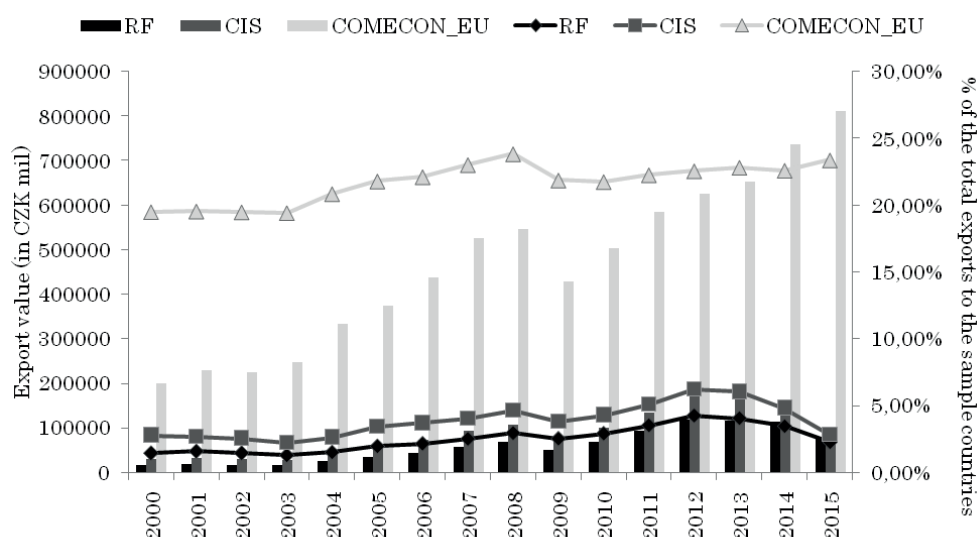
41.7% (CzechTrade, 2016a). In the same period, there was also a drop in exports to Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Turkmenistan, Ukraine and Uzbekistan, i. e., toward many other ex-COMECON countries (Czech Statistical Office, 2016).

On the other hand, the drop in exports to this region applies also to the global EU trade. If we focus on the Russian Federation, the EU-28 is its major trading partner, nevertheless, the share in the volume of goods imported to Russia fell from 48.2% in 2014 to 44.8% in 2015 (CzechTrade, 2016b). What is worth noticing is that a great part of the Russian import from the EU consists

on machinery and transportation equipment, a category which also registered a considerable slump with respect to the previous year, from 50.5% in 2014 to 44.8% in 2015 (CzechTrade, 2016a).

Despite the slump in the bilateral trade with Russia and the other CIS, the overall Czech trade with the analyzed countries has increased. This happened especially due to the considerable increase in European demand.

The development of Czech exports into three above mentioned territories can be seen in Fig. 1. It plots the level of Czech exports to the Russian Federation, CIS countries and to the countries which were part of the COMECON, but are now



1: Czech exports to Russia, the CIS countries and the EU members that were part of COMECON and their shares in the total exports of the sample countries.

Source: Czech Statistical Office (2016). External Trade Database.

European Union members. There can be seen a downward trend in Czech exports to Russia and the CIS members. These peaked in 2012 when they accounted for 4.25 and 6.24% of the total exports to the countries contained in our sample, and continued falling to 2.27 and 2.81% of the total.

However, the declining trend in Czech exports to Russia and CIS had started well before the implementation of the economic sanctions. Therefore, factors other than the sanctions may be considered when analysing the drop in trade with these partners. The heavy fall in the prices of oil, the most important source of the country's revenues, as well as the depreciating ruble, which made imports more expensive, had both important influence in the trading relations.

## MATERIALS AND METHODS

### Literature review

Our literature review embraces two topics. The first deals with the impact of disintegration on trade. The second topic covers our methodology approach – gravity models.

#### *The speed of the change of the bilateral trading patterns*

Since McCallums' *National borders matter: Canada-US regional trade patterns* (1995) analysing the so-called *home bias* in the intra-national Canadian trade, there have been a vast range of papers focusing on the importance of the border for the volumes of trade between two countries. On the one hand, some studies are trying to explain the impact of the political and economic integration (Nitsch, 2000; Baier and Bergstrand, 2002), on the other hand, there were also papers dealing with the political disintegration and its consequences for the bilateral trade (Fidrmuc and Fidrmuc, 2003; Sousa and Lamotte, 2007). As has been previously stated, although the Czechoslovak Republic was not part of the Soviet Union, its trade was almost exclusively realized with centrally planned economies.

Fidrmuc and Fidrmuc (2003) compare the fall in the trade intensity among the countries of the former Czechoslovakia, Soviet Union and Yugoslavia, immediately after their breakup. In addition, they make a comparison with the reunification of Germany. The authors observe a steep decline in bilateral trade after all the political breakups<sup>4</sup>. The political integration and the economic crises in Russia may also have played an important role. Contrary to them, Sousa and Lamotte (2007) find out that the trading patterns change very slowly. They oppose the traditional argument of the negative influence of the political disintegration on

international trade. These patterns may change at an unhurried pace because they depend on sunk costs, which a firm has to bear after it enters a new market and builds a new trading infrastructure. So did find Eichengreen and Irwin (1997). Paluzie (2015) underlines that the established patterns resulted from a massive development and depended on many factors, among them historical, cultural and linguistic ones.

We should also consider the general context, that may include the European Union integration, the proximity of the Czech Republic to the Western states or the latest world economic crisis in 2008–2009. Also in the recent years, in addition to the negative effects of the economic sanctions imposed by the EU, there were other effects behind the fall of exports to the Russian Federation, as we have mentioned. Russian bad economic performance, its dependence on the falling prices of oil, the weak ruble and the general tendency of the local government to discourage firms from signing a contract with potential partners abroad and giving preference to the local companies via public procurements (Samsyan, 2009). On the other hand, the Czech National Bank's interventions on the foreign exchange market in order to bolster national exports may have had a positive effect on Czech exports.

In line with the traditional approach to this topic, we will proceed to analyze the determinants of the actual Czech exports through the gravity model approach.

#### *Gravity Model of International Trade*

In the analysis of international trade flows, the gravity model was pioneered by Jan Tinbergen (1962), who was followed by a number of economists, such as Hans Linneman (1966), James Anderson (1979), Alan Deardorff (1984), Jefferey H. Bergstrand (1985), Helpman and Krugman (1985) and Jeffrey Frankel (1997).

Additionally, economists in the last decade have made use of the mentioned model, as it performed reasonably well in empirical studies, and therefore it acquired great popularity among those who aimed to analyze natural relations behind the trade among different states of the world. The use of this model is not restricted to the trade of goods. It is often used to assess the flows of migrants or foreign direct investment, the impacts of free trade areas or the influence of the exchange rate volatility and currency unions. However, there is still no consensus about the appropriateness of the variables included in the regression equation, nor about the estimation technique.

Despite the criticism concerning its lack of theoretical background, empirically, it has been

4 For example the trade intensity between the Czech and the Slovak Republics before the breakup was 32 times higher than the normal level predicted by the gravity model. The following political disintegration led to a fall to 11 fold of the predicted level from 1993 to 1994. In 1998, it was only 7 times the normal level Fidrmuc and Fidrmuc (2003).



extremely successful (Deardorff, 1984). Until the last decade of the 20<sup>th</sup> century, the models used to work with cross-sectional data. However, this may lead to endogeneity problems of the explaining variables with the error term, or due to the omission variable bias, and consequently to inappropriateness of the OLS estimates (Baier and Bergstrand, 2002; Egger, 2004; Bubáková, 2013).

Recently, papers like Anderson and Van Wincoop (2003) attempt to address the correct specification of problems. Nevertheless, there is still an open debate about how to deal, among others, with zero trade flows (Francois and Manchin, 2006; Linders and De Groot, 2006; Gómez-Herrera, 2012; Grančay *et al.*, 2015), or the methods of calculation of the geographical distance (Nitsch, 2000; Anderson and Van Wincoop, 2004; Brun, 2005). There is therefore still space for further investigation.

### Methodology

We divide this section to the first part that covers data and our attitude towards the topic and the second that presents our results.

#### Data and attitude towards the topic

Our sample includes 45 trading partners of the Czech Republic from 2000 to 2015. It is a balance data set, as there are no zero flows. The included countries are either European countries or members of the Commonwealth of Independent States which includes Eastern post-soviet states. We aim to specify the determinants of the Czech exports to those countries. The data set was retrieved from the External Trade Database provided by the Czech Statistical Office (2016). It contains Czech exports from January 2000 to December 2015.

The following two regression equations have been specified. Both of them try to find out whether there is still some bias towards the East in Czech exports.

$$\ln\_EXPvolume_i^t = \beta_0 + \beta_1 + \beta_1 \ln\_GDP\_PPP\_1_i^t + \beta_2 \ln\_distance_i + \beta_3 Common\_history_i + \beta_4 Land\_locked_i + \beta_5 Island\_state_i + \beta_6 Inst\_avg_i^t + \beta_7 EEA_i^t + \beta_8 EU_i^t + \beta_9 COMECON_i + \varepsilon_i^t \quad (1)$$

$$\ln\_EXPvolume_i^t = \beta_0 + \beta_1 + \beta_1 \ln\_GDP\_PPP\_1_i^t + \beta_2 \ln\_distance_i + \beta_3 Common\_history_i + \beta_4 Land\_locked_i + \beta_5 Island\_state_i + \beta_6 Inst\_avg_i^t + \beta_7 EEA_i^t + \beta_8 EU_i^t + \beta_9 COMECON\_EU_i + \beta_{10} CIS_i^t + \beta_{11} RF^t + \varepsilon_i^t \quad (2)$$

The dependent variable in both of the equations expresses the volume of exports from the Czech Republic to the corresponding trading partner.

We generally believe that Czech exports positively depend on economic growth at trading partners, negatively on transportation costs (distance of the countries, the fact whether a country is land

locked or not) and positively on proximity of institutions. Our research answers the question whether there was anything special on exports to specific regions. These regions are in our model represented by ex-COMECON and contemporary EU members, the CIS countries and the Russian Federation. Below we focus on all the explaining variables of the model.

The right sides of both regression equations include time varying as well as time invariant terms. The volumes of trade may be positively influenced by the size of the demand. One possibility how to cover this influence is to use the gross domestic product in the equation. In order to do so, we include the variable  $\ln\_GDP\_PPP\_1_i^t$ , which reflects the gross domestic product in purchasing power parity of the 45 trading partners of the Czech Republic. The data, provided by the World Bank, are in current dollars.<sup>5</sup> We use the lagged variable, in order to avoid endogeneity problem caused by the fact that the product of one country is a function of its net exports. However, according to Frankel (1997), endogeneity causes only a little change in the results and it is therefore often ignored.

To approximate the transaction costs, we include the  $\ln\_distance_i$  term. The data for this variable was retrieved from the geobytes.com site<sup>6</sup>, which uses the great circle approach.<sup>7</sup> We expect this variable to influence the volume of exports negatively. We also expect the transportation costs to be higher for countries without access to the sea and for this reason we use the dummy *Land\_locked*, which takes the value of 1 for countries that are landlocked and 0 otherwise. Our source in this case was the CEPII database (Mayer and Zignago, 2011), that provides also data for the next geographical variable of interest, *Island\_state*, as the trading patterns of countries surrounded completely by the sea are expected to be different from the others.

The *Common\_history* variable accounts only for Slovakia and hence is 0 for the rest of the trading partners. There may still be strong ties to this country because both republics share a border, history and to a certain extent also the language. There is no other country with so many links to the Czech Republic. Indeed the inclusion of the *Border* variable did not lead to reasonable results and therefore was omitted. The reason may be that all the countries that share borders with the exporter are European Union members and there are no physical borders among them.

The volume of Czech exports is also expected to be influenced by the institutional quality of its purchaser countries. For this purpose, we include the variable *Inst\_avg*. This is the average of the six Worldwide Governance Indicators (WGI). This

5 The data for Malta 2015 is an estimate made by the World Bank.

6 The data for Malta was retrieved from GeoDataSource.

7 Nevertheless, there is no consensus among the existing literature about how to measure the distance between two countries.

project provides aggregate indicators of the quality of governance and has been published by the World Bank since 1996. Due to the fact that the indexes are yearly constructed only from 2002, the values for 2001 had to be interpolated from the 2000 and 2002 ones. These indicators result from enterprise, citizen and expert surveys among many countries of the world. They are Political Stability No Violence / Terrorism, Voice and Accountability, Rule of Law, Government Effectiveness, Control of Corruption and Regulatory Quality. They take values from -2.5 (bad institutional quality) to 2.5 (very good quality of institutions). These variables may have a positive effect on the trade magnitude and therefore the countries with negative values of this index are unlikely to import the same volume of Czech exports, as those with strongly positive ones. Going to the East, the institutional quality generally worsens.

Other dummies were also included in the model. These are  $EEA_i^t$ ,  $EU_i^t$  and  $COMECON_i$ . The first one takes the value of 1 if the country is part of the European Economic Area and 0 if it is not. The same logic holds for the  $EU_i^t$  term, which accounts for the European Union membership. The last variable distinguishes economies which were part of the Council of Mutual Economic Assistance (COMECON) or were at least associated ones, from those which were not. The problem here arises with Germany, as its former Eastern part was a centrally planned economy, whereas the Western one capitalist. We suppose the latter to be economically stronger and hence account for the country as a non-COMECON member. In the second equation, The  $COMECON_i$  term has been substituted by three partial ones. The  $COMECON_{EU_i}$  dummy is 1 if the country is one of the post-soviet members of the EU<sup>8</sup> and 0 otherwise. The  $CIS_i^t$  variable reflects if the country is a member of the Commonwealth of Independent States. Georgia was member till 2009 and Ukraine till 2014 and therefore the corresponding values for these units are 1 till the respective years and 0 onwards.<sup>9</sup>  $RF^t$  is a dummy for the Russian Federation and is zero for the rest of the countries included in the sample.

$\beta_0$  is an intercept and  $\beta_t$  is a year-specific intercept used to account for significant year-to-year changes in the world trade patterns as the financial and economic crises of 2008 and the recent events related to the Russian Federation may have also affected the trade patterns.  $\varepsilon_i^t$  is the error term.

Following the Hausman test, the method used for the estimation is the GLS random effects model (RE). This method allows for time-varying intercepts, because all the things equal, some

countries may trade more in different moments. Although in the existing literature the fixed effects method (FE) prevails, the RE is preferable if one is interested in estimating time-invariant variables, as the FE drops them out. The drawback of the RE method is that it assumes that there is no correlation between all the observed and all the unobserved influences. If this assumption is not met, it may result in inconsistent estimates (Egger, 2005). Another disadvantage is that it provides us with a low statistical significance of some parameter estimates. Nevertheless, the signs of the estimates remain the same (Grančay *et al.*, 2015). The method for testing the adequacy of this estimation technique is the above mentioned Hausman test. If the null is not rejected, the RE model should be consistent and its estimates more efficient (Gómez-Herrera, 2012).

## RESULTS AND DISCUSSION

Our results are depicted in the following table illustrating the size and direction of the main determinants of exports of the Czech Republic to selected countries.

As expected, the effect of GDP is positive and highly significant. Also the estimated parameter for the distance term has the expected sign and it reflects the fact that growing distance magnifies the transaction costs and therefore affects the trade negatively.

The regression corroborated our presumption of lasting considerable ties with the Slovak economy, as the term *Common\_history<sub>i</sub>* is positive and highly significant. The variable of special interest was  $COMECON_i$ , which also resulted positive and strongly significant.

Hence this gravity model estimation provides evidence that the past still matters. Nevertheless, it is conceivable that there may be some differences among the trading patterns with the COMECON countries. This could be based, among others, on the quality of institutions. The parameter estimate of *Inst\_avg<sub>i</sub>* is highly significant and positive. This is not a surprise, as the exporter may beware of those countries that are not politically stable, do not respect property rights, where corruption flourishes, etc.

Positive, living up to the expectation, is also *Island\_state<sub>i</sub>*. On the contrary, the parameter estimate for the *Land\_locked<sub>i</sub>* countries resulted negative. Both of them are statistically significant, however on a lower level of significance (5 and 10% respectively). The same holds for the  $EU_i^t$  term with a 10% significance level and a positive sign. The EEA membership resulted not relevant. The low or null significance level of these parameter estimates could

8 These countries are Slovak Republic, Hungary, Poland, Slovenia, Estonia, Latvia, Lithuania, Bulgaria, Romania and Croatia.

9 The other countries included in this variables are the actual members of the CIS: Armenia, Azerbaijan, Belarus, Kazakstan, Kyrgyzstan, Russian Federation, Tajikistan, Uzbekistan, Moldova and Turkmenistan as an associated member.

III: GLS Random effects model for the 45 European and CIS trade destinations of Czech exports.

Random effects (GLS)				
	1		2	
<b>const</b>	-6.222	***	-5.82538	***
<b>l_Distance</b>	-0.90245	***	-0.863429	***
<b>l_GDP_PPP_1</b>	1.07059	***	1.05199	***
<b>Inst_avg</b>	0.522012	***	0.462749	***
<b>Common_history</b>	1.79026	***	1.77005	***
<b>Island_state</b>	1.37945	**	1.28433	**
<b>Land_locked</b>	-0.292683	*	-0.293674	*
<b>EU</b>	0.738767	*	0.774285	*
<b>EEA</b>	-0.629302		-0.695273	
<b>COMECON</b>	0.477616	***		
<b>COMECON_EU</b>			0.434941	**
<b>CIS</b>			0.158867	
<b>RF</b>			-0.00129767	

Hausman test –

Null hypothesis: GLS estimates are consistent

Asymptotic test statistic: Chi-square(18) = 1.57584

with p-value = 1

The \*, \*\* and \*\*\* indicate significance on 10, 5 and 1 % level.

be a result of one of the above mentioned drawbacks of the random effects method.

If the difference among these countries is considered and the variable  $COMECON_i$  is dropped from the model and instead of it,  $COMECON_{EU_i}$ ,  $CIS_i$  and  $RF_i$  are included, the permanency of the trading patterns of Czech exports is more clear. Whereas the second and the third terms are not significant, the  $COMECON_{EU_i}$  one results positive and significant. The model therefore shows that the argument of Czech bias towards the Eastern

markets is true, nevertheless, only if it accounts for the East of the European Union (ex-COMECON). It means that, controlling for the gross domestic product, distance, etc., exports to these destinations are higher than to the rest of the countries. There is no such evidence of Czech export bias towards Russia or other CIS countries. Hence, the historical linkages are of importance, nevertheless, there may be other factors considered by the exporters, for example, the institutional climate, which provides for less problematic trading relations.

## CONCLUSION

Czech(oslovak) trade used to be almost exclusively oriented towards the Eastern markets during the period of the centrally planned economy. Economic transformation consequently changed the direction of trade towards western markets. Our goal was to find out if there was still any bias towards Eastern markets in Czech export. In specific we tried to determine if the level of exports to some of the destinations exceeds the normal level predicted by the gravity model. We considered three specific destinations – the Russian Federation, the CIS countries and the ex-COMECON contemporary members of the EU. We found out that there is a positive bias in Czech export to the third group, whereas the other groups were not statistically significant. We can conclude that Czech exports to these destinations not only take relatively small share of the total exports. At the same time, there is not any specific export pattern that would be inherited from the period of the central planning and which would mean any specific dependence on Russian or CIS markets.

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