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# Time Dependent Efficiency of Free Trade Agreements: The Case of Slovenia and the CEFTA Agreement

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*Abstract:* In international trade literature there is a common feature that the abolishment of barriers to trade leads to direct expansion of trade flows. Many empirical studies that simulate welfare effects of trade liberalisation explicitly make use of this direct tariff reduction – trade expansion mechanism. On the contrary, this paper explores panel data to analyse the time-dependent efficiency of Free Trade Agreements (FTAs). It is shown that trade liberalisation *per se* needs time to become effective, and that immediately after the enforcement of the FTA the autonomous factors (such as domestic demand for particular import goods) are of great importance. Using an illustrative case of rapid expansion of Slovenian imports from other CEECs in the period 1993–1998, the paper demonstrates that the tariff reductions become effective in the second to third year after enforcement of the FTA. In addition, the relation between tariff reductions and trade expansions is non-linear, which reflects the time needed for new business connections to be established.

## I INTRODUCTION

In international trade literature there is a common feature that the abolishment of barriers to trade leads to expansion of trade flows. The past four decades of rapid growth of bilateral, regional and world trade flows are usually taken as evidence of direct effects of extensive trade liberalisation under the GATT rounds as well as in the framework of different regional free trade agreements (FTAs). Starting with Harris (1984, 1986), and Deardorff and Stern (1986), all the subsequent studies using computational general

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equilibrium (CGE) models explicitly made use of this *direct tariff reduction – trade expansion mechanism* in order to simulate the welfare effects of trade liberalisation. Furthermore, a number of empirical studies (Smith and Venables (1988), Gasiorek, Smith and Venables (1991, 1992, 1994); Norman (1990) and Haaland (1993), etc.) followed the same approach by converting other non-tariff barriers to trade into tariff reduction equivalents and using then these figures to calculate the effects of establishment of the Single European market. However, there is, to our knowledge, no evidence of two basic facts regarding this direct tariff reduction – trade expansion mechanism. First, one has to ask the question how does this mechanism work, i.e. how "direct" is the relationship between trade liberalisation and trade expansion? And second, what is the time path of the mechanism, i.e. how long does it take trade liberalisation to become effective?

This issue should have been of special interest at the end of the 1980s when present transition countries opened up and reoriented their trade flows towards EU. There is a bulk of studies using the gravity approach aiming at estimating the potential volume of trade expansion (see Baldwin, 1994) for a survey). In general, most of the studies predict that the trade of Central and Eastern European countries (CEECs) with Western Europe should expand fivefold comparative to the pre-transition trade in order to reach the level estimated by the gravity model. Some of the studies from the mid-1990s suggested that the trade potential between CEECs and the EU has already been exhausted up to 1995 (Festoc, 1996). However, none of the studies paid attention to the factors behind the evident trade expansion. Was it enough just to remove tariffs and the trade started to expand mechanically? What about the autonomous factors such as the latent unsaturated pre-transition demand for western goods? Would not imports of the CEECs from EU expand also without removal of tariffs, only because the ban on imports of western goods has been lifted?

The aim of the present paper is to shed more light on the above issues. We show that lifting the barriers needs time to become efficient and that in the meantime the autonomous factors are of great importance, since they may or may not stimulate expansion of bilateral trade flows. We use an illustrative case of rapid expansion of Slovenian imports from other CEECs in 1990s. We explore to what extent has the expansion of Slovenian imports from other CEECs been driven by the reduction of import tariffs in the framework of the Central and Eastern European Free Trade Agreement (CEFTA[1]) after 1994 and to what extent it was autonomous and would have occurred regardless of

[1] Members of CEFTA agreement are the Czech Republic, Hungary, Poland, Slovakia, Slovenia, Romania and Bulgaria.

the FTA. In order to do so, we estimate the impact of tariff reductions and of autonomous factors such as demand and other product specific fixed effects on the expansion of Slovenian imports. We use an error components model in a panel framework, which enables us to control for both the time dependent effects of trade barriers reduction as well as country and product-specific effects. We first employ a static model and then switch to the dynamic, partial adjustment model. The latter – via the lagged dependent variable and non-linear time determined effect of tariff rate cuts – enables us to capture the time dependent effects of establishing new business connections between Slovenian and CEFTA firms, which would give rise to further expansion of bilateral trade flows.

The paper addresses a special case of FTA. However, we are confident that the examined pattern of FTA enforcement is general and is relevant also for other transition and developing countries. We see the main contribution of our paper not only in the fact that it is, to the best of our knowledge, the first paper that addresses the questions of the time-dependent efficiency of FTAs, but also in an original empirical approach to modelling non-linear time determined effect of trade liberalisation.

The paper is organised as follows. Section II gives a short overview of the volume and the structure of trade as well as the dynamics of trade barriers between Slovenia and the CEFTA countries in the period 1992-1999. Section III describes the methodology and the data used in the analysis. Section IV reports empirical estimates of the impact of reduction of trade barriers and the impact of changes in domestic demand on the expansion of Slovenian imports from CEFTA countries. The conclusions briefly summarise the main findings of the paper.

## II DYNAMICS OF TRADE AND TRADE BARRIERS BETWEEN SLOVENIA AND CEFTA COUNTRIES

### *2.1 Pattern of Trade Expansion in Countries in Transition*

The opening of transition countries has initially led to a collapse of trade among former members of CMEA market (Hamilton and Winters, 1992; Baldwin, 1994). The collapse of CMEA market has been followed by an extensive expansion of trade with Western countries, in particular with the EU, with the trade patterns that corresponds to comparative advantages (Halpern, 1995; Hoekman and Djankov, 1997; Freudenberg, 1998). Most studies analysing the expansion of trade, however, discovered different patterns of trade reorientation. Only the advanced CEECs were able to expand trade with the West by increasing not only the value, but also and

above all, the share of exports to the West. For other transition countries (least advanced CEECs and the successor countries of the former Soviet Union (FSU)) this adjustment of trade is still to be completed. For advanced CEECs it has been mainly argued that this trade expansion with the West has been due to reorientation of products previously sold on CMEA markets. Brenton and Gros (1997) found some limited evidence in favour of this hypothesis. In contrast, Jackson and Repkine (1997) discovered similar clustering of exports to the EU at 5-digit SITC between 1988 and 1996. Thus, as already noted by Rodrik (1994), the reorientation of products previously sold to CMEA market and to the EU market was not a prominent feature of the transition period. Furthermore, Repkine and Walsh (1999) explicitly show that the recovery in individual sectors' output is explained by the increasing importance of inherited EU-oriented production over time, while formerly CMEA-oriented sectors did not recover yet.

Slovenia is the only successor country of ex-Yugoslavia that succeeded to follow the pattern of trade reorientation of the advanced CEECs.[2] As noted by Wyzan (1999), in spite of the common legacy, Slovenia performed much better in the transition process relative to other former republics of ex-Yugoslavia. The main reasons for this performance lie certainly in more favourable initial conditions (higher level of development, higher degree of trade openness, inherited trade orientation to EU countries, etc.), and in a more favourable political situation. However, one should also consider the explicit efforts of the Slovenian government to create a favourable climate for economic recovery via an almost complete liberalisation of foreign trade. After the break-up of former Yugoslavia, and the loss of a high share of the domestic market, Slovenia embarked on an intensive drive to reorient its trade. In accordance with theoretical considerations (Cooper and Massell, 1965), that also found lately an important empirical confirmation in Vamvakidis' (1998) study, that broad liberalisation is better than joining a single regional free-trade area, Slovenia followed a diversified pattern of trade liberalisation. In addition to the Co-operation and Europe Agreements with the EU, Slovenia was rapidly entering into free-trade agreements (FTAs) with EFTA and CEFTA member states, as well as with other European countries. Thus, up to now, Slovenia has signed FTAs with altogether 32 European countries that account for 86 per cent of total Slovenian foreign trade in 1999. Having in mind that Slovenia is also a member of WTO, it is clear that Slovenian foreign trade is almost completely liberalised.

[2] Furthermore, Slovenia is in this respect the most successful transition country, since its export propensity to the EU is the highest among the first- round transition candidates for EU accession.

*2.2 Dynamics and Structure of Bilateral Trade with CEFTA Countries*

The results of Slovenia's search for new markets can also be seen in the rapid expansion of trade with CEFTA countries. The volume of trade with most countries more than tripled in the period from 1992 to 1999: total exports to CEFTA countries grew by an absolute 144 per cent and imports grew by 147 per cent. In comparison, it must be noted that total Slovenian exports and imports in the same period grew by 36 per cent and 73 per cent respectively, whereas exports to the EU grew by 46 per cent and imports by 107 per cent.

The exceptional dynamics of the growth of bilateral trade with CEFTA countries is also reflected in the average annual rates of growth in this period, which by far exceed average rates of growth of total Slovenian trade and trade with the EU in this period. Average growth rate of exports to all CEFTA countries is twice the growth rate of exports to EU, and triple the growth rate of total exports. Obviously, the most likely reasons for this are the initially low level of bilateral trade and rapid elimination of trade barriers with CEFTA countries within the framework of FTAs. However, in our opinion, an even more important reason for it might be the efforts of Slovenian firms to compensate the loss of the former Yugoslav market with the markets of CEFTA countries. With the imposition of barriers on trade with the former Yugoslav republics,[3] and the following near-complete suspension of bilateral trade,[4] Slovenia redirected its demand for the necessary inputs, deficient raw materials and agricultural products to the cost-effective markets of CEFTA countries. The same is true for the exports – after the break-up of Yugoslavia and the suspension of bilateral trade domestic firms have needed new export markets for their large-scale production facilities.

As a result of rapidly increasing bilateral trade, the CEFTA countries' share in total Slovenian exports in the period 1992-1999 increased from 3.6 to 6.7 per cent, and their share in total imports increased from 5 to 7.7 per cent. It is interesting to note, that the shares of individual CEFTA countries' trade in total trade increased nearly equally. In relative terms, Hungary's share experienced the slowest growth, both in exports (increasing from 1.1 per cent to 1.6 per cent) and in imports (decreasing from 2.6 per cent to 2.5 per cent), whereas – with the exception of the Czech Republic – the other CEFTA countries' shares more than doubled.

[3] Starting in 1989, the former Yugoslav single market began to fall apart due to impositions of some quasi-import taxes among the republics. After the official break-up of Yugoslavia in 1991, additional barriers on bilateral trade were created, followed by the war in Croatia and Bosnia, and the trade embargo against Serbia and Montenegro.

[4] Slovenian sales to other republics of the former Yugoslavia decreased in only two years from $6.662 millions in 1990 to only $1.508 millions in 1992.

Slovenia's exports to CEFTA countries consist nearly exclusively of manufacturing products, as the combined exports of the agricultural products and food (section A and industry DA) account for just 2.3 per cent of the total exports. With a 40 per cent share, chemical products (and within this industry, mainly pharmaceuticals) represent the biggest part of exports of industrial products, followed by the metal industry's products, machinery, paper, and electrical and optical equipment. CEFTA represents an important sales market for some industries (in particular for oil derivatives, chemical products, paper, rubber and plastic products, and metal products). In these industries shares of exports of individual products in total industry's exports significantly exceed the share of total exports to CEFTA countries in total Slovenian exports. The structure of exports to individual CEFTA countries does not differ substantially from the structure of total exports to CEFTA countries.

The structure of Slovenian imports from CEFTA countries differs significantly from the structure of exports, especially by the relatively high share of imports of agricultural and food products (nearly 20 per cent in total), chemicals, iron and steel as well as unprocessed wood. The significance of the CEFTA countries' markets as an import market for Slovenian manufacturing is evident from the fact that 27 per cent of all imported agricultural and food products originate from CEFTA countries. The situation is similar for the acquisition of iron and steel (16 per cent of all imported iron and steel is purchased in CEFTA countries). Of similar significance is wood, followed by certain mineral non-metals, chemicals etc.

The structure of imports from individual CEFTA countries differs slightly among them. Especially notable are Hungary and Romania, from which there are the least industrial imports (only about 60 per cent and 75 per cent of imports, respectively, consist of non-food products). Hungary accounts for approximately 80 per cent of total Slovenian imports of agricultural and food products from CEFTA countries. From a global perspective, Hungary represents more than 20 per cent of all Slovenian imports of agricultural and food products. The Czech Republic and Slovakia export mostly iron and steel to Slovenia (more than 40 per cent of their exports) and in addition to this Slovakia exports chemical raw materials (16 per cent) and the Czech Republic cars (11 per cent). The largest part of Polish exports to Slovenia is chemical raw materials (24 per cent) followed by iron and steel (15 per cent).

*2.3 Dynamics of Trade Barriers*

To denote trade barriers in this analysis, we use exclusively data on actually paid import duties, including paid customs duties, variable import levies and other import taxes. In the general sense, of course, trade barriers

have a wider meaning, as they also encompass untariffed import quotas and other forms of non-tariff barriers (rules on domestic content and the origin of goods, voluntary export restraints, phaetosanitary regulations, technical standards, public procurement rules, etc.), but these cannot be expressed quantitatively.

In 1998 the average import duty for the import of most industrial products from CEFTA countries was equal to or close to zero, which points towards completely liberalised importation of industrial products from CEFTA countries. Especially notable are the Czech Republic and Slovakia, with which the trade in industrial products has already been completely liberalised.

## III METHODOLOGY AND DATA

### *3.1 Methodology*

We model Slovenian imports from CEFTA countries with import duties and domestic demand for individual products (all variables in logs). Regressions are performed on a panel data set comprising 243 cross-section units (import items from 5 countries) over 7 years (1992-1998). A natural approach to modelling of trade reorientation is to use an ARDL (1,0,0) statistical model, since we are empirically describing a process of gradual transition between two trade regimes; from initial protectionistic regime, when trade was on a low level, to a liberalised one. Lagged dependent variable captures the gradual establishment of new business connections between Slovenian firms and their partners from CEFTA. We do believe that the elimination of mutual trade barriers has an important effect on expansion of bilateral trade flows in the long run, while in the short run there are other, autonomous factors that give rise to a slower or faster trade expansion. The most important autonomous factor (in relation to tariff reductions) is, of course, domestic demand, which can be effectively expressed in terms of domestic consumption. In the case of strong domestic demand for a certain deficient product, imports of this product will increase despite trade barriers. Likewise, there will be no increase in imports of this product when domestic consumption is saturated, except in cases where a change of trade barriers with an individual trading partner significantly affects the competitiveness of importing this product from that country, compared to other trading partners. Of course changes in trade flows are also affected by other (unobserved) factors, which pertain to the characteristics of a certain product – most importantly, homogeneity or heterogeneity of products, as well as the quality of the products in relation to their price. The latter factors can be empirically accounted for by controlling for unobserved individual effects in the panel framework.

In algebraic notation the model specification can be generically written as:

$$IM_{it} = a_i + d_t + \lambda\, IM_{it-1} + b_1 F(t) T_{it} + b_2 C_{it} + \varepsilon_{it}.^{5} \quad (1)$$

All variables are in logs. *IM* denotes imports, *T* tariff rates and *C* domestic consumption of product *i* in time period *t*. $a_i$ represents cross-section specific country and product fixed effects, whereas $d_t$ captures common time effects. Pooled OLS and "within" estimators of (1) are inconsistent for finite *T* by construction, due to the presence of fixed effects. Consistent estimator of (1), based on generalised method moments technique, has been provided by Arellano and Bond (1991). Their procedure (Diff-GMM) differences the equation in order to eliminate fixed effects and then uses lagged levels of imports, tariff rates and consumption as instruments for differenced equations. The procedure developed by Blundell and Bond (1998) (Sys-GMM) exploits additional moment restrictions, which leads to the use of initial conditions as additional instruments for level equations. These additional moment restrictions are particularly informative when the variance of individual effects ($a_i$) is relatively large compared to the variance of the normal error term ($\varepsilon_{it}$), which is the case of present data set. For this reason we report estimates obtained with both methods and show that Sys-GMM yields economically more meaningful results.

In the final stage we modify Equation (1) with *F(t)*, a function of time that describes the evolution of tariff rate coefficient through time – from the first year when trade liberalisation started to the last year when trade was completely liberalised. Heuristically, and as confirmed by the results, the tariff rate coefficient should follow a certain time path. The coefficient is expected to be very low initially (first year of FTA enforcement). As newly established business connections enable enterprises to profit on tariff rate cuts the coefficient increases and reaches its peak after three years. Subsequently the coefficient decreases, reflecting significantly smaller changes in tariff rates in the last two years. Optimal empirical strategy would require non-parametric estimation or the use of increments along the logistic curve for *F(t)*. However, as Sys-GMM is a linear estimator and logistic function is non-linear in its parameters, we used standard normal function as the second best choice. Thus, *F(t)* can be represented as:

$$F(t) = \sqrt{2\pi}\, e^{-\frac{1}{2}t^2};\ \ t = -2, \ldots, 2 \quad (2)$$

[5] In Table 1 we report also estimates of static model ($IM_{it} = a_i + b_1 T_{it} + b_2 C_{it} + \varepsilon_{it}$) to show that modelling the process of trade reorientation as a static process leads to a statistically misspecified model.

We do not include the *F(t)* function in front of demand coefficient, since the inclusion resulted in distortion of the results. This confirms that demand coefficient did not follow a similar time dependent path.

*3.2 Data*

Imports and domestic consumption are measured in billion SIT, while import duties are calculated *ad valorem* – as a ratio of actual import duties paid to the value of imports of each product item (in per cent).

We dispose with the data on Slovenia's foreign trade at the highest possible disaggregated level, which is accompanied by Slovenian statistics at the level of the Combined Nomenclature of Tariffs (CN). Basically, this nomenclature contains over 10,000 production items, but Slovenia's trade with individual CEFTA member countries only involves about 800 to 2,500 production items. As far as foreign trade data is concerned, econometric analysis would thus be possible on a sample of the indicated size, depending on the selected country. The problem limiting the size of the sample is the consumption variable, which is defined as the sum of domestic production and of imports of a specific product, minus the exports of that product in the selected time period. Production statistics are not even near as disaggregated as the CN. Data on Slovenian industrial production is available at the level of the 3-digit NACE. When this data is adjusted for the appropriate foreign trade flows with the appropriate partner country, we get a sample of 90 import items (according to NACE-3) per each country and per each year. Further balancing of the sample, where we excluded all cross-sectional units with incomplete time series of data, led to a balanced sample of 43 product items for Slovakia and up to 72 items for the Czech Republic.

The second problem of sample limitation is related to the selection of the time period, which depends on the date of enforcement of the FTA with the individual CEFTA country. With the Czech Republic and Slovakia the FTA came into force in January 1994, with Hungary in July 1994, and with Poland in January 1995. Hence, for the Czech Republic, Slovakia and Hungary year 1993 and for Poland year 1994 have been taken as the initial years before the FTA came into force. We have chosen 1997 for the Czech Republic and Slovakia, and 1998 for other countries as the final year of the elimination of trade barriers. Data for 1992 were utilised as instruments in the estimation of the dynamic model. Therefore, we have differently sized data sets for each of the selected countries.

## IV RESULTS

The upper panel of Table 1 reports the estimates of the static model using pooled OLS and "within" estimators for CEFTA as a whole.[6] The signs of coefficients are consistent with our priors and statistically significant. These results are robust to inclusion of time and country dummies. However, the tests for first and second order residual autocorrelation in the residuals (m1 and m2) show that both models are statistically highly misspecified. This deficiency was corrected in the dynamic (ARDL (1,0,0)) specification, which is reported in the lower panel of Table 1. For all three specifications the test for residual autocorrelation are consistent with the assumption of no residual autocorrelation.[7] A correct specification also requires inclusion of time and country dummies.

The estimates of the dynamic model reveal a different picture. The coefficient of lagged dependent variable is highly significant, and in size sufficiently below unity to be comfortable about the problem of non-stationarity of the system. While the demand and tariff-rate coefficients are insignificant and even incorrectly signed for Diff-GMM estimator, the results are better for Sys-GMM estimator. As explained in Section III, although both estimators are consistent, Sys-GMM estimator exploits additional moment restrictions that bear important additional information in our case.

Sys-GMM estimator yields correctly signed coefficients; the demand coefficient is significant and has a meaningful size (income elasticity close to 0.3). An important result is the insignificance of the tariff rate coefficient, which points to the absence of a linear and time-independent effect of tariff rate cuts on the expansion of imports. As expected, high growth of imports has been predominantly driven by the autonomous factors (domestic demand and unobservable product specific characteristics).

If there was any significant effect of tariff rate cuts, it must have been non-linear and time dependent. This is confirmed in the last line of Table 1. Augmenting the model in the manner described in Section III, and using Sys-GMM estimator on a modified equation yields a significant tariff rate coefficient, while leaving the estimates of the first two coefficients and their standard errors virtually unchanged.

[6] Estimation results for each individual country are not reported for compactness and are available upon request.

[7] In this case m1 and m2 are test statistics calculated on first-differenced residual. Rejection of the null for the m1 test implies the absence of a unit root, while accepting the null for the m2 test confirms the conclusion of no residual autocorrelation.

Table 1: *Estimation Results*[a]

| *Model* | *Estimator* | *Lagged Imports* | *Demand* | *Tariffs* | $R^2$ | *Specification tests*[d] *m1* | *m2* | *Dummies Time* | *Country* |
|---|---|---|---|---|---|---|---|---|---|
| **Static** | | | | | | | | | |
| (1,639 obs) | Pooled OLS | – | 0.783** | –0.101** | 0.29 | 48.3** | 35.9** | No | No |
| | | | (0.040) | (0.019) | | | | | |
| | Within[b] | – | 0.367** | –0.036** | 0.28 | 7.36** | –4.43** | No | No |
| | | | (0.07) | (0.014) | | | | | |
| **Dynamic**[c] | | | | | | | | | |
| (1,397 obs) | Diff-GMM[e] | 0.399** | –0.026 | 0.002 | – | –5.88** | –0.66 | Yes | Yes |
| | | (0.080) | (0.188) | (0.040) | | | | | |
| | Sys-GMM[f] | 0.534** | 0.289* | –0.029 | | –5.90** | –0.91 | Yes | Yes |
| | | (0.067) | (0.116) | (0.037) | – | | | | |
| | Sys-GMM | 0.530** | 0.260* | –0.122* | | –5.97** | –0.84 | Yes | Yes |
| | (non-linear)[g] | (0.066) | (0.109) | (0.055) | – | | | | |

Standard errors in parentheses.

[a] All the calculations were performed in DPD for Ox (Doornik, Arellano, Bond, 1999).

[b] Test for the presence of fixed effects: F = 11.32, p-value = 0.00.

[c] One-step standard errors presented.

[d] m1 and m2 are test statistics for first and second order autocorrelation in differenced residuals. Sargan's test of over-identifying restrictions not presented as no robust test can be based on 1st step residuals.

[e] Level instruments for differenced equation: $IM_{2,}\ldots, IM_{7,} D_{1,}\ldots, D_{7,} T_{1,}\ldots, T_{7}$.

[f] Level instruments for differenced equation: $IM_{2,}\ldots, IM_{7,} D_{1,}\ldots, D_{7,} T_{1,}\ldots, T_{7}$.
Level instruments for level equations: *Dummies,* $IM_{1,} D_{1,} T_{1}$.

[g] The model specification in this case is: $IM_{it} = \alpha_i + \delta_t + \lambda\, IM_{it-1} + \beta_i F(t) T_{it} + \beta_2 C_{it} + \varepsilon_{it}$, where

$$F(t) = \sqrt{2\pi}\, e^{-\frac{1}{2}t^2};\ t = -2, \ldots, 2$$

## V CONCLUSIONS

This paper explores the time-dependent efficiency of FTAs. We show that trade liberalisation *per se* needs time to become efficient and that immediately after the enforcement of the FTA the autonomous factors are of great importance for expansion of bilateral trade flows. Using an illustrative case of rapid expansion of Slovenian imports from other CEECs in the period 1993–1998 we explore to what extent the expansion of imports is driven by the reduction of import tariffs according to CEFTA agreement and to what extent it is autonomous. In order to do so we estimate the import function in ARDL(1,0,0) form, using the Sys-GMM estimator (Blundell and Bond, 1998) on a panel data set. The dynamic nature of the process and gradual adjustment of imports to changes in domestic demand and tariff rate reductions are confirmed empirically.

The results show that – after controlling for product-specific fixed effects and common time effects – the expansion of Slovenian imports from CEFTA countries has been predominantly driven by autonomous factors (such as domestic demand), as we find a positive and significant effect of domestic demand, while the effect of tariff reductions proved to be insignificant. This finding explicitly confirms our thesis that immediately after enforcement of FTA there will be an expansion of imports of already heavily traded products, while for other products some time is needed for new business connections to establish.

If there was any significant effect of tariff rate cuts, it must have been non-linear and time dependent. In this framework we make an attempt to explicitly model the time-determined effect of tariff rate cuts on new trade links by augmenting the tariff rate coefficient using a standardised normal curve. The results are consistent with our prior reasoning. The results show a significant time-dependent tariff rate coefficient, while leaving the estimates of all other coefficients unchanged. This implies that with time new business connections are promoted through decrease of trade barriers, which gives rise to increasing influence of tariff rate cuts on further expansion of bilateral trade flows. A similar time pattern could not be observed in the influence of domestic demand.

Regarding the efficiency of the CEFTA agreement, our analysis reveals that the autonomous reorientation of Slovenian trade due to the break-up of the former Yugoslav market had a deciding impact on the sizeable expansion of Slovenian imports from CEFTA countries. The liberalisation of trade – with a certain time lag needed for new business connections to establish – only served to increase the cost-effectiveness of the trade reorientation.

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