
AICEI PROCEEDINGS

Macedonian Export Performance and Potential Gains from EU Integration

*Nikica Mojsoska-Blazevski
Marjan Petreski*

Abstract

The objective of this paper is to assess Macedonian export performance as a function of the economic performances of its main trading partners in a panel context. We also evaluate the role of relative prices. In general, the results suggest that Macedonian exports are highly dependent on foreign demand, particularly on EU demand, while relative prices are insignificant. FTAs are found to increase Macedonian exports by half, but no additional gains are accrued from the CEFTA 2006 agreement. This is in accordance with the conclusion that the EU's economy has a strong effect on Macedonia; hence CEFTA 2006 countries, including Macedonia, are eager to trade with the EU instead of trading amongst themselves. In a separate section, the paper uses a qualitative approach to discuss the potential benefits for Macedonian trade from the new Lisbon Treaty and further EU integration in general.

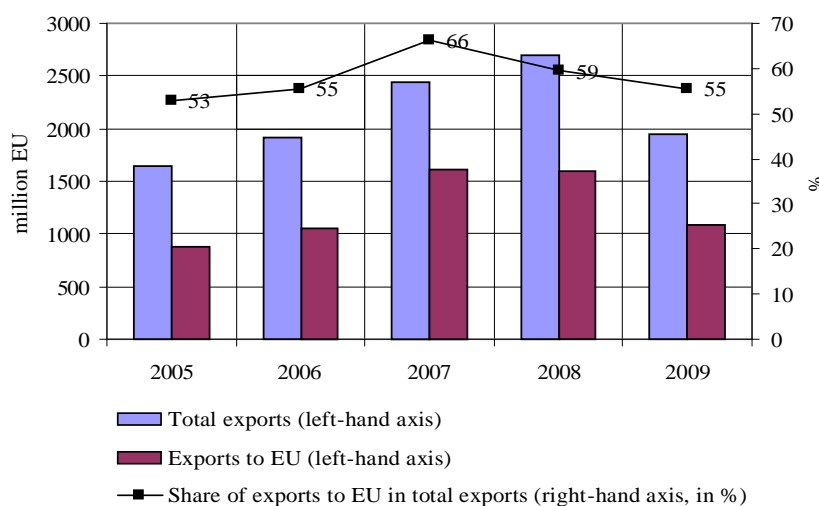
Keywords: *exports, Macedonia, trade, foreign demand, European Union*

Introduction

Macedonia is a small and open economy which exports approximately 40% of its domestic production. The sustainable growth of the Macedonian economy should thus be export-based, since the positive effects of trade-driven expansion in market size for a small country is greater than for a large country (Kathuria, 2008). In particular, small countries can benefit from economies of scale by greater access to and by being part of a larger market, by more efficient factor allocation, reduced macro-volatility, innovation and so on (Hallaky and Sivadasanz, 2009). Similarly, based on micro data from 27 transition economies, Gorodnichenko *et al.* (2009) found that greater trade flows induce greater competition and thereby stimulate domestic firms to innovate and improve.

The trade integration of Macedonia with the EU is quite large: exports to the EU-27 account for about 60% of total exports (see Figure 1). The second largest trade partner of Macedonia is CEFTA 2006, which participates with about 35% of total exports, or about 14% of GDP.

Figure 1: Total Macedonian exports and exports to the EU, 2005–2009



Source: Authors' calculations based on State Statistical Office and Ministry of Finance data

In terms of preferential trade agreements, Macedonia has so far signed two regional agreements: the Stabilization and Association Agreement (SAA) with the EU, in lieu of the Regional Approach of the EU, establishing political and economic conditionality for the development of bilateral relations with Western Balkan countries; as well as the CEFTA 2006 agreement with countries from South-East Europe.

The SAA was signed in 2001 and entered into force in April 2004. The EU announced that the SAA would improve existing autonomous trade preferences for the Western Balkan countries and provide autonomous trade liberalization for 95% of all their exports to the EU. Exports to the EU from these countries, including Macedonia, are free of quantitative restrictions or

measures with equivalent effect and are exempt from customs duties and charges with equivalent effect for all products except a limited number of products, such as baby beef, wine and fishery products. Macedonia accepted a complete abolition of quantitative restrictions and a gradual reduction of its custom duties over a (maximum) period of 10 years for industrial products, textile, steel, agriculture and processed agricultural products.

CEFTA 2006 is a comprehensive free trade agreement (FTA) between South-Eastern Europe (SEE) countries.¹ It provides for fully liberalized trade in manufactured goods and mostly free trade in agricultural goods, aimed at supporting trade and investment among member countries. The Agreement augmented 32 previous bilateral free trade agreements between SEE countries.

This study is among the first attempts to examine and empirically test the major determinants of the size of the export flows of the Republic of Macedonia at country level. Moreover, this study tries to quantitatively measure the importance of the EU for Macedonian exports, as well as the potential benefits for Macedonia from CEFTA 2006 membership. The theoretical framework for this investigation is the fairly standard Gravity Model, while panel econometric techniques are used. In general, the results suggest that Macedonian exports are highly dependent on foreign demand, in particular on EU demand. Free trade agreements are found to increase Macedonian exports by half; but no additional gains are accrued from CEFTA 2006. This is in accordance with the conclusion that the EU economy plays a potentially strong role for Macedonia; thus CEFTA 2006 countries, including Macedonia, tend to trade with the EU instead of trading among themselves. In a separate section we describe some of the features of the new Lisbon Treaty and qualitatively assess their potential importance for Macedonian export performance.

The paper is organized as follows: in the following section we provide theoretical background and a review of the relevant literature. Sections 3 and 4 deal with the model in the estimable form and the data used, respectively. Section 5 presents the research methodology, while results and discussion are offered in Section 6. Section 7 discusses potential gains for Macedonia from the new Treaty of Lisbon in a qualitative fashion. The final section presents our conclusions.

Theoretical Framework

The Gravity Model employed in the social sciences is a modified version of Isaac Newton's Law of Gravity. It has been consistently used in modeling bilateral international trade flows and is often referred to as a "workhorse for empirical studies" (Baier and Bergstrand, 2007), although it can be used to predict other flows as well, such as flows of migration and foreign direct investment, people, information and so on (Martinez-Zarzoso, 2003). In its simplest and conventional form, the gravity model estimates bilateral trade flows as a function of income levels (GDP expressed in nominal terms) and the distance between the two trading partners. Domestic income level approximates supply and is assumed to push exports, while foreign income approximates demand and is assumed to pull exports. The distance between capital cities is used as a proxy for transportation costs and hence is considered as a trade resisting factor (Clark *et al.* 2004).

Besides the above variables, the empirical specifications of the gravity model typically include (dummy) variables that support or reduce trade between two countries, such as common borders, common language, land areas, cultural similarity, geographical position, historical links, and preferential trade arrangements. These variables tend to affect the transaction costs relevant for bilateral trade and have been proven to be statistically significant determinants of trade in various empirical applications (Anderson, 1979; Helpman and Krugman, 1985). The Linder effect might also be incorporated in the model, meaning that countries at a similar developmental level (in terms of GDP per capita) will trade more. This effect is captured through a dummy variable that measures absolute differences between the per capita incomes of the trading partners. In addition to such conventional gravity models, generalized gravity models include price and exchange rate variables (Pugh and Tyrrall, 1999).

Moreover, as Clark *et al.* (2004) point out, the real exchange rate has an effect on exports, albeit their focus is on its volatility and the robustness that various measures provide. According to Pugh and Tyrrall (1999), the effect of exchange rate on exports is undoubtedly negative, though some studies underline the existence of two channels through which such an effect is realized: the uncertainty channel and the political economy channel, which has implications for policy actions.

The omitted variable of great concern is termed “multilateral resistance” and is emphasized in the theoretical foundation of the gravity model (Anderson and van Wincoop, 2003; Frankel, 2008). These effects are defined as a function of unobservable equilibrium price indices and depend on bilateral trade barriers and the income shares of all the trading partners. In other words, the term “multilateral resistance effects” summarizes the effects on a given bilateral trade from differential, possibly unobserved, trade costs between this country pair and all other trading partners. The gravity equation can then be interpreted as indicating that bilateral trade depends on the bilateral trade barrier between the two countries relative to the multilateral resistance indices of the two countries: for a given bilateral trade barrier between the two countries, higher barriers between them and their other trading partners would reduce the relative price of goods traded between them, increasing bilateral trade. In empirical applications, the multilateral resistance indices can be conveniently proxied by individual country effects. Since we employ a panel approach, these aspects are accordingly included in the country-specific effect. Given that no study, to our knowledge, has so far analyzed Macedonian exports in a panel context, this is among the most important contributions of this paper. We also include time effects in the model to control for time-specific factors such as world business cycles, global shocks and so on, as a strategy invariably suggested in recent panel literature (see, for instance, Sarafidis *et al.* 2006).

The gravity model as a framework for estimating bilateral trade flows has proved to be robust and successful in a wide variety of empirical applications (Clark *et al.* 2004). Moreover, the gravity model is strongly founded in international trade theories, from those based on different factor endowments or technology between countries to models of increasing returns to scale and monopolistic competition, as well as economic geography, non-economic gains and industrial localization (Deardorff, 1998; Anderson and van Wincoop, 2003; Clark *et al.* 2004; Caporale *et al.* 2008).

One of the main critiques of studies using the gravity model to predict international trade flows concerns causality, that is the endogeneity of the choice over the trading partners(s) with whom a country signs FTAs and/or forms a currency union, which is usually (and ‘naturally’) biased towards its neighbors. Hence, if an FTA dummy is not treated as endogenous, biased and inconsistent results arise from the unobservable heterogeneity and/or omitted variables (Caparole *et al.* 2004; Baier and Bergstrand, 2007).

Controlling for endogeneity by using differentiated panel data—rather than instrument variables used in previous studies—Baier and Bergstrand find that traditional estimates of the effect of FTAs on trade flows have underestimated the effect by 75–85%; the results are biased downwards, which explains rather weak empirical support or low estimates of the effect. According to Frankel (2008), the endogeneity issue might be stronger for developing countries, such as Macedonia. Having no instrument variables and given the scope of this paper, tackling potential endogeneity bias will form a subject for future empirical analysis by the authors.

Empirical Model

The benchmark panel specification for the analysis of aggregate trade is similar to that used by Rose (2002) and Clark *et al.* (2004). We estimate the following model:

$$\ln lex_{ijt} = b_0 * \ln lgd_{p_dijt} + b_1 * \ln lgd_{p_fijt} + b_2 * rer_{ijt} + b_3 * dist_{ijt} + b_4 * trade_{ijt} + b_5 * border_{ijt} + b_6 * language_{ijt} + b_7 * CEFTA_2006_{ijt} + b_8 * linder_{ijt} + \alpha_i + \tau_{t} + \epsilon_{ijt}$$

where $\ln lex_{ijt}$ denotes the logarithm of the aggregate export between Macedonia (country i) and country j at time t ; $\ln lgd_{p_dijt}$ is the logarithm of the GDP per capita of Macedonia; $\ln lgd_{p_fijt}$ is the logarithm of the GDP per capita of the country j ; rer_{ijt} is the real bilateral exchange rate between Macedonia and country j ; $dist_{ijt}$ is the physical distance between Macedonia and j ; $trade_{ijt}$ is a dummy variable taking the value of 1 if Macedonia has a trade agreement with country j at time t ; $border_{ijt}$ is a dummy variable taking a value of 1 if Macedonia shares a border with country j ; $language_{ijt}$ is a dummy variable taking the value of 1 if Macedonia and j have a common language; $CEFTA_2006_{ijt}$ is a dummy variable taking the value of 1 if country j belongs to CEFTA 2006; $linder_{ijt}$ is the quotient of the foreign and domestic income capturing the Linder effect; α_i is the country-specific effect, to capture the abovementioned effects; τ_{t} is a time-specific effect, to capture any global influences like the Great Moderation and the 2008 economic crisis; while ϵ_{ijt} is *i.i.d* random shock and is assumed to be well-behaved.

Data

The study uses a panel dataset for exports from Macedonia to 40 trading partners over the period 1999:Q1 to 2009:Q4. Data for Macedonia were compiled from the State Statistical Office and the Central Bank; data on trade agreements were obtained from the Ministry of Economy. Data on the foreign-countries variables were collected from World Economic Outlook and International Financial Statistics. Distance is approximated by the physical distance between Skopje and country j 's capital and is obtained from the World Wide Web. The bilateral real exchange rate is estimated through the product of the logarithm of the nominal bilateral exchange rate of the denar to the currency of country j and the relative prices, expressed as the foreign price level divided by the domestic price level. For both price levels, the consumer price index is taken. The common language variable is assigned to all countries from ex-Yugoslavia, plus Bulgaria.

Methodology

Given our earlier exposition, a reasonable strategy to follow is to run a fixed-effects (FE) or random-effects (RE) regression. Both have intuitive grounds and thus the distinction will be performed quantitatively. Namely, FE estimation is preferable when all countries of interest are included and when regressors are assumed to be correlated with country-specific effects. Although all Macedonia's export-partner countries enter in the regression, still there might be concern that not all right-hand side regressors are correlated with unobserved country-specific effects (like distance, border, and language, which are fully exogenous). Hence, from that viewpoint, RE is needed. However, RE estimator has the drawback that conclusions cannot be generalized out of the sample; but this is acceptable in this case.

However, following the line of the literature (Bahmani-Oskooee and Alse, 1993; Buffie, 1992; Dutt and Ghosh, 1996; Giles and Williams, 1999) discussing the export-led growth hypothesis and, in particular, its interference with the growth-led export hypothesis (Xu, 1996), there is a concern over the endogeneity of domestic income in the gravity equation. Other variables are not suspect of being endogenous. The endogeneity of the regressors causes inconsistency of the usual OLS estimates and requires the use of instrumental variables to correct it. An instrumental variable (IV) is highly correlated with

the regressor (which is assumed to be endogenous), but is not correlated with the error term (Wooldridge, 2007). Two general IV estimation techniques were developed to correct the endogeneity bias: two-stage least squares (2SLS) and the generalized method of moments (GMM) techniques. In the 2SLS technique in the first stage, new endogenous variables (so-called, instruments) are created to substitute the original ones and then, in the second stage, the regression is computed by OLS, but using the newly created variables, which are not correlated with the error term (i.e. are exogenous). In GMM estimation, the information contained in the population moment restrictions is used to define instruments (Hall, 2005). In addition to the two general IV methods, Hausman and Taylor (1981) developed, and Amemiya and MaCurdy (1986) advanced, an IV estimator, applicable to panel data only, based on the RE model. Namely, in the RE model, regressors are assumed to be uncorrelated with the individual-specific error; the Hausman-Taylor estimator allows some of the regressors to be correlated with the individual-country effect, but not with the idiosyncratic error. This is still a source of endogeneity bias and requires an IV correction. Still, 2SLS and GMM estimates, on the one hand, and Hausman-Taylor, on the other, are not directly comparable, because they correct endogeneity arising from different sources (Greene, 2003). Nevertheless, Hausman-Taylor might give interesting insights in our case, because of the aspect mentioned above: only incomes and the real exchange rate might be thought of as being correlated with the unobserved country-specific effect, and Hausman-Taylor allows for this. Hence, in what follows, five estimators are presented: FE, RE, Hausman-Taylor, IV-RE, IV-FE and GMM. We later explain our preference.

Results

Results are given in Table 1. Time effects are not presented due to space, but are available on request. In the IV estimates, lags of the instrumented variable(s), lags of the foreign income variable and of the domestic price level are used as instruments. Throughout all specifications, available diagnostics are fine.

The comparison between FE and RE is made in columns (1) and (2). As argued earlier, we have more intuitive grounds to run RE regression, although magnitudes are apparently similar. However, in the FE regression, dummies of ones all over the country are wiped out because of the first differencing.

From an econometric viewpoint, the Hausman test also suggests using the RE estimator. However, the 'middle' solution, the Hausman-Taylor (column 3) estimator, also gives plausible estimates.

Considering endogeneity in the regressions (columns 4 to 6), we again do not observe considerable differences. The Hausman test (IV-FE versus IV-RE model; column 4 versus column 5) further favors the RE specification. However, these columns are interesting from another point of view. RE estimates are not robust to heteroskedasticity and autocorrelation, because the option is not developed under the appropriate command. On the other hand, instrumental variables FE estimators (2SLS and GMM) have the 'robust' facility. However, columns (5) and (6) suggest that heteroskedasticity and autocorrelation is not a problem in our model, given that results and diagnostics remain stable. A minor exception might be the coefficient on foreign income per capita, suggesting that its magnitude is considerably higher when heteroskedasticity and autocorrelation are accounted for. However, this estimate is close to the Hausman-Taylor estimate. Given this discussion, our preferred estimator is IV-RE – column (4), with caution regarding the coefficient on the foreign GDP.

Results suggest that Macedonian GDP per capita (supply in the model) does not play any role in explaining export. On the other hand, foreign income (demand in the model), as expected, is highly significant, and, as argued, its magnitude is taken to be about 1.3% to 1.8% increase of exports when the income of the foreign country increases by 1%. This result can also be reconciled with the surge of economic activity in 2008–9 when the drop of Macedonian exports due to decreased foreign demand largely translated the global economic crisis into the domestic economy.

The real exchange rate is not significant. This has a plausible explanation in that the domestic currency is fixed to the euro, and invoices with foreign partners are rarely expressed in another currency. In addition, this might suggest that exports are still non-responsive to changes in relative prices.

Distance is predictably negative, suggesting that the larger the distance, the lower the export. Trade agreements have a positive effect on exports, suggesting that if Macedonia has a trade agreement with the respective country, then exports are higher by nearly half as compared to trade with countries without trade agreements. This is an important finding and a magnitude of the result. If countries share the same border and speak a

similar language, then trade is higher by 2.3 and 1.9 times respectively than trade with other countries that do not belong to these categories.

Table 1: Basic results

| Dependent variable | FE | RE | Hausman-Taylor | IV-2SLS RE | IV-2SLS FB robust | GMM FE robust | IV-2SLS RE (LINDER) | IV-2SLS RE (CEFTA 2006) |
|---|------------|-----------|----------------|------------|-------------------|---------------|---------------------|-------------------------|
| Export | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Log of Domestic GDP per capita | -0.495 | 0.253 | -0.352* | 0.392 | -0.382 | -0.427 | -0.083 | 0.384 |
| Log of Foreign GDP per capita | 1.863*** | 0.729*** | 1.324*** | 0.710*** | 1.740*** | 1.876*** | 1.106*** | 0.727*** |
| Log of real bilateral exchange rate (increase=depreciation) | -0.161** | 0.006 | -0.048 | -0.004 | -0.161** | -0.155** | -0.042 | -0.005 |
| Distance (in km) | * | -0.346*** | -0.365*** | -0.346*** | * | * | -0.374*** | -0.340*** |
| Trade agreement | 0.407*** | 0.488*** | 0.195** | 0.497*** | 0.398*** | 0.328*** | 0.471*** | 0.570*** |
| Common border | * | 2.276** | 3.033* | 2.267** | * | * | 2.424** | 2.313** |
| Common language | * | 1.949** | 2.428 | 1.941** | * | * | 2.144** | 2.035** |
| Linder effect (GDP / GDP _d) | * | * | * | * | * | * | -0.006*** | * |
| Participation in CEFTA 2006 2007 | -11.163*** | -6.264*** | -7.595*** | -7.497*** | * | * | -7.212*** | 0.276 |
| Constant | | | | | | | | -7.701*** |
| F-statistics | 75.06*** | 180.52*** | 147.52*** | 185.04*** | 6.91*** | 7.36*** | 208.29*** | 184.59*** |
| H0: All regressors are insignificant | | | | | | | | 0.2108 |
| Hausman test (p-value) | | * | * | 0.2289 | 0.1144 | 0.1144 | 0.1523 | |
| H0: Instruments are valid | | | | | | | | |
| Hausman test (p-value) | 0.1758 | | | 0.7590 | | | | * |
| H0: RE estimator preferred | | | | | | | | |
| Under-identification test (p-value) | * | * | * | * | 0.000 | 0.000 | * | * |
| H0: Model is under-identified | | | | | | | | |
| Weak identification test (F-stat) | | | | | 3.3e+05*** | 3.3e+05*** | | |
| H0: Model is weakly identified | | | | | | | | |

Note: *, ** and *** signify significance at the 10, 5 and 1%, respectively.

In column (7) the Linder effect is added. We observe that all remaining coefficients remain along the above magnitudes, which is a kind of robustness check of the results. The Linder coefficient itself is highly significant and has plausible magnitude. It suggests that if a country has double the GDP per capita of Macedonia (meaning higher by 100%), then export is smaller by 0.6%; if a country has a GDP per capita 10 times that of Macedonia, export will be smaller by about 6%.

To analyze the potential gains from the CEFTA 2006 agreement, column (8) of Table 1 is drafted. For this purpose, the FTA variable is altered. Now this variable has a value of 1 if Macedonia has an FTA other than the CEFTA 2006 agreement with the respective country. Accordingly, a new variable is created, CEFTA 2006, which takes a value of 1 if the respective country is a member of CEFTA 2006. Surprisingly, the CEFTA 2006 agreement did not exert any positive role on Macedonian exports, while the FTA variable retains its magnitude and significance. There are several plausible explanations for this: i) many countries in CEFTA 2006 had already had some form of FTA even before CEFTA 2006 was signed, so that the whole effect of CEFTA 2006 had already been utilized with the FTAs beforehand (however, this still suggests that no additional gain was accumulated by CEFTA 2006 for Macedonia); ii) CEFTA 2006 might not have significant implications for Macedonian exports because member-countries are more oriented to trade with the EU than among themselves; and iii) although CEFTA 2006 eliminated tariffs and quotas, it has led to an increased significance for nontariff barriers, such as technical, sanitary and phyto-sanitary measures (Handziski *et al.*, 2009). In addition, as argued in section 3, the finding that CEFTA 2006 did not positively affect Macedonian exports to signatory countries might be the result of likely endogeneity. Column (8) also serves as a robustness check for the other results.

Given that CEFTA 2006 membership is not of potential benefit for Macedonia, a conclusion thus emerges that Macedonia might benefit more from trade with the EU. To further explore these deductions, in Table 2 we perform a similar analysis with countries which are EU members only. The period of investigation is the same, but the sample is thus halved. Note that we drop the variables related to common border and language, since only Bulgaria from the EU has these characteristics.

In Table 2 we get largely similar results, though with some notable differences. RE is further preferred in the ordinary estimation; Hausman-

Taylor performs well. However, when IV estimates are observed, the Hausman test rejects the null that RE is the preferable estimator. In addition, heteroskedasticity- and autocorrelation-corrected standard errors now alter the results (columns 5 and 6 vs. column 4), which suggests that column 4 is problematic from this viewpoint and is thus further disregarded. Conclusions are based on both columns (5) and (6), though, as mentioned above, the conclusions are similar.

Domestic income is further insignificant, suggesting that Macedonia as a small economy cannot determine its exports by gross domestic product. We take into account the possible endogeneity of domestic income here, but it might be that case that causation is vice versa, i.e. that export is a determinant of income. This is a plausible assumption for a small open economy—it is indirectly evident here, but should be further investigated in future research. The Linder effect is estimated at about 0.8% smaller export when a country has double the income per capita of Macedonia, but the estimates are not shown due to space.

Interestingly, though predictably, EU income has larger magnitude than foreign income in general in Table 1. Its significance is again high. This suggests that the EU economy strongly affects Macedonian export performance. *Inter alia*, the implication is that Macedonian exporters might want to improve export quality, invest in export promotion and so on, but export will be affected only if there is a demand for it in general. A further corroboration is the export surge during the recent economic crisis, which showed that in spite of government efforts to support the export sector the absence of foreign demand ensured there would be no results. Magnitude is considerable, suggesting that when the EU economy grows by one additional percentage point, Macedonian export grows on average by more than 2%. Relative prices do not matter; FTAs play a significant and positive role; distance is dropped (but for gaining intuition, from the other specifications, its magnitude fully vanishes).

Consequently, the results suggest that Macedonian exports are highly dependent on foreign demand, in particular on EU demand. Relative prices, at least under the observed period of fixed exchange rate, are insignificant. Predictably, the proximity of trading partners, their economic similarity, common language and shared borders all increase Macedonian exports. FTAs are found to increase Macedonian exports by half, but no additional gains are attained from the CEFTA 2006 agreement. This is in accordance

with the conclusion that the EU economy has a strong influence on Macedonia and that CEFTA 2006 countries—including Macedonia—tend to trade with the EU more than among themselves. In light of this conclusion, we proceed to a qualitative assessment of potential (additional) benefits which Macedonian exports can hope to accrue from the new Treaty of Lisbon.

Table 2 – Results for the EU

| Dependent variable | FE | RE | Hausman-Taylor | IV-2SLS RE | IV-2SLS FE robust | GMM FE robust |
|---|------------|-----------|----------------|------------|-------------------|---------------|
| Export | (1) | (2) | (3) | (4) | (5) | (6) |
| Log of Domestic GDP per capita | 0.335 | 0.559 | 0.485 | 0.988*** | 0.382 | 0.228 |
| Log of Foreign GDP per capita | 1.506*** | 0.907*** | 1.317*** | 0.987*** | 2.183*** | 2.171*** |
| Log of Real bilateral exchange rate (increase=depreciation) | -0.021 | 0.076 | -0.013 | -0.059 | -0.190 | -0.207 |
| Distance (in km) | - | 0.000** | 0.000* | -0.000** | - | - |
| Trade agreement | 0.270*** | 0.347*** | 0.291** | 0.061 | 0.435*** | 0.466*** |
| Constant | -13.848*** | -9.211*** | -11.182*** | -12.34*** | - | - |
| F-statistics | 197.08*** | 385.11*** | 147.52*** | 278.47*** | 96.02*** | 106.35*** |
| H0: All regressors are insignificant | - | - | - | - | - | - |
| Hansen test (p-value) | - | - | - | 0.1132 | 0.3869 | 0.3869 |
| H0: Instruments are valid | - | - | - | - | - | - |
| Hausman test (p-value) | - | - | - | 0.0000 | - | - |
| H0: RE estimator preferred | 0.2572 | - | - | - | 0.000 | 0.000 |
| Under-identification test (p-value) | - | - | - | - | - | - |
| H0: Model is under-identified | - | - | - | - | - | - |
| Weak identification test (F-stat) | - | - | - | - | 3450.9*** | 3450.9*** |
| H0: Model is weakly identified | - | - | - | - | - | - |

Note: *, **, and *** signify significance at 10, 5 and 1% respectively.

The Treaty of Lisbon and Further EU Integration: A Gain for Macedonian Exports?

The European Union created a Common Commercial (Trade) Policy to "encourage the integration of all countries into the world economy, including through the progressive abolition of restrictions on international trade" (new Article 10A Treaty of the EU, 1992) and to govern its trade relations with non-EU countries. The creation of a common commercial policy followed as a logical consequence of the formation of a customs union among its Member States, dating back to the Treaty of Rome in 1957. The Treaty of Lisbon (2007), in Article 3, provides an explicit confirmation that common commercial policy is an area of exclusive EU competence and now extends to trade in services, commercial aspects of intellectual property and FDI. The European Union's trade policy therefore establishes common rules, including a common customs tariff, a common import and export regime and the undertaking of uniform trade liberalization measures as well as trade-defense instruments.

Over the years, de jure and de facto EU competence has grown. De jure, more policy areas have come under EU competence. De facto, the Commission has developed strong institutional capacity and detailed knowledge of trade topics and Member State governments have tended to cede more de facto competence to the Commission on many of the less contentious external trade topics (Woolcock, 2008). The Lisbon Treaty entered into force on December 1, 2009 and its aim was to provide the EU with modern institutions and optimized working methods to tackle contemporary challenges more effectively. Trade Brussels (2009) argues that it has a significant impact on trade policy. Namely, three aspects in relation to trade policy have been changed: institutional powers, competences and voting rules. Firstly, the Treaty empowers the European Parliament as a co-legislator with the Council (the Member States), which is intended to improve the democratic legitimacy of the EU in an important policy area. In terms of new competences, the Lisbon Treaty explicitly mentions "foreign direct investment" as forming part of the EU's common commercial policy. This includes investment protection. Finally, the Treaty provides for qualified majority voting for all aspects of trade policy.

What benefits will these changes bring to the EU? EU trade policy must be seen in the light of past practice and the broader economic and political factors shaping EU trade policy. The greatest benefit is likely to be the

inclusion of all key policy issues within EU competence. Secondly, the inclusion of FDI in common trade policy is an important step towards the creation of a comprehensive EU approach to trade and investment that reflects the nature of the international economy in which trade and investment are inextricably linked.

Given the analyses presented in the previous section, we are particularly interested in the potential benefits of the new arrangements in EU trade policy for Macedonian exports and for trade in general. As argued in Section 1, The Stabilization and Association Agreement (SAA) that the EU concluded with the accession states, including Macedonia, contemplated the creation of a free-trade area between the EU and those countries. This trade relationship was built on the basis of reciprocity, but in an asymmetric manner. This meant that candidate countries like Macedonia were still able to keep certain barriers to protect the development of their internal economic activity. As a result, industrial products from Macedonia have had virtually free access to the EU since 2001, and some restrictions still apply in a number of sensitive sectors, such as agriculture and textiles. Hence, predictably, the greatest benefit for Macedonian trade was gained by the SAA, given that 50–60% of all Macedonian exports go to EU member states. Pelkmans (2002), for instance, argues that “trade induced simulations typically show that the applicants as a group gain everywhere from 1.5% to 8% or even 10% of GDP in the short to medium term”. Unfortunately, no such simulation has occurred in Macedonia and this remains a challenge for future research. It seems that the major benefits of EU integration for Macedonian trade were already exhausted with the SAA; thus, although changes related to trade in the Lisbon Treaty will potentially have an impact on EU trade policy itself, they will unfortunately not impact on non-EU economies, including the trade flows of candidate countries. On the other hand, we have found some evidence in support of the conclusion that CEFTA 2006 has not rendered any additional benefits.

Nevertheless, some thoughts already emerge as to the second major contribution of the Lisbon Treaty, that of FDI. For Macedonia, trade links with the EU have been paralleled, although to a smaller extent, by the growing EU-originated FDIs. Currently, more than 50 percent of FDI in Macedonia originates from the EU, in particular from Slovenia and Greece as countries with geographic proximity. Significant shares of foreign investment were attracted through privatization, in particular in the infrastructure and financial services. The proliferation of free trade agreements between the EU,

Macedonia and the CEFTA 2006, all of which were driven directly or indirectly by integration into the EU, has contributed significantly to the expansion of trade and business networks in the SEE region, and hence resulted in FDIs. The creation of a 'common' FDI policy is expected to further support the intensity of EU FDIs in Macedonia. Benefits might be expected to accrue in the area of investment protection, which is expected to reduce the country's risk premium and hence support long-term growth.

However, although in this paper we have identified the strong potential impact of EU demand on Macedonian exports and the strong role of FTAs, but not CEFTA 2006, in driving exports, and although Macedonia (and candidate countries in general) has already been considerably integrated into the EU at the level of economic relations (business contracts and FDIs) and political contacts (consultations, information sharing and monitoring of membership obligations), we believe that additional benefits will accrue after joining the single market. These will include the removal of remaining market protection measures and physical barriers to trade and movement, i.e., customs procedures. The latter are of particular significance in reducing the transaction costs of businesses. According to some estimates, the costs of customs procedures currently constitute around 3 percent of the value of exports.

Immediate benefits would result from the removal of the remaining barriers to trade, while long-term benefits to the accession economies would come from increased competition, the removal of barriers to the free movement of capital (restrictions on sales of agricultural land) and labor (discriminatory employment regimes). Full membership in the single market would most likely generate additional trade, foreign direct investments and economic growth in the new member states, the more exact estimates of which differ between 1.5 to 19 percent of GDP depending on the reduction of risk premium and the effects of removing barriers to trade. However, we should bear in mind that joining the EU will imply the adoption of the Union's external trade policy, which might have diverse impacts depending on the nature and degree of the changes it entails.

Conclusion

The objective of this paper was to present a comprehensive view of Macedonian exports and the potential economic gains for Macedonia from further EU integration and from the Treaty of Lisbon. In the quantitative part, a standard Gravity Model was used to measure the determinants of the bilateral exports of Macedonia and its trading partners in a panel framework. The results suggest that Macedonian exports are highly dependent on foreign demand, while the effect of EU demand was found to be particularly stronger. Relative prices, at least under the observed period of fixed exchange rate, are not significant. The proximity of trading partners, their economic similarity, common language and shared borders all increase Macedonian exports. FTAs are found to increase Macedonian exports by half, but no additional gains were attained from the CEFTA 2006 agreement.

In the second part of the paper, we presented a qualitative assessment of the potential gains for Macedonian trade from the Treaty of Lisbon and from further EU integration. We concluded that while the Lisbon Treaty further strengthens the role of trade policy at the EU level, these gains are likely to be important for the EU itself and not for accession countries like Macedonia. However, the broad inclusion of FDIs in the EU's common commercial policy will potentially lead to benefits for Macedonia, given the role of the protection of investor rights, as well as from the further proliferation of business contracts.

These results identify areas for further research with the objective of estimating the potential benefits for Macedonia from future EU membership in terms of greater trade flows within the single market and the likely structural changes which would increase demand for Macedonian exports, in particular the combination of the quality and price of exports.

Endnotes

1 The members of CEFTA 2006 are: Albania, Kosovo, Macedonia, Montenegro, Moldova, Croatia, Serbia, and Bosnia and Herzegovina. Bulgaria and Romania, which were signatory parties to the CEFTA 2006 agreement, left when they joined the EU in January 2007.

References

- Anderson, J.E. and van Wincoop, E. (2003). Gravity with Gravitas: A Solution to the Border Puzzle. *American Economic Review*, 93 (1), 170–192.
- Bahmani-Oskooee, M. and Alse, J. (1993). Export Growth and Economic Growth: An Application of Cointegration and Error-Correction Modeling. *Journal of Developing Areas*, 27(4), 535–542.
- Baier, S.L. and Bergstrand, J.H. (2007). Do Free Trade Agreements Actually Increase Members' International Trade? *Journal of International Economics*, 71(1), 72–95.
- Buffie, E.F. (1992). On the Condition for Export-Led Growth. *Canadian Journal of Economics*, 25, 211–225.
- Caporale, M.C., Ralt, C., Sova, R. and Sova, A. (2008). On the Bilateral Trade Effects of Free Trade Agreements between the EU-15 and the CEEC-4 Countries. *IZA Discussion Paper*, No. 3782.
- Deardorff, A.IV. (1998). Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World? In: J.A. Frankel, (ed.) *The Regionalization of the World Economy*. (Chicago: University of Chicago Press), 7–22.
- Dutt, S.D. and Ghosh, D. (1996). The Export Growth – Economic Growth Nexus: A Causality Analysis. *The Journal of Developing Areas*, 30, 167–182.
- Frankel, J. (2008). The Estimated Effects of the Euro on Trade: Why are they below historical effects of monetary unions among smaller countries? *Harvard Kennedy School Research Working Paper Series*, December, 2008.
- Giles, J.A. and Williams, C.L. (1999). Export-led Growth: A Survey of the Empirical Literature and Some Noncausality Results. *Econometrics Working Paper EWP9901*, 1–78.
- Martinoz-Zarzoso, I. (2003). Gravity Model: An application to trade between regional blocks. *Atlantic Economic Journal*, June, 2003.
- Papazogiou, C. (2007). Greece's Potential Trade Flows: A gravity model approach. *International Advances in Economic Research*, November, 2007.

- Pelkmans, J. (2002). Economic Implications of Enlargement, *Bruges European Economic Policy (BEEP) Series*, Briefing No. 1, Bruges.
- Pugh, G. and Tyrrell, D. (2000). Intra-European Trade, Exchange Rate Variability, and Monetary Cooperation in Europe: Some quantitative evidence for the single currency debate. *Paper presented at the Conference The European Monetary Union and Beyond*, Prague University, June 1999.
- Rose, A.K. (2000). One Money, One Market: Estimating the effect of common currencies on trade. *Economic Policy*, 15(30), 7–46.
- Sarafidis, V., Yamagata, T. and Robertson, D. (2006). A Test of Cross Section Dependence for a Linear Dynamic Panel Model with Regressors. *mimeo*, University of Cambridge.
- Trade Brussels (2009). Treaty of Lisbon enters into force – Implications for the EU's trade policy. Online material. Accessible on: <http://trade.ec.europa.eu/doclib/press/index.cfm?id=493>. Date of access: 15.03.2010.
- Woolcock, S. (2008). The potential impact of the Lisbon Treaty on European Union External Trade Policy. *European Policy Analysis*, 8, 1–6.
- Xu, Z (1996) On the Causality between Export Growth and GDP Growth: An Empirical Re-investigation. *Review of International Economics*, 4(2), 172-184.