Abstract

Croatia was quick to recognize the importance of globalisation developments and has been making efforts to adapt to them ever since it stepped out of the Yugoslav Federation. Croatia is especially interested in converging as rapidly as possible with European economic integrations, lead by the European Union, Europe’s most important economic and political integration. Although negotiations with the EU began shortly after Croatia gained its independence, the EU due to the well-known events that took place on the Croatian political scene soon postponed them. Under strong pressure from the most developed countries of Europe and the world, and under the new and growing impact of globalisation, Croatia has been developing a more successful cooperation with the EU and other countries around the world. Upon the successful conclusion of negotiations, a Stabilisation and Association Agreement has been ratified by the national parliaments of EU member countries.

Keywords: Globalisation, European Union, Croatia, static and dynamic effects of association.

1 Introduction

World development has been marked by economic relations resulting from globalisation. Fostered by multinational companies, these relations continue to strengthen within economic systems worldwide. Central to the concerns of globalisation are production activities, new technologies, and the development of services. This has impacted on the growing demand for products and services at both local and global levels.

New globalisation relations on the market are making it necessary to reorganise outdated organisational forms and relations in the domains of labour, production, services and management. Leading world-class companies have been quick to adapt to new globalisation trends and to extend their operations to other countries, regions or continents.

In seeking appropriate solutions to current economic issues, it is necessary to look beyond the state level at the various achievements of globalisation that can be readily adapted.

Globalisation processes have impacted crucially on all members of European integrations – the members of the European Union in particular – and will increasingly...
continue to do so increasingly in the future. The EU authorities are attaching great importance to economic integration with all other European countries, either through the direct collaboration of these countries with the EU as a whole, or through collaboration between member and non-member countries. These forms of collaboration are employed to secure the free movement of persons, goods, services and capital within the European region.

The above benefits are also available to European transition countries, including Croatia, depending upon their ability to accept and implement economic, market, social, legal and democratic standards, as well as the criteria, relationships and forms applied by advanced countries.

2 Globalisation–based Cooperation Between Transition Countries and The Countries of The European Union

While the economy of Croatia, one of the then most developed countries of the Socialist block, was rapidly stagnating under the impact of imposed warfare, the countries of Eastern Europe, spurred by globalisation processes, were gaining their independence. They were soon to establish collaboration with both of the European integrations and to achieve notable economic and political results.

Successful negotiations were crowned in 1991 by the signing of cooperation agreements between the EC on the one hand, and the Czech Republic, Slovak Republic, Poland and Hungary on the other, bringing them considerably closer to the EC, and placing them in a position that was far more favourable than Croatia’s. Known as the “European Agreements” (Office for Official Publications of the EC-s 1990), their intention is to assist the signatories in achieving full membership within the EC. In addition to encouraging the formation of mutual free-trade zones, the provisions of the agreements was promoted economic and financial cooperation, cultural exchange and political dialogue.

The EC presently assumed the role of directing aid from the West to the war-torn regions of the former Yugoslav federation, and to other countries in Eastern, Central and South-eastern Europe. The EC was instrumental in coordinating the development aid and funding provided by the Group of 24, establishing the European Bank for Reconstruction and Development (EBRD), and developing and implementing the PHARE program. (Commission of the EC-s 1992)

3 Stabilisation and Association Agreement: Croatia’s Initiation to European and World Globalisation Process

Following Slovenia and Macedonia, Croatia was the third country of the former Yugoslav federation to sign a Stabilisation and Association Agreement (SAA) with the EU after only five months of negotiation. While Slovenia has already been accepted into the EU, Macedonia has been granted a 10-year transition period. Croatia, however, has been granted a 6-six year transition period, indicating that, although Croatia is currently going through a critical period, it is nevertheless perceived by the EU authorities as one of the most perspective countries in the region.
Croatia’s negotiation efforts were crowned by the initialling of the SAA in Brussels on 14 May 2001. Having been approved by the Croatian Parliament, the SAA was officially signed in November 2001, and then ratified by the European Parliament and EU countries. The SAA highlights the individual evaluation of Croatia’s ability in approximating internal reforms to those of the EU, and focuses on Croatia’s contribution to the region’s stability.

Through the SAA, the EU market is opening up to the Croatian economy. A significant part of Croatia’s economy, however, is not capable of rising to the challenges of free market competition, and as such will require restructuring in accordance with global markets.

Future Croatian-EU cooperation will impact on Croatia’s economy, resulting in new static and dynamic effects, as illustrated below using mathematical and statistical methods.

4 Static Economic Effects in Croatia

Croatia’s implementation of the SAA and accession to the EU should result in static economic effects realised through the free trade zone into which Croatia has entered. The globalisation experiences of other countries indicate that the positive effects of accession to a free trade zone should begin to appear within a short period of time. Other effects are felt as a result of shifting trade, that is, less expensive import from other countries around the world is substituted by increased import from countries of the free trade zone.

As an example for analysis, we shall consider the effects produced by product X, following Croatia’s (country A) acceptance to the customs union, and its impact on the economic development of the country – the so-called elasticity of the country’s economic system. (Kersan 1998)

Graph 1 illustrates the supply and demand curves of country A, marked SS’ and DD’, respectively. Line PP’ represents the trade offer of country B. Prior to joining the customs union, country A incurred OQ3 costs, while producing the quantity OQ2 of a certain product X, and importing the quantity Q2Q3 of product X from country B. The
plotted area of the rectangle $F_2F_3G_1G_2$ signifies the revenue generated by various customs duties on exported or imported products.

Upon joining the customs union, country A undergoes economic changes. While consumption is increasing (indicated as $OQ_4$ in the graph), production has dropped to the value of $OQ_1$, with import growing to the coordinates $Q_1Q_3$. Relevant to these changes is the fact that country A can no longer collect customs-related revenue. Triangle $F_1F_2G_1$ of the graph illustrates the savings in real costs of production, as a result of substitution by products imported into country A. This is the so-called realised production effect. Located on the opposite side is triangle $F_3F_4G_2$, representing net profits, that is, consumer surplus realised through the production effect. The sum of these two triangles, resulting in the creation of trade, depends initially upon customs duties and ultimately upon the elasticity of supply in country A prior to joining the customs union, as well as the elasticity of demand prior to joining the customs union. The real benefits of creating trade in the country will be substantial, providing the customs duties previously imposed by country A were high, and providing that the elasticity of supply in the country and the demand itself are great. According to this economic ratio, the beneficial effect will amount to $1 - 2\%$ of the GDP.

In the stage prior to joining the customs union, the consumption of various products $X$ in country A amounted to $OQ_3$, of which the country itself produced quantity $OQ_2$ of product $X$, while importing quantity $Q_2Q_3$ from country C or other countries. Upon the formation of a customs union between countries A and B, customs duties were abolished on goods imported by country B. Following this, the import of product $X$ from country B became less expensive according to the relation $OB<OT$. Concurrently, consumption in country A has grown to quantity $OQ_4$. Production capacity has dropped to $OQ_1$, while import shows an upward trend to $Q_1Q_4$. Given this relationship of economic factors, customs-related revenue will no longer be generated in country A. In this case triangles $F_1F_2G_1$ and $F_3F_4G_2$ display the trade-shifting effect, which should be ultimately compared with the amount of customs-related revenue $F_2F_3H_1H_2$ lost. When these two triangles $F_2H_1H_2F_3$ are compared, the social benefit of shifting trade is obvious. In the contrary, shifting trade will cause a loss.

*Cline’s model is used to present the previous case and to calculate the static effect of the case illustrated above. Focusing on trade elasticity, this model also presents the
elasticity of import demand, and the elasticity of substitution between the potential exporting countries. In the case of a perfect model of elasticity of supply, the mathematical model of creating trade can be presented as follows:

1. Formula for calculating trade created

\[ T_c = EM - M_1 - t \]

- \( T_c \) = trade created
- \( EM \) = price elasticity of export demand
- \( M_1 \) = share of integration-based exports
- \( t \) = average customs duties

2. Formula for calculating trade shifted

\[ Ts = \left( \frac{M_n - M_i - s - t}{M_{tot}} \right) \left( 1 + \frac{M_n}{M_{tot}} \right) \]

- \( Ts \) = trade shifted
- \( M_n \) = share of exports from the rest of the world
- \( M_i \) = share of imports from the newly created integration
- \( s \) = elasticity of substitution
- \( M_{tot} \) = total import of observed country

Empirically expressed within the relations of 1 and 2, the elasticity of import demand is reflected in the positive correlation between the degree of GDP realised and its share in the foreign trade of the country observed. The elasticity created in this way will increase with regard to consumer goods, while it will decrease for industrial goods intended for further processing. Concerning Croatia, this relationship is presented as follows. In 1995, exports to the EU accounted for 57.7 per cent of all of Croatia’s exports, whereas imports from the EU into Croatia accounted for 62.1 per cent of total imports. Tariff rates ranged 0 – 18 per cent. According to the tariff system, a 0 – 5 per cent tariff was imposed on 83.2 per cent of all imported articles, and a 10 – 18 per cent tariff, on the remaining 16.4 per cent of imported goods. The average tariff rate amounted to 10 per cent. (The Institute of Economics 1996) A comparison between Croatia and Slovenia – a country whose initial economic efforts were fairly similar to Croatia’s, as both countries had previously existed under the same economic system – reveals that they both share similar transition-related problems. With a high degree of certainty, it is, therefore, possible to apply to Croatia’s economic situation the price elasticity coefficient of 1.2 presented in an economic study conducted in Slovenia. (TEPSA – Centar za medunarodne odnose 1996) The coefficient of the elasticity of substitution has been determined at 0.3 per cent. This means that the effect of creating trade in the case of Croatia would be as follows:

- Growth of imports \( T_{cu} = 0.621 - 1.2 - 1.10 = 7.4 \) per cent
- Growth of exports \( T_{ci} = 0.577 - 1.2 - 0.03 = 2.1 \) per cent

According to the outcome of this model, the accession of Croatia to the EU may not necessarily result in the growth of exportation to EU countries. An upward trend in importation from EU countries into Croatia is, however, quite obvious. This means that within a very short period of time Croatia will experience an increase of its trade deficit. Concurrently, the effect of shifting trade in Croatia can be expressed as follows:
Shifting import \( Tsu = 0.379 - 0.621 - 0.3 - 0.1 + (0.379 - 0.3 - 0.1) = 0.7 \) per cent

Shifting export \( Tsi = 0.423 - 0.577 - 0.3 - 0.1 + (0.423 - 0.3 - 0.03) = 0.7 \) per cent

In the former model, EU accession would result for Croatia in a substantial growth of 7.4 per cent in imports, whereas export would grow by only 2.1 per cent. Croatia’s trade deficit toward the EU would, thus, amount to 5.3 per cent. The effect of shifting trade in Croatia would amount to 0.7 per cent for import and export alike. A comparison of the percentages obtained clearly indicates that Croatia’s volume of export to and import from other countries around the world will not change in favour of the EU. The effects described would begin to take place shortly after accession to the EU, and would continue until the time all trade barriers between Croatia and the EU have been fully abolished. The timeframe for this has been estimated at roughly five years, at the end of which period dynamic effects would begin to emerge, rapidly improving the country’s economic development reflected in the growth of export and decline of import.

For the calculations of statistical effects to be reliable, it is essential to have reliable data on the average annual rates of Croatia’s import and export with member countries of the EC.

Calculations clearly indicate that the effects of import growth in Croatia could be considerably higher than the effects of export growth. Calculations also exhibit two negative export rates, one with Germany, and the other with Great Britain. According to statistical indicators, Germany’s economy roughly grew by +5 per cent from 1993 to 1995. The negative export rate indicated in calculations is the result of a relatively high level of export in 1990, whereas an export growth rate of 5 per cent has been applied in our example. The rate of export to Great Britain is based on the assumption that Croatia’s export growth rate will amount to 0.6 per cent. It is a well-founded assumption that the stark situation of Croatia’s economy will be followed by a period of rapid recovery for the entire economic structure of the country; national production is expected to grow at rates that are slightly higher than those of other transition countries, which should lead to higher export rates, and accordingly to lower import rates. According to a hypothetical approach to the SAA, the positive effects of growth should begin to show as early as the year following the coming into force of the SAA, with slightly more pronounced trade-creating effects with the EC.

5 Potential Dynamic Effects in Croatia

An analysis of Croatia’s foreign trade balance reveals a considerable discrepancy between import and export, as a result of the country’s failure to fully embrace globalisation trends. This discrepancy is especially evident in trading with the EU. Croatia’s export and import opportunities are presented, and the current situation in this area is discussed. (Kersan 1998)

In the earlier stage of its development, Croatia operated within a socialist political and economic environment, in which the majority of trade took place with other countries having a similar political system. Trade between these countries developed through mutual interstate agreements, which were based, for the most part, on political cooperation, rather than on efficient economic collaboration. Cooperation of this kind
was fostered by the Council for Mutual Economic Assistance (CMEA). Through former Yugoslavia, Croatia enjoyed exceptionally good relations with the CMEA. The economic and political forces of globalisation were instrumental to the downfall of the socialist system, with the liberated countries embracing the economic and market model of the West, and joining its economic and political integrations. To determine the economic potential of transition countries for collaboration with the West, studies were conducted which showed that cooperation in mutual trade, especially among transition countries, was not at a level that could provide satisfactory results, due to the lack of appropriate incentives such as export credits, and the lack of a desire for political cooperation.

In these studies, evaluations and forecasts are based on gravitational research models, which assume that mutual cooperation in trade impacts on the GDP growth of the countries involved, and helps to development common trade policies. In this model, geographical distances represent an aggravating factor in trading. Gravitational research models illustrate the potential export and import levels of countries engaged in foreign trade.

The following is an example of the gravitational model for the potential export level of country \( i \) to country \( j \). (UN EC for Europe 1993)

\[
X_{ij} = 1.7522 + 0.7914 \ln \text{GDP}_i + 0.7832 \ln \text{GDP}_j - 0.9809 \ln R_{ij} + 0.315 \ln P_{ij}
\]

\[
R = 0.8610
\]

\( X_{ij} \) = flow of trade from country \( i \) to country \( j \)
\( \text{GDP}_i \) = Gross Domestic Product of country \( i \)
\( \text{GDP}_j \) = Gross Domestic Product of country \( j \)
\( R_{ij} \) = distance between countries \( i \) and \( j \) measured as the road distance between the capital city of each country
\( P_{ij} \) = trade policy variable, having a value of \( e \) for countries belonging to the same trade bloc, and a value of \( l \) for all other countries

This gravitational model has two particularly important drawbacks. First, this mathematical model was established as long ago as 1987 for 17 EC countries, EFTA countries and former Yugoslavia. Second, the flow of trade between countries depends heavily upon the volume of the GDP realised. If the GDP of a given country has been overestimated – which is the case with most countries – the volume of trade flow will also be overestimated.

Nevertheless, by applying this gravitational model in determining the volume of Croatia’s potential export to other countries – the EU countries, in particular – a fairly realistic picture can be obtained of the country’s export possibilities, providing it becomes an EU member. To make it easier to check results against the country’s trade balance, GDP data relating to 1995 has been used in the above equation.

The calculations show that, providing Croatia does not become a member, its potential volume of export to the EC would be 76.3 per cent greater than the volume realised in 1995. Providing Croatia does join the EC, its export volume to the EU would increase by 2.5 times with regard to 1995, in which exports amounted to about USD 6.5 billion. In respect of the GDP realised, Croatia’s theoretical export potential is much greater than the volume currently realised. Calculations refer to the country’s potential for export to its traditional trading partners: Germany – USD 1.4 billion, Italy – USD 1.4 billion, and Austria – USD 0.7 billion.
A comparison of the results obtained indicates a slight discrepancy with regard to Italy and Germany, as the volume of potential export to these countries is about 30 – 38 per cent higher than the volume actually realised. The least discrepancies emerge with regard to those countries to which Croatia exports less: Luxemburg, Denmark, Spain, Portugal, Finland, Great Britain and Sweden. The potential volume of export to these countries is from 10 to even 255 times greater than the export volume realised.

With regard to Croatia’s potential level of export to the EU, it follows that, in the case of accession, Croatia’s current volume of export should increase by roughly 37 per cent. Graph illustrates the level of importation from the EU into Croatia. Analysis shows that the potential volume of import from the EU, providing accession does not take place, would be about 4.10 per cent higher than the volume realised. Discrepancies between the volumes of potential and realised import are the least for data referring to Italy and Sweden, whereas the realised volume of import from Germany is higher than the calculated potential volume. Providing trade barriers with the EU are abolished, it follows that Croatia’s current volume of import from the EU will increase by roughly 37 per cent with regard to the potential import volume calculated.

Viewed in the longer term, Croatia’s import volume can be expected to grow by 42.66 per cent, and its export volume, by 141.60 per cent, gradually bringing the levels of import and export into balance. This would also result in a trade deficit of roughly USD 200 million.

An analysis of static and dynamic economic effects shows that, in the initial period upon EU accession, Croatia would experience an increase of its foreign trade deficit. In the longer term, however, the country’s trade balance would even out, with export to EU countries accounting for three-quarters of Croatia’s total export volume. With regard to these facts, it will be necessary to give careful consideration to all relevant factors and to take steps to make EU accession as painless as possible for Croatia’s economy.

### 6 Conclusion

The heavy impact of globalisation effects has forced Croatia into completely remaking its social and economic policies. Accession to European integrations – the EU, in particular – has become Croatia’s leading political and economic determinant. Accession to European integrations and acceptance of globalisation challenges will set off many positive, but also negative changes within the country itself as well as within its broader environment. Global opening will result in heightened competition on both the domestic and the international marketplaces. It is to be expected that rival countries, especially transition countries in Croatia’s closer environment, will endeavour to enrich and extend their economic offer and improve their quality. All countries will make efforts to enmass their strategic companies to use them as a way of responding to the challenges of globalisation.

Less developed countries will do their utmost to retain their current markets, and, if possible, to acquire new ones. Encouraged by new lines of action within the globalisation process, the large European integrations are sure to use their future economic policies to impact on the continuation and development of the positive economic processes of globalisation within their current member countries, and especially within new members, as well as those countries preparing for membership.
Given its present level of development, the economy of Croatia cannot reckon with any substantial benefits from today’s globalisation processes. However, in the next 10 to 15 years, it will certainly be capable of successfully competing on the international market of highly structured and superior-quality products and services.

Notes

1 The elasticity of import demand for product X of a country refers to the percentual increase or decrease in the volume of the country’s import demand for product Y, providing that the relative price of import px/py decreases or increases by one per cent. Providing the elasticity coefficient is larger than one, the demand for imports is elastic, as the increase of the price ratio px/py by one per cent has induced the volume of import of product Y to increase by more than one per cent.

References