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Foreign Trade in the View of Competitiveness in the EU



Summary

Competitiveness is examined at national, regional and corporate levels. The primary aim of the study is to present and analyse the competitiveness of the EU Member States and to evaluate trends. Two statistical indicators are worth considering: the commodity terms of trade (C), also known as the net barter terms of trade (N), and the income terms of trade index (I), which expresses the correlation between changes in prices and quantities. The economic structure allows the surplus in the balance of trade with most countries, and also requires improvement in the exchange rate. The indicator seeks primarily to capture the knowledge capital present in the country, which may be facilitated by the structure and characteristics of trade. The export surplus to GDP is extremely high for Ireland, Switzerland and the Netherlands. The United Kingdom, France and Romania recognised negative trade balances. Nominal trading values continued to rise in 2018 as a result of volume and price changes. Global commodity exports increased by 10 per cent, driven mainly by the 20 per cent rise in oil prices. Growth in exports and GDP need rapid development in innovation. Export grows significantly faster in Euro Area Member States than in other EU Member States.

Journal of Economic Literature (JEL) codes: F1, F31, F4, O24

Keywords: economic structure, high-quality products, export surplus, Euro Area Member States, exchange rate

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INTRODUCTION

Competitiveness is examined on national, regional and corporate levels. A sharp difference between these levels is not advisable, because in any given country, the economic agents influence one another's performance, intertwining national economic competitiveness, corporate competitiveness and regional competitiveness. Thus, competitiveness can only be examined in a complex way and a systemic approach at all levels, but the examination of the sub-areas is also very important. Therefore, the topic of the research is the analysis of the competitiveness of the EU-28 and Hungary, with reference to the effects of foreign trade. Originally, competitiveness was a micro-economic concept and used by scientists (Porter, 2000; Krugman, 1991; 1994), then OECD documents defined a common concept for competitiveness as follows: "The ability of companies, industries, regions, nations and transnational regions to create relatively high incomes and relatively high levels of employment over time while being exposed to foreign (global) competition" (Lengyel, 2012; see mere in Magda et al., 2017; Magda, 2017). The primary aim of the study is to present and analyse the competitiveness of the EU Member States, and to evaluate trends and forecasts on the basis of the WEF Evaluation Report 2017–2018. Products are marketable in the world market and in the single market of the European Union based on the competitiveness of producers and consumers' propensity to buy. Naturally, sales revenues and export sales revenues also depend to a large extent on the volume of the domestic value added and the level of processing in the case of certain or semi-finished products.

MATERIAL AND METHODS

The various exported and imported goods cannot be combined in their natural state, and therefore cannot be aggregated. However, changes in the international exchange rates of a given country can be detected. Two such indicators are worth considering (Dr. Bhimrao Ramji Ambedkar University, 2018):

1. Commodity terms of trade (C), otherwise known as the net barter terms of trade (N): $C = P_x / P_m$

The numerator includes the export price index, which represents the average change in the value of products exported by a country. The import price index in the denominator can be interpreted in the same way. If the value of C is greater than 1, the country's exchange rates have improved, i.e. it produces less on average per export product.

2. The income terms of trade index (I) expresses the correlation between changes in prices and quantities: $I = (P_x / P_m) \times Q_x = C \times Q_x$

The Q_x factor in the formula shows the average change in the export volume from one year to the next, while a country's total export earnings can buy more or less imported products than in the previous year if its export earnings were entirely spent on imports. We also need to keep in mind the evolution of C-related factors. A decrease in C may trigger an increase in Q_x that raises I above 100 per cent (1). In this case, a

decrease in C may be favourable, and imports may increase (Wilson et al., 1969; also see in detail in Vizard, 2002).

It is expedient to calculate and analyse the two trade ratios simultaneously. It may well be that, for example, in a country C is less than one in a given year, but still represents improvement. This may be the case if the price elasticity of export products is more than one, and therefore a relative decrease in export prices may result in a larger increase in the export volume. Changes in the trade ratio of foreign trade also point to the development of the comparative advantages realized by the national economy, among other things. Improvement (deterioration) in the indicators shows a relative increase (decrease) in the realized comparative advantages. This is particularly important information in the case of so-called open economies (Wilson et al., 1969; for more details see Porter, 2000; 2001).

The raw monthly data are processed in most detail to obtain elementary unit value indices, which are defined by the value of the commodity and by quantity. These unit values are divided by the previous and average unit values, thus resulting in elementary unit value indices, which in turn allow the determination and removal of the outliers. Subsequently, elementary unit value indices are aggregated into countries and commodities using the Laspeyres, Paasche and Fisher index formulas, and then the Fisher unit value indices are chained back to the base year (2000). The resulting indices give an approximate description of the movement of import and export prices.

RESULTS AND DISCUSSION

The importance of this research is given by the fact that foreign trade relations between the EU Member States have a crucial role in strengthening international regional economic integration, and thus in ensuring the EU's outstanding role in the world economy. Hungary lags far behind the majority of the EU Member States in terms of competitiveness, and in several aspects it even performs below the Visegrád 4 average. The competitiveness of Hungary and the EU Member States are analysed according to the objectives. In the case of indicators considered important in the EU principles, an 11-year trend is examined on the basis of a large database.

The positions of WEF competitiveness in Hungary are presented in detail for the 12 pillars to show the importance of networking for organisations and the role of the cluster system in increasing competitiveness. According to my hypothesis – proved on the basis of literature data – Hungary lags far behind the majority of the EU Member States in terms of competitiveness, and in many cases it even performs below the Visegrád 4 average.

In order to accelerate development, new ideas should be brought to the fore:

- The internationalisation of trade can bring great benefits to our country,
- Intensifying capital inflows can improve our position,
- In the face of global competition, long-term corporate competitive advantages are provided by the soft factors of innovation, including knowledge transfer.

Improving competitiveness requires an economic structure that allows surplus in the trade balance with most countries, and improvement in the exchange rate. These presuppose an increase in the knowledge and innovation content of goods and services for export. The surplus in our trade with the EU is partly due to the export-import activity of German value chains. It would be important for the value-added sections of the value chains to be also or partly located in Hungary. Our trade with Asian countries is in deficit, which means that we do not have enough products we can sell to Asian countries at a good price.

The export of low-processed products cannot generate greater export value gains. Only the export of high-quality products is acceptable. Also, the national-level financial strategy and management should be extended to the corporate level through governance, organisation, planning and control performed according to clearly defined criteria; preparation for and the implementation of the attraction of capital owners, also in agriculture (Széles et al., 2014; Lentner, 2018). Agricultural producers' main aim in the EU, Hungary and Germany was to increase their capital accumulation to implement improvement in production technology in order to be competitive in the world and domestic markets (Szabó–Zsarnóczai, 2004; Zsarnóczai, 1996; and Powell–Gianella, 2010). In the EU-28, subsidies on production were concentrated on developing technology by subsidising the consumption of fixed capital. Generally, the value of subsidies was 87 per cent of the value of consumption of fixed capital in 2016 (Zsarnóczai–Zéman, 2019). The concentration of subsidies for the fixed capital in EU-28, also stimulated competitiveness in EU exports.

The essence of the global value chain is to divide the production process into stages and to relocate each stage in different countries. Car manufacturing is an example: complicated parts are manufactured in Germany and assembled in Hungary, while product marketing and after-sales services are done by a third country. Assembly represents the lowest value-added production. Simple work done by higher-skilled employees is called underemployment, which is a major disincentive to competition, and a sign of mismanaging the human capital. Work at the conveyor belt is harmful to health and thus reduces the quality of life. Nowadays the foreign trade of service providers is becoming increasingly important. Tourism has the largest share in the export and import of services.

The Economic Complexity Index (OEC, 2018) is surveyed annually in 128 countries. This indicator refers to competitiveness as it can respond to the expected pace of catching-up in terms of economic complexity and development. The indicator also shows the complexity of each country's economy using international trade data. In 2015, Hungary was ranked 8th out of 128 countries, steadily improving since 2011, while the ranking of the V4 has not changed significantly and their average relative position has declined. Hungary precedes the United States, Finland, the United Kingdom, Belgium and the Netherlands, among others. The top three countries in the index have been Japan, Switzerland and Germany for years. The indicator primarily seeks to capture the knowledge capital available in the country, with the structure and characteristics of trade serving as a tool. The UN Comtrade database is used to

calculate this indicator. The applied mathematical methods are based on objective data, and the factors that repel the results are removed. The indicator reflects the economic strength of a country in terms of export diversity and product quality (see more detailed in Schwab–Sala-i-Martín, 2017; Samuelson–Nordhaus, 1992).

Foreign trade in goods is conducted in accordance with the principles, concepts and definitions contained in the relevant United Nations recommendations. The legislation of the European Union regulate the operation of two subsystems: Regulation (EC) No 638/2004 of the European Parliament and of the Council and Commission Regulation (EC) No 1982/2004 of the European Parliament and of the Council regulate trade with Member States of the European Union, while non-EU trade statistics are produced in accordance with Regulation (EC) No 471/2009 of the European Parliament and of the Council, as amended, and with Commission Regulations (EC) No 92/2010 and (EU) No 113/2010. Outstanding growth was recorded in the United States (4.1%), Russia (5.7%) and China (5.4%) in 2018.

The export volume of the 28 Member States of the EU increased by 3 per cent in 2018, and the volume growth rate is slowing. The export volume of Hungary was 4.3 per cent higher for products and 6.3 per cent higher for services. The foreign trade balance in some key countries is presented as a percentage of GDP, which has declined in most EU countries. Hungary is no exception. The surplus to GDP is extremely high for Ireland, Switzerland and the Netherlands. The United Kingdom, France and Romania recognised negative trade balances (Eurostat, 2018; UN Comtrade).

Nominal trading values continued to rise in 2018 as a result of volume and price changes. Global commodity exports increased by 10 per cent, driven mainly by a 20 per cent rise in oil prices. Oil producers, especially Saudi Arabia (35%) and Russia (26%), achieved the highest sales growth among traders. The value of goods imports increased most in Indonesia (20%), Brazil (20%), China (16%) and Vietnam (15%) (The World Bank, 2018; IMF, 2018).

The smaller increase was due to a number of uncertainties. These include:

- Retaliatory measures against certain goods,
- Weaker global economic growth,
- The introduction of strict monetary conditions,
- Other risk factors (for example Brexit).

Areas where the country lags far behind the more advanced states have been identified. Areas where more development effort is needed include:

- Efficient institutional functioning,
- Primary education,
- Training according to the demand for labour,
- Technological preparedness (4th industrial revolution),
- Sophistication of the business sector,
- Rapid development in innovation.

These factors can also have a significant impact on competitiveness. The export-import value data of the EU Member States increased. Exports totalled EUR 1955.7 billion, up 4.1 per cent on 2107. Imports closed at 6.6 per cent at EUR 1980.4 billion.

The external trade balance of the EU-28 was close to EUR 25 billion, representing a decrease by EUR 46 billion compared to the previous year. The EU's external trading partners are relatively stable, as shown in Table 9. In 2018, intra-Community trade accounted for 64 per cent of the EU's total external trade. Product turnover between the EU-28 Member States was EUR 3519 billion in 2018 (Eurostat, 2018).

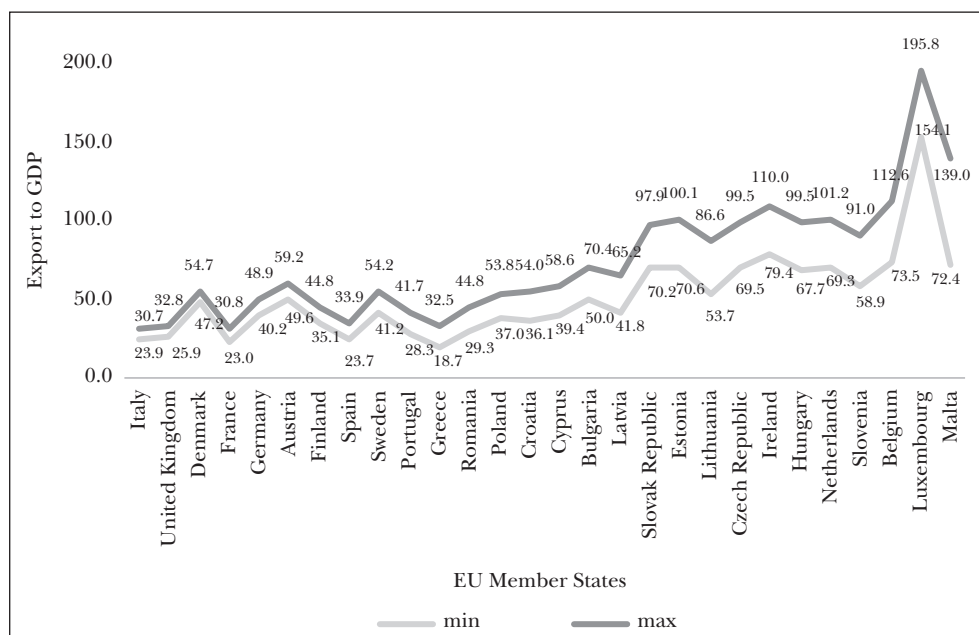
According to the export ratio the value of exports increased significantly as a percentage of GDP. In the case of EU countries, the export value of developed countries as a percentage of GDP is generally higher (Figure 1). Growth is faster in euro area members than for non-euro members (Figure 2).

Based on the import rate, the growth of domestic imports has recently accelerated. This is partly due to an increase in domestic consumption, but care should be taken to ensure that it is not excessive. Imports as a percentage of GDP grew rapidly in the euro area (Figure 5).

According to a cluster analysis based on the annual inflation value, Hungary ranks second among the five groups in the EU-28, including Slovakia and Slovenia. On this basis, clusters of developed and less developed states can be distinguished. The best performing states include the Netherlands, Belgium, Austria and Finland.

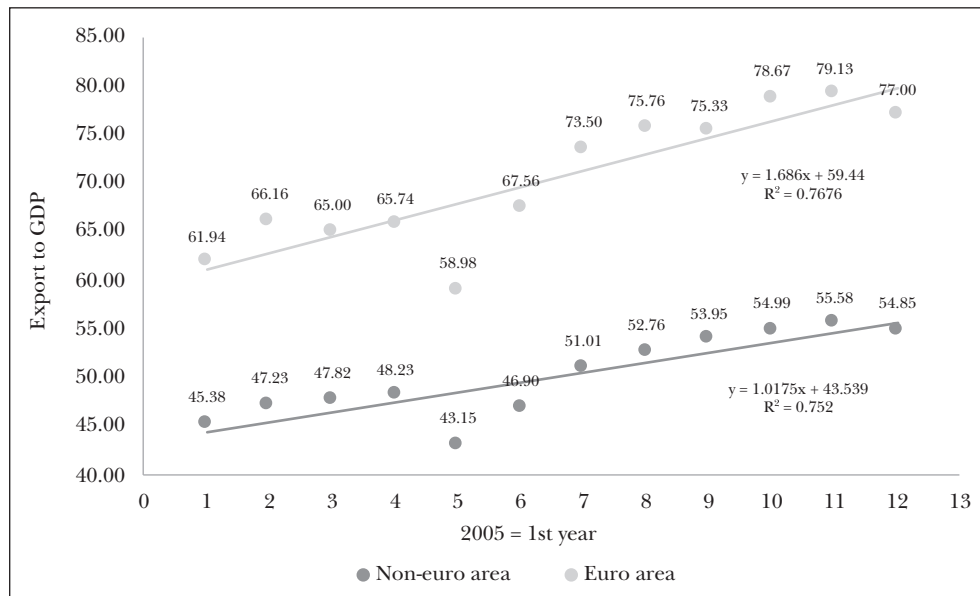
The competitiveness of Hungary and of the EU Member States are analysed on the basis of the objectives. In the case of indicators considered important for the EU principles, the 11-year trend is analysed on the basis of a large database. The positions of WEF competitiveness in Hungary are presented for the 12 pillars. The importance

Figure 1: Minimum and maximum values of export to GDP, 2005–2016



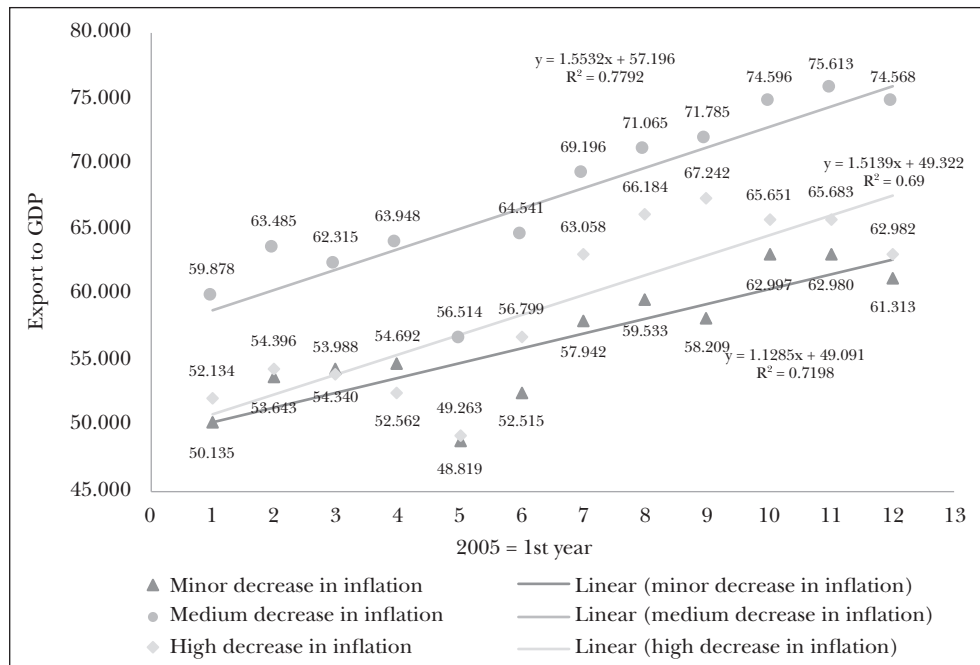
Source: WEF and own calculation

Figure 2: Annual average exports in euro area and non-euro area Member States, 2005



Source: WEF and own calculation

Figure 3: Annual average exports based on inflation, 2005



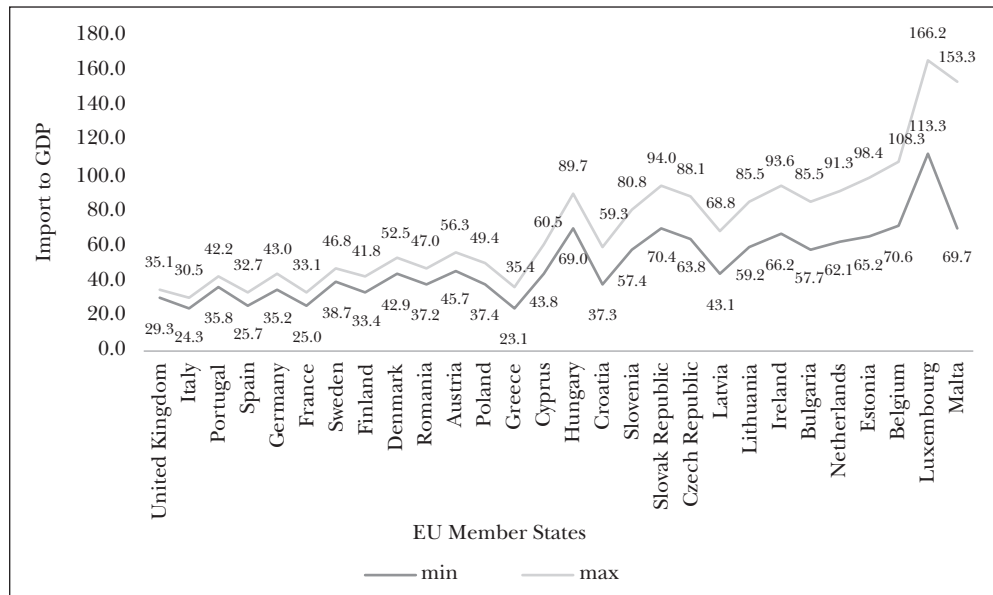
Source: WEF and owned calculation

of networking for organisations and the role of the cluster system in increasing competitiveness is exposed. As competitiveness and trade are interrelated, the situation and changes in international and domestic trade are also presented. Hungary's foreign trade is presented on the basis of the most recent CSO data. Trade and competitiveness are intertwined. There is strong empirical evidence that open economies are richer and therefore more productive than closed ones. A 1 percentage point increase in the share of trade in GDP will increase revenue by 0.9–3 per cent. As a company enters the export market, productivity growth will be boosted (European Commission, 2008; 2018).

CONCLUSIONS

Based on to the linear trend analysis, the value of exports to GDP is growing significantly faster in the euro area Member States (11-year trend). Developed countries are generating rapid export-import growth.

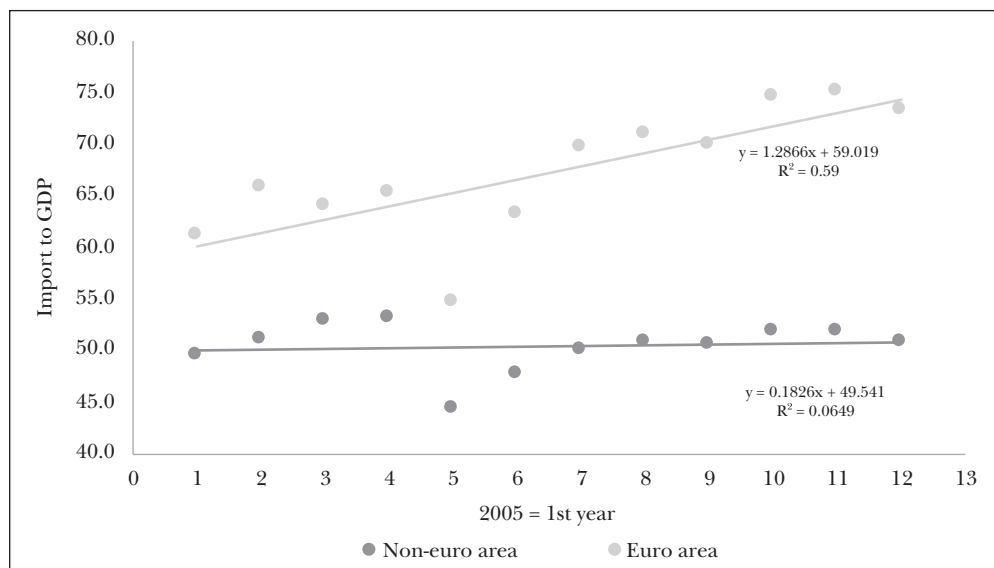
Figure 4: Minimum and maximum values in imports to GDP, 2005-2016



Source: WEF and own calculation

In the case of exports and imports, the results are different for euro area and non-euro area Member States. The average of the annual export data grows significantly faster in the euro area than in the other EU Member States. The linear trend in imports outside the Euro Area stagnates, while growth in the euro area is rapid (Figure 3, Figure 4 and Figure 5). On this basis, belonging to the euro area is accelerating development, so Hungary should reconsider whether it is worthwhile to join the euro

Figure 5: Linear trend in import in euro area and non-euro area Member States, 2005



Source: WEF and owned calculation

area. Areas where improvements are achievable can be determined in order to realize faster progress; we must focus on a number of areas. Trade may be one of the areas where we can have significant potentials.

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