



**Szent István University**

**Management and Business Organizational Sciences**

**Doctoral School**

**Thesis of Ph.D. Dissertation**

**INTERACTION BETWEEN FREE TRADE COMMITMENT AND  
ECONOMIC INTEREST**

**TÖRÖK TIBOR**

**Gödöllő**

**2020**

**The doctoral school**

**Title:** **Doctoral School of Management and Business  
Organizational Sciences**

**Discipline:** **Management and Business Organizational Sciences**

**Head of Doctoral School:** **DR. Zoltán Lakner  
DSc, Doctor of the Hungarian Academy of Sciences  
Head of Doctoral School,  
Faculty of Economics and Social Sciences, Szent István  
University, Gödöllő**

**Supervisor:** **Dr. Márk Tóth,  
PhD, Associate Professor, Institute of Business  
Sciences  
Faculty of Economics and Social Sciences, Szent István  
University, Gödöllő**

.....  
**Approval of Head of Doctoral School**

.....  
**Approval of Supervisor**

## CONTENTS

<b>1. INTRODUCTION</b> .....	4
<b>2. MATERIAL AND METHOD</b> .....	8
<i>Structure of components according to economic variables</i> .....	8
<b>3. MAIN CONCLUSIONS AND OBSERVATIONS</b> .....	10
<b>4. NEW SCIENTIFIC RESULTS</b> .....	16
<i>Major experiences related to the analysis and derived from the research</i> ...	19
<b>5. LIST OF PUBLICATIONS</b> .....	21

## 1. INTRODUCTION

Over the past decade and a half, foreign trade relations between some of the world's major economies have had a major impact on world trade, as evidenced by the fact that in 2017, their mutual exports accounted for 65% of world trade exports. This is why the aim of my research was focused on these 24 countries. In this group of countries, the proportion was approximately the same in 2005, at 64.4%. Their total imports accounted for 66.5% of world trade imports in 2017, compared to 66.9% in 2005.

Most of the 24 countries highlighted in the research are developed countries, but there are also developing and economically transforming countries. These countries are: South Africa, France, India, Poland, Mexico, Spain, Turkey, UK, United States, Argentina, Australia, Brazil, Indonesia, Canada, Nigeria, Russia, Saudi Arabia -Arabia, Venezuela, China, South Korea, Japan, Germany, Italy and Hungary. The countries selected include the most developed countries in the world economy, as well as the most important developing countries (China and India) and the most important oil-exporting countries such as Saudi Arabia, Venezuela, Russia and Nigeria.

The aim of my research is to assess the role and possible expansion of free trade and protectionism in the foreign trade relations of the 24 priority countries involved in world trade, either in one or the other. My research also aims to assess the foreign trade relations of the studied countries in the light of the WTO (World Trade Organization), which replaced the previous GATT (General Agreement on Tariffs and Trade) agreements under the auspices of the United Nations. The fundamental question is to what extent the principle of free trade or protectionism is reflected in the foreign trade relations of the 24 countries, and to what extent the related economic interests influence the WTO agreements. The investigation covers the period from 2005 to 2017.

The topicality and importance of my research topic is also given by the fact that in the current world economic processes, foreign trade and export orientation have played an important role in the global economic growth of the given countries. The most classic example of this is China's growing foreign trade activity, highlighting the growth of its exports to the more developed countries of the world economy.

Recently, international trade in goods has increasingly expanded into intercontinental relations. In 2016, the most dynamic developments in this area took place between China, the United States and Germany, valued at \$ 990 billion, accounting for 6% of total world trade imports. There has also been significant intra-regional trade between China and neighbouring or nearby countries, mainly with South Korea, Japan, the Taiwan Province of China and the Hong Kong Special Administrative Region of China. of China = Hong Kong SAR) was significant. In terms

of world trade, the close foreign trade relationship between the USA, Canada and Mexico was also significant. In 2016, more than two-thirds of total exports took place between countries within the region, and even in Asia, more than half of their total exports took place between countries within the region. For other regions of the world economy, intra-regional foreign trade accounted for less than 20% of each region's total foreign trade relations. These regions include Oceania, Latin America and the Caribbean, and Africa.

Over the last two decades, individual countries have been highly specialized in exporting different product groups. By the end of 2016, many economically developed and developing South and East Asian countries had significantly increased their exports of processed industrial products, thus becoming dominant in their exports. In contrast, many transition and developing countries in West Asia (a significant part of the Middle East) and North and Central Africa have focused on energy exports. Food exports strongly characterized the foreign trade of South America and East Africa. In contrast, countries in South and West Africa and Central Asia have strengthened exports of ores, metals, precious stones, and non-monetary gold.

By the mid-2010s, processed industrial products accounted for 72% of total exports from developing countries, approaching the level of developed countries in terms of the share of processed industrial products in exports. While processed industrial products accounted for only one-third of total exports from transition economies, energy sources accounted for almost half of their exports.

Between 2000 and 2017, the share of exports and imports in foreign trade remained largely stable for economically developed countries, while it increased for developing countries. In contrast, the less developed countries of Africa, as well as Haiti and countries with economies in transition, have achieved deteriorating foreign trade rates over the past four years. The international literature highlights the differences between trade in goods and trade in patents (licenses) in the analyses, such as the possibility of relative competitiveness, the structure of global export and import markets, the importance of trade for both countries and groups of countries for that period.

The following 24 countries, including each of the G-20s, have been included in my scientific research because of their economic characteristics.

I believe that an examination of the indicators in the following areas will provide measurable results for the development of international relations in the 24 countries selected:

- exports
- import,
- GDP growth,
- government debt,
- foreign trade exchange rate,
- the share of value-added products in exports,
- foreign trade balance.

In my scientific research, I have used various economic characteristics that are relevant to the countries involved in the analysis. These economic characteristics are as follows:

1 / E05171 (Change in exports, 2005-2017, 2005 = 100);

2 / I05172 (Change in imports, 2005-2017, 2005 = 100);

3 / IEX053 (Export / Import, foreign trade exchange rate, 2005, Import = 100);

4 / IEX174 (Export / Import, foreign trade exchange rate, 2017, Import = 100);

5 / KülMÉE5 - EXCHANGE5 (Rate of change in foreign trade balance, 2005-2017, 2005 = 100);

6 / Fel156 (Proportion of higher value-added products in% of exports, 2014-2015);

7 / GDPGrowth7 (GDP growth, 2005-2017, 2005 = 100);

8 / Chief ADGDP8 - ÁllAdGDP8 (Government debt as a percentage of GDP, annual average, 2005-2017).

The development of exports and imports is closely related to the economic characteristics of the countries, and in relation to them the volume of exports per unit of imports, the balance of foreign trade balance, the structure of exports and imports in foreign trade, highlighting the share of processed industrial products. The development of foreign trade is affected by the growth of GDP and the level of public debt as a percentage of GDP. With the growth of GDP, the given economy has a realistic opportunity to develop an export-oriented economic strategy or to develop import-substituting economic sectors. Where appropriate, import-substituting economic sector development can also increase a country's export orientation strategy. That is why these economic variables have been included in my research activities.

Exports play an important role in gaining the international market for domestic producers and in gaining access to internationally important currencies. Imports make it possible to obtain products from a given national economy which do not have a comparative advantage in their production, but which can be produced in another country more cheaply, cheaper and at a lower cost without any deterioration in quality. Thus, with free foreign trade relations, imported products can be cheaper in domestic markets.

The development of the foreign trade ratio is also important for the countries, as it is a measure of the export demand per unit of imports. The share of higher value-added or higher value-added products as a percentage of exports significantly increases export revenues. In addition, the need to increase the share of higher value-added products in exports encourages the development of a more diversified economic structure, which reduces the unilateral foreign economic dependence of national economies. Higher export revenues and declining imports have a positive effect on the development of the foreign trade balance.

Ultimately, the foreign trade balance also has a direct impact on the development of the balance of payments and government debt as a share of GDP.

*Hypotheses:*

H1 / The development of imports has a decisive effect on government debt as a percentage of GDP and the share of highly processed industrial products in exports. Within exports, the share of processed industrial products and government debt as a percentage of GDP are also inversely related to the general development of imports.

H2 / The change in the share of highly more processed industrial products in exports is inversely proportional to the change (increase or decrease) in GDP.

H3 / An increase in GDP may reduce the level of government debt as a share of GDP, or a decrease in GDP may increase the ratio of government debt as a percentage of GDP.

H4 / Due to the optional increase in imports resulting from the shortcomings of diversified economic development, the level of government debt may increase as a percentage of GDP.

H5 / Changes in trade creation or trade diversion affect foreign trade relations between countries and the economic situation of countries.

H6 / The change in the foreign trade balance may be closely related to the size of government debt as a percentage of GDP. For example, a positive increase in the foreign trade balance may reduce the government debt as a percentage of GDP, or a negative change in the foreign trade balance may increase the government debt-to-GDP ratio.

In developing the hypotheses, I used the analysis with the SPSS statistical software package in each case, which I detail in the methodological chapter.

## 2. MATERIAL AND METHOD

In my scientific research, I used a statistical comparison analysis method based on SPSS data aggregation. In doing so, I compared the individual countries based on the different economic characteristics used. This statistical system classified and grouped individual countries based on key economic characteristics. Furthermore, economic characteristics or economic variables are components between which the relationships are illustrated by the coordinate system. The analysis classified the countries into quarters of the coordinate system, depending on the increasing or decreasing nature of each country's economic variables.

I consider the research method based on SPSS to be important because the program clearly, logically and factually explores the economic variables describing economic processes and the economic connections between them.

The classification of countries in this form depended on the development and changes of their economic characteristics, as well as on the extent to which these economic changes occurred in the period under review. In addition, the coordinate system also visually expresses the relative distance between each country. The location within the coordinate system already divides the studied countries into four groups.

### *Structure of components according to economic variables*

Based on the SPSS statistical analysis used in my research, I used the following economic characteristics or economic variables, indicating also which components of each variable were included in the program:

"X" Principle line, Component-1:

IEX053 (Export / Import, foreign trade exchange rate, 2005, Import = 100),

IEX174 (Export / Import, foreign trade exchange rate, 2017, Import = 100),

GDPGrowth7 (GDP growth, 2005-2017, 2005 = 100)

"Y" Principle line, Component-2:

E05171 (Change in exports, 2005-2017, 2005 = 100),

I05172 (Change in imports, 2005-2017, 2005 = 100),

(Minus) ÁllAdGDP8 (Government debt as a percentage of GDP, annual average, 2005-2017)

"Y" Principle line, Component-3:

KülMéE5 (Rate of change in the foreign trade balance, 2005-2017, 2005 = 100),

Fel156 (Proportion of processed products in% of exports, 2014-2015)



Based on the above, it can be seen that in each case, countries can be classified into only four groups in the coordinate system based on their correlations between the components based on their economic variables. However, based on the economic characteristics of the countries, i.e. their economic variables, statistical analysis provides a much more uniform grouping of countries, different from the coordinate system, depending on how many groups of countries we want to form within the statistical analysis program. This can be measured on the dendrogram graph.

SPSS is a widely used program for statistical analysis in the social sciences. The SPSS-based analysis method is also used by market researchers, health researchers, companies, governments, educational researchers, marketing organizations, and data miners.

The original SPSS manual described it as one of the \ "most influential books in sociology \ " that allows traditional researchers to conduct their own statistical analyses. In addition to statistical analysis, the program includes data management, data selection, file transformation, derivative data creation, and data documentation, i.e., storing metadata dictionaries in the data file, which are characteristics of the base software.

SPSS, like many Windows programs, works with a multi-window technique. We can manage the database in a separate window, which is most similar to a - 7 - László Huzsvai - Szilvia Vincze (2012) SPSS-book spreadsheet database, the result is displayed in a separate window, and we can edit the syntaxes and scripts in a separate window. Syntax is the internal language of SPSS in which you can store and run statements set in dialogs. You can also use this internal language to issue instructions that are not from the dialog box. SPSS is an extended mathematical or matrix operations, which can be used to perform even the most complex computational operations, can only be performed with very simple instructions written in this internal language.

The matrix procedure includes the determinant, inverse matrix, eigenvalue, eigenvector, etc., starting from the elementary matrix operations (addition, subtraction, multiplication, division). determination. These can be used in correlation and regression calculations. Cycle statements, iteration procedures, and automatic database creation can only be run in the syntax editor window. The easiest way to create Syntax is to use the Paste statement in the dialogs. This will open the syntax editor window and display the command prompts. Commands that are not available in this way must be entered manually according to the syntax rules. A syntactic description can be found in the SPSS Syntax Reference Guide.

Scripts are actually a series of functions and procedures written in sax basic. This language, with a few special rules, is very similar to Visual Basic. After studying the example scripts provided with the program, you can easily create your own scripts. With the help of scripts, all the possibilities of SPSS can be exploited. The so-called. autoscripts execute a series of instructions when an event occurs, such as when creating a statement table, you can automatically set which variables appear in the rows and columns of the statement, whether there is a subtotal, and what format they take. Scripts and syntaxes are interoperable (you can run syntax from a script and script from a syntax).

### 3. MAIN CONCLUSIONS AND OBSERVATIONS

1 / According to the SPSS statistical program, the four most important and decisive economic variables, which according to the system are the most justified: the share of processed industrial products in% of exports (Fel156), the rate of change in the foreign trade balance (KülMéE5), measured in% of GDP government debt (ÁllAdGDP8) and GDP growth (GDPGrowth7). In my analyses, I also consider these economic variables to be the most important indicators.

The other four economic variables, which are closely related: the increase in exports between 2005 and 2017 (E05171), the increase in imports over the same period (I05172) and the foreign trade exchange rates in 2005 and 2017 (IEX053 and IEX174) show that the serious impact of export and import growth and the size of the foreign trade ratio in the analysis of the economic characteristics of the countries involved in the research. One of the economic data used, Fel156 (Proportion of processed industrial products as a percentage of exports), is given by the fact that the level of processing of exported products can increase international competitiveness on the world market and higher level of processing can provide higher export revenue, which can further increase production capacity. and enables innovative development.

2 / In the vast majority of the examined countries, the share of processed industrial products in exports was inversely related to the general development of imports. Where the share of high value-added products in exports is low, there will be a deterioration in foreign trade terms between 2005 and 2017. On the other hand, where the share of processed products in exports is high, the development of the foreign trade ratio in those countries shows a favourable trend. Government debt as a percentage of GDP is inversely related to general developments in imports, external trade ratios and GDP growth.

3 / If the share of processed industrial products in exports is high, then the increase in imports is not significant, and if the public debt measured as a percentage of GDP increases, the size of the purchase base for imported products decreases, so the increase in imports also decreases. The development of imports also has a serious impact on the share of processed industrial products measured as a percentage of exports and on government debt as a percentage of GDP. If the share of processed industrial products in exports is low, imports may increase, because domestic consumer needs can only be met by imports of certain manufactured goods from abroad.

If the government debt as a percentage of GDP decreases, the purchase base for imported products will increase, so import purchases may increase to a greater extent. In parallel with the growth of GDP, the share of processed industrial products in the percentage of exports is low, and vice versa, ie the growth rate of GDP in the percentage of exports is high in parallel with the low share of processed industrial products.

4 / In terms of changes in the foreign trade balance, China achieved the highest growth rate among the countries studied, with a growth rate of 481% between 2005 and 2017. China has achieved this performance with export growth and, within that, a significant proportion of more processed industrial products. In the case of China, high GDP growth of 387% also contributed to this. Between 2005 and 2017, China's 199% export growth was the largest among the countries studied. The example of the USA shows, as did the world economy in some other countries, that high government debt as a percentage of GDP could not be reduced despite dynamic export growth and a significant share of processed industrial products and modest growth in imports.

5 / In terms of GDP growth, Venezuela has achieved the highest growth rate in this period. While Venezuela in the world economy as a whole has been able to do so thanks to rapidly growing oil demand in the economy, thus strengthening the country's unilateral economic dependence on oil exports. In contrast, China, with its diversified, diversified economy and the simultaneous development of several economic sectors, has achieved significant economic recovery and outstanding GDP growth, while maintaining strong export growth despite significant growth in imports.

6 / It can be stated that in developing countries where the share of processed industrial products in exports is low, these countries are essentially oil-exporting countries. In these countries, the growth rate of imports is very high, while the growth of exports is significantly lower or declining, and in addition, foreign trade terms have developed unfavourably, which in many cases has led to a deteriorating foreign trade balance. These economic developments can be seen, for example, in Brazil, Indonesia, Nigeria, Saudi Arabia, Venezuela and India, and to some extent in Mexico and Turkey.

7 / The unfavourable development of foreign trade in goods and foreign trade is due to the fact that these countries want to cover their domestic consumption from imports instead of the domestic supply of goods from domestic import substitution investments. Their exports are mostly crude oil, so the share of industrial processed products or semi-finished products in their exports is low.

8 / Despite internationally significant oil revenues, domestic inward investment is relatively low due to the lack or severity of factors required for industrial deployment and investment, such as infrastructure. Accordingly, these countries use their available crude oil revenues for their daily domestic market needs, to meet their consumption needs from imports. In most oil-exporting countries, the enormous amount of capital required to carry out extreme natural factors, endowments and infrastructure investments will counteract the implementation of investments as long as the extremely high source of revenue from oil is continuously available. This does not encourage the investment needed for their future economic development, but long-term, balanced economic growth makes it essential to prioritize investment-friendly economic policies.

9 / The GDP growth rate of these countries also depends on their sales revenues from oil exports, which are a function of current world oil prices, so these countries have become very vulnerable economically as economies that are too open to the world economy. Even in international comparison, their low public debt as a percentage of GDP does not provide complete financial security against a possible increase in their future indebtedness. This is why these countries take significant financial risks as a result of their unilateral economic development, with their unilateral foreign economic dependence.

10 / Based on the relationship of some economically developed countries, for example, in the case of Canada, it can be stated that its economy is not so diversified and therefore not as competitive in the world economy, which is also well characterized by its foreign trade situation. Canada's general economic situation has also led to its high (like the US) public debt, which is almost equal to annual GDP, compared to economically developed countries. In essence, the annual GDP of this country is used to fully repay its public debt, from which it may already be difficult to create a social welfare situation.

11 / For countries with diversified economies and export structures, such as Japan, Italy, the USA, the UK and France, despite their economic development, their public debt as a percentage of GDP is either more than their annual GDP or almost equal to their annual GDP, or nearly two-thirds of their annual GDP. In addition, their foreign trade ratio deteriorated. The deteriorating foreign trade ratio also dampened export growth, so their government debt as a share of GDP may have increased, so these economic variables are closely related. Essentially, Australia is also included, with the difference that its government debt in terms of GDP is close to 60%, but the improvement in the foreign trade ratio is significantly more favourable.

12 / It can also be stated for the 24 countries examined that in countries where GDP is growing, the share of processed industrial products in exports is low or decreasing, such as India, Argentina and Australia. At the same time, the reverse is also true that in countries where GDP growth is declining or low, the share of processed industrial products in exports is high. This can also be explained by the fact that GDP growth may be accompanied by employment growth and the expansion of the internal market, so the needs of the domestic consumer market for processed industrial products will increase. With the growth of employment, solvent demand will also increase, and accordingly the share of consumer goods, ie processed industrial products that can be exported, may decrease within exports. In this case, it is clear that this is not a trade diversion, so the share of processed industrial products in each country's exports is not reduced due to import restrictions from other countries, but to meet the needs of the internal consumer market.

13 / In the case of Argentina, the situation is special because, although the GDP growth rate is very high and the share of processed industrial products in exports is low, the country's very high GDP growth rate is mainly due to raw material production and low value, lower processed light industrial products. the result. The outstanding weight of raw material production in the national economy is also reflected in the structure of exports. Despite significant GDP growth, the domestic market has not been able to expand sufficiently and export growth has not been

very significant, while domestic market needs are largely covered by imports. These economic conditions have already led to a deterioration in the foreign trade ratio and are expected to deteriorate further in the future.

14 / In the case of Brazil, Indonesia, Nigeria, Saudi Arabia and Venezuela, it can be seen that GDP is growing, and at the same time the share of processed industrial products in exports is low. The very high GDP growth rates of the countries are mainly due to the production of raw materials and, within this, mainly to the extraction and export of energy sources. Due to the unilateral economic structure, only the profitability of the oil extraction and certain oil refining sectors will ensure GDP growth in these countries.

In the case of Saudi Arabia, it should be noted that the expansion of the domestic consumer market is due to high incomes for the dominant public sector and relatively extensive social assistance to the population, which is ultimately covered by oil export revenues. In such cases, the expansion of the service sector is in many cases only due to an increase in the number of household members and not to production-related services such as the maintenance and logistics sector.

15 / In countries where GDP growth is declining or there is a clear decline in GDP, such as Japan and Italy, employment may decline. Due to the declining domestic market demand, the export volume of processed industrial products is increasing, so the share of processed industrial products in the exports of each country is increasing.

16 / It can be stated that the countries' foreign trade balance may deteriorate significantly due to the deterioration of their foreign trade exchange rate despite high GDP growth, a small increase or decrease in exports, and a more significant increase in imports than in exports. The proportion of processed industrial products is low. The decline in the foreign trade balance in these countries is mainly due to the very low share of processed industrial products in exports. The GDP growth rate and the relatively more favourable export revenues are mainly due to the production of raw materials and energy. Classic examples of this are Argentina, Australia, Brazil, Indonesia, Nigeria, Saudi Arabia, Venezuela.

17 / Through the example of Mexico, it can be stated that in a given period, with the same increase in exports and imports, a lasting foreign trade exchange rate can develop. In addition, despite internationally acceptable GDP growth and a high share of processed industrial products in exports, the external trade balance may deteriorate. All of this can ultimately be traced back to less competitive industrial export products that lag behind international market demands.

18 / It should be noted that many developing countries are struggling with the problem of the unilateral economy, which means that no other economic sectors have emerged along with the extractive sector, especially a sufficient domestic manufacturing industry to meet domestic consumer needs. Due to the lack of these sectors, the majority of domestic consumer needs can only be met by imports.

Due to the lack of a proper manufacturing industry in developing countries, this has not led to the development of a sufficiently diversified economy and, with it, diversified export capacity

to balance the foreign trade balance. These economic characteristics apply to Nigeria, Venezuela, Saudi Arabia, Indonesia and Argentina, and in part to India and Brazil.

19 / In many developing countries, such as the Republic of South Africa or Turkey, and in some developed countries, such as Spain, where there is a significant increase in exports and yet a significant deterioration in the external balance, in this case the world market for exported industrial products lack of competitiveness is causing the deteriorating trend. It can be seen that the ultimate solution for these countries could be internationally competitive or more competitive export funds, which would require much more innovative investment, thus boosting the share of higher value-added products in exports.

20 / Basically, it is not the creation of trade or the reduction of trade diversion proposed by international organizations that is important in foreign trade relations between countries, but the diversified production structure to be established for a given country and the resulting diversified export structure. Ultimately, creating countries with internationally competitive or more competitive commodity export funds may provide the solution. In addition, it is possible to develop a production structure based on the principle of competitive and comparative advantages in each country.

Competitive advantages mean the competitiveness of products produced with modern, innovative production technology. Realization of comparative advantages is basically possible with lower production costs. Lower production costs can occur in several ways (eg cheap labour, favourable natural conditions, modern technology) or they can only take the form of a complementary form. Therefore, in many cases, companies in developing countries play a role in the production of end products in developed countries. In this case, foreign direct investment flows (FDI) play a decisive role.

21 / This also raises the issue of deepening the international division of labour, and thus product specialization or specialization in the production of sub-products or parts. In this respect, it is natural that the creation of trade or the reduction of trade diversion proposed by international organizations could come to the fore. The process of countries or groups of countries relying solely on the production of raw materials or energy sources, while other countries trade in a predominantly processed industrial product, predicts a perpetual spiral of further unilateral economic dependence and indebtedness. This process makes poor countries even poorer, rich or richer countries even richer.

22 / This process, which has so far determined the current state of the world economy, has led to 90 percent of the world's total wealth being in the possession of 10 percent of humanity. If the above unilateral foreign economic dependence persists, this wealth concentration will continue. On the other hand, one of the possible solutions is to use the available financial resources wisely, by making innovative investments in line with the natural-social and economic-geographical characteristics of the world economic regions and countries, in order to ensure international competitiveness.

23 / Developing countries may have owed their cheap exports mainly due to the low cost of labour. At the same time, with the devaluation of the U.S. dollar, more expensive U.S. exports were sought on the world market because, in addition to the favourable price, the products were of better quality against which developing country exports could not compete, so they could be sold less.

24 / The other big problem with the devaluation of the US dollar for exported goods in developing countries was that the national currencies of developing countries appreciated relatively relative to the US dollar, so their otherwise cheap exports could become more expensive. In addition, for developing countries, due to their relatively appreciated national currency, the prices of their export products increased slightly on the basis of the former, and in parallel, imported products became cheaper. In essence, it is generally true that if the national currency is devalued, exports will be cheaper and imports more expensive. Otherwise, if the national currency is appreciated, exports will become more expensive and imports will be cheaper. An important consideration in shaping the exchange rate of a national currency is to encourage exports and restrict imports, or to encourage imports and restrict exports. For all countries, the previous version is the goal, but in the case of a negative balance of payments, the national currency is devalued, which is why the exchange rate is influenced by several economic factors.

25 / Based on the experience of France and similar countries included in the research (such as the UK, Japan and Brazil), the growth rate of imports is expected to be higher than the growth rate of exports in the future, thus further deteriorating the external balance towards increasing public debt. This effect, which may not only lead to a weakening of the national currency, but will sooner or later slow down GDP growth, as a weakening national currency and a generally weakening economic background will also make investment and job creation much more costly.

#### 4. NEW SCIENTIFIC RESULTS

1 / In connection with the increase in public debt, the size of the purchase base that can be spent on imported products decreases, so the increase in imports is insignificant, and the high share of processed industrial products in exports also counteracts the increase in imports. - The first hypothesis is confirmed. As in the case of several countries of the world economy, such as the USA, the size of government debt as a share of GDP has not decreased despite the dynamic growth of exports and the significant share of higher value-added industrial products and more modest growth in exports. In contrast, in developing countries, which are mainly oil-exporting, the growth of exports is much more modest or declining compared to the growth of imports, and their foreign trade exchange rates have also developed unfavourably, which in many cases has led to deteriorating foreign trade balances. The unfavourable development of foreign trade terms and trade flows is due to the fact that these countries are offsetting domestic demand with increasing imports of consumer goods. At the same time, the share of domestically processed industrial products in exports has a low or declining trend, as crude oil and its derivatives are the determining factors in the structure of exports.

2./ In those countries where there is a very serious increase in GDP, the share of more processed industrial products in exports is not significant. Among the countries studied, for example, economic data from Australia, India, or Argentina also supported this hypothesis. - The second hypothesis is confirmed. For other countries, GDP growth is low or low, but within exports, the share of their higher value-added industrial products is high, which helps export dynamism and provides more favourable opportunities on the world market. The analysed data clearly show these processes for the economic indicators of Spain, France, Germany and Japan.

3./ "An increase in GDP may reduce the level of government debt as a share of GDP, and a decrease in GDP may increase the ratio of government debt as a percentage of GDP."

The study shows that in countries with high GDP growth, the government debt ratio is extremely favourable over the period under review. Examples of this are most oil-exporting countries such as Brazil, Saudi Arabia, Russia, Nigeria and Venezuela, and the three major Asian countries, China, India and Indonesia, are good examples of research.

Although the government debt-to-GDP ratio is also relatively low by international standards, these countries, being largely oil-exporting countries, still take serious financial risks with their generally unilateral economic development and, consequently, their growing unilateral foreign economic dependence. The indebtedness situation for a future period cannot be based solely on how world oil prices develop, the export structure built on it is highly exposed and increases the economic vulnerability of countries in general. The current financial security could be severely damaged as a result of lagging economic policy developments. However, the reverse is also true, as GDP growth in economically developed countries, mainly in Europe, has been



modest or declining, with a high level of public debt, such as Germany, Spain, France, Italy and Japan. The third hypothesis is confirmed.

4./ "As a result of the optional increase in imports resulting from the shortcomings of diversified economic development, the level of government debt may increase as a percentage of GDP."

It should be noted that many developing countries are struggling with the problem of a one-sided economy, which means that no other economic sectors have emerged alongside the extractive sector, notably a sufficient domestic manufacturing industry to meet domestic consumer needs. Due to the lack of these sectors, the majority of domestic consumer needs can only be met by imports.

Due to the lack of a proper manufacturing industry in developing countries, this has not led to the development of a sufficiently diversified economy and, with it, diversified export capacity to balance the foreign trade balance. These economic characteristics apply to Nigeria, Venezuela, Saudi Arabia, Indonesia and Argentina, and in part to India and Brazil.

The fourth hypothesis is confirmed.

In many developing countries, such as the Republic of South Africa or Turkey, and in some developed countries, such as Spain, where there is a significant increase in exports and yet a significant deterioration in the external balance, there is a lack of competitiveness of exported industrial products on the world market. causing a deteriorating trend. It can be seen that the ultimate solution for these countries could be internationally competitive or more competitive export funds, which would require much more innovative investment, thus boosting the share of higher value-added products in exports.

5./ "Changes in trade creation or trade diversion affect foreign trade relations between countries and the economic situation of countries."

Basically, it is not the creation of trade or the reduction of trade diversion proposed by international organizations that is important in foreign trade relations between countries, but the diversified production structure to be established for a given country and the resulting diversified export structure of goods.

Ultimately, creating countries with internationally competitive or more competitive commodity export funds may provide the solution. The fifth hypothesis is confirmed.

In addition, it is possible to develop a production structure based on the principle of competitive and comparative advantages in each country. Competitive advantages mean the competitiveness of products produced with modern, innovative production technology. Realization of comparative advantages is basically possible with lower production costs. Lower production costs can occur in several ways (eg cheap labour, favourable natural conditions, modern technology) or they can only take the form of a complementary form. Therefore, in many cases, companies in developing countries play an embedded role in the production of end products in developed countries. In this case, foreign direct investment flows (FDI) play a decisive role.

6./ "The change in the foreign trade balance may be closely related to the size of government debt as a percentage of GDP. For example, a positive increase in the external balance may reduce the government debt as a percentage of GDP, or a negative change in the external balance may increase the government debt-to-GDP ratio. "

It has not been demonstrated that changes in the foreign trade balance between 2005 and 2017 in the 24 countries examined would be closely related to the size of government debt as a percentage of GDP.

This correlation cannot be established for a significant number of the countries examined, as the positive change in the external balance was accompanied by high government debt, such as in Germany, Canada and Italy, and the drastically deteriorating balance in Saudi Arabia, Nigeria and Indonesia. The sixth hypothesis is not substantiated, not proven.

A change in the foreign trade balance does not clearly cause an increase or decrease in government debt because government debt can also be covered by the government from other financial sources.

### *Major experiences related to the analysis and derived from the research*

The recurrence of the trade war between the United States and China was due to the fact that Chinese exports supply the American (US) and Latin American markets with substandard products, thereby lowering the level of US domestic supplies and worsening US export opportunities. Chinese export products often consist of a copy of goods produced with advanced technology, which results in a deterioration in quality because the production is not made with the original technology and raw materials.

Japan has suffered a serious loss of space in international markets. This is because many newly industrialized Asian countries - South Korea, Malaysia, Vietnam, Thailand and of course China - have entered the world market with their products, mainly cheap technical and consumer goods, as well as clothing and footwear. The European Union's growth in the world economy has also declined recently, mainly as a result of lagging behind the American level of technological development. While this backlog is not unimportant, it is still a sign of the technological decline in the late adoption of know-how, licenses and state-of-the-art technology.

The activity of European financial markets and commodity exchanges is lagging behind that of its American and Asian competitors, which is contributed, among other things, by the fact that the weakening of the financial system in most eurozone countries is related to economic difficulties. Such are the increase in unemployment, the increase in public debt, and the continuous deterioration of the foreign trade balance. Public debt is significant in euro area countries such as Greece, Italy, Portugal, France and Spain. Although the UK is not a member of the eurozone and is no longer a member of the European Union, public debt is significant. The UK's exit from the EU in 2020 will also weaken the Union.

Currently, the most economically developing part of the EU is the Central and Eastern European region, including the V4 countries, which do not yet play a significant role in the world economy.

Due to its historical, economic, social and geographical characteristics, European Union agriculture is not competitive with American (US) agriculture either, not to mention the differences in technological standards and economies of scale.

Chinese investment in Western Europe is primarily for modern high-tech and EU markets. The resulting market acquisitions (e.g., the installation of 5G towers by Huawei) are gaining ground in China, both politically and economically, supported by large amounts of relatively cheap Chinese loans. This kind of reorganization of the world economy is by no means to the benefit of the EU, whether from an American or a Chinese perspective. The relationship between GDP and innovation: Economic growth in countries is generally characterized by GDP growth. GDP growth can be attributed to two main reasons:

- or as a result of an increase in volume when it results from an increase in the volume of goods and services;
- or as a result of qualitative growth, when value added through innovation and added production and services through more efficient production technologies results in GDP growth.

Starting from the title of the dissertation, in my scientific research I analysed the economic characteristics of the 24 countries mainly related to foreign trade for the period between 2005 and 2017. In my research, it has become clear that, no matter how relevant and useful the UN World Trade Organization recommendations (WTO rounds) are for UN member states in strengthening free trade, ie trade creation, and protectionism, interest is primarily authoritative. This is the focus of my research.

Therefore, in the course of my research, I primarily based on the specific characteristics of the examined countries, and through this I analysed and made comparisons of groups of countries formed on the basis of similar economic characteristics. The comparisons were made according to economic variables as economic characteristics, highlighting the change in foreign trade exchange rates, the growth rate of export and import volumes, and the share of processed industrial products within exports.

The development of the foreign trade balance is an important indicator for the aggregation of export and import turnover. The increase in exports has an impact on the foreign trade balance. Foreign trade also has a serious impact on GDP growth. Therefore, these economic characteristics were included in my research.

Despite the priority economic interests, the WTO agreements are extremely important because they provide a framework for world economic operators to conduct world trade more smoothly and without tension.

## 5. LIST OF PUBLICATIONS

### Tibor Török PhD student

#### Journal article in English

**Török, Tibor** et al, (2015): Methane reductions to moderate the global warming effects. APSTRACT - APPLIED STUDIES IN AGRIBUSINESS AND COMMERCE 11: (4) pp. 59-64.

#### Journal articles in Hungarian

**Tibor Török** (2018): A szabadkereskedelem a XXI. század elején. *Polgári Szemle*, 14. évfolyam, 4-6. szám. pp. 355-362. ISSN 1786-6553 (Free trade in the XXI. at the beginning of the century. *Polgári Szemle* Civic Review, 14th grade, 4 - 6. song. pp. 355-362.)

**Tibor Török** et al, (2015): Az akkreditív ügylet résztvevői (Participants in Accreditive business). *Controller Info*, III. year / quarter, 3rd quarter / quarterly, Publisher, Publishing: Copy & Consulting Kft. / Ltd, Budapest, Professional journal, scientific journal, pp. 24 - 29, ISSN 2063-9309.

**Tibor Török** et al, (2015). Az akkreditív ügylet jogviszonyai. (Legal relations of the letter of credit transaction). pp. 47 - 53. *Controller Info* III. Vol. Issue 4 / Quarter 4, September 2015, ISSN 2063-9309.

#### Conference publication in English

**Török, Tibor** et al, (2015): Role of CMIM in integration of Asian Region, pp. 27- 34. 5th International Conference of Economic Sciences Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary – 7 - 8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

**Török, Tibor** et al, (2015): Financial integration process in ASEAN Region at the beginning of XXI. Century, pp. 35-40, 5th International Conference of Economic Sciences, Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary – 7-8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

**Török, Tibor** et al, (2015): Economic growth of ASEAN country group in Asia. pp. 47-53. 5th International Conference of Economic Sciences, Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary – 7 - 8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

**Török, Tibor** et al (2015): Compare the economic development of ASEAN and Latin – American countries. pp. 51-60. 5th International Conference of Economic Sciences, Editors: Katalin Szendrő, Viktória Szente, Róbert Barna, Kaposvár University – Kaposvár – Hungary – 7 - 8 May 2015, Published and distributed by Kaposvár University, Faculty of Economic Science, ISBN: 978-963-9821-86-6

**Török, Tibor** et al (2015): International cooperation for sustainable economic growth, p 558-562. II. Management and Management Scientific Conference; Economics and Economics Section I. Kecskemét College, Faculty of Horticulture, August 27, 2015 ISBN 978-615-5192-34-0 II.

**Török, Tibor** et al, (2015): Role of East Asia and China in the world-wide FDI flow (Role of East Asia and China in International Foreign Direct Investment) pp. 563-567, Scientific Conference on Management and Management; Economics and Economics Section I. Kecskemét College, Faculty of Horticulture, August 27, 2015, Editor: Ferenc, Árpád. Kecskemét. ISBN 978-615-5192-34-0 II.

## **Other publications**

### **School book**

Katalin Neubauer - Andrea Vajda (2019): Sales Studies, Commercial Knowledge Textbook, Professional reviewer: **Tibor Török** 100 pages, Műszaki Könyvkiadó Kft., ISBN: 978-963-16-6710-3 Previous notes and book excerpts

**Tibor Török** - Andrea Vajda (1993): Ministry of International Economic Relations - Preparation of a proposal for a Professional Advisory Board - Elaboration of the system of requirements for the professional qualifications of Foreign Trade Administrator, Foreign Trade Sales Representative and Foreign Language Correspondent - Preparation of graduation assignments

**Tibor Török** - Andrea Vajda (1994): Application of Standards in International Trade. Education Note, 60 pages. TRAINEX Business Vocational School

**Tibor Török** - Andrea Vajda (1994): The foreign trade transaction. Education Note, 40 pages. TRAINEX Business Vocational School. A revised version of the notes marked as second and third, 2006, was used as an educational note at the KVIF Faculty of the Budapest College of Economics. Ministry of Industry and Trade.

**Tibor Török** - Andrea Vajda (1995): Vocational Final Exam Exercise Collection, 70 pages, National Institute of Vocational Training

**Tibor Török** - Andrea Vajda (2001): National Secondary School Study Competition Task Collection, 60 pages

### **Book excerpt in Hungarian**

**Tibor Török** - Andrea Vajda (2015): The application of the franchise system in Hungary and corporate flexibility. Pp. 105-115. MULTIDISCIPLINARY CHALLENGES, MULTI-COLOR RESPONSES, Volume 5, Part 2. On-line study volume, [www.ecosym.wix.com/kvik](http://www.ecosym.wix.com/kvik), Editor-in-Chief: dr. Hamar Farkas Ph.D. Budapest College of Economics, Faculty of Commerce, Hospitality and Tourism, Department of Economics, Volume of Studies, ISBN: 978-963-7159-51-0

**Tibor Török** - Andrea Vajda (2015): Ways and means of financing in the franchise system, pp. 116-123. MULTIDISCIPLINARY CHALLENGES, MULTI-COLOR RESPONSES, Volume 5 Part 1. On-line study volume, [www.ecosym.wix.com/kvik](http://www.ecosym.wix.com/kvik), Editor-in-Chief: dr. Hamar Farkas Ph.D. Budapest College of Economics, Faculty of Commerce, Hospitality and Tourism, Department of Economics, Volume of Studies, ISBN: 978-963-7159-51-0