Regionalization in Global Space

José Manuel M. BOTELHO, Iveta MIETULE, Serhii HUSHKO, Volodymyr KULISHOV, Irina MAKSYMOVA

# COMPARATIVE ADVANTAGES OF INTERNATIONAL TRADE: THE BILATERAL OPPORTUNITIES PORTUGAL – LATVIA, PORTUGAL – POLAND AND PORTUGAL – UKRAINE

## Abstract

The paper aims to estimate which sector is under-exploited in terms of the trade between Portugal and three other European countries: Latvia, Poland and

<sup>©</sup> José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova, 2021.

Botelho, José Manuel M., PhD, University of Evora, Portugal. ORCID: 0000-0002-4001-6563 Email: jmmbinternationalization@gmail.com.

Mietule, Iveta, Dr.oec., Professor, Faculty of Economics and Management, Rezekne Academy of Technologies, Latvia. ORCID: 0000-0001-7662-9866 Email: mietule@inbox.lv.

Hushko, Serhii, Dr.oec., Professor, State University of Economics and Technology, Ukraine. ORCID: 0000-0002-4833-3694 Email: vice-rector@duet.edu.ua.

Kulishov, Volodymyr, Dr.oec., Professor, Department of International Economics, State University of Economics and Technology, Ukraine. ORCID: 0000-0002-8527-9746 Email: kulishov\_vv@kneu.dp.ua.

Maksymova, Irina, PhD, Associate Professor, Department of International Economics, State University of Economics and Technology, Ukraine. ORCID: 0000-0001-9754-0414 Email: maksimova\_ii@kneu.dp.ua.



José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Ukraine. The Feitoria Model identifies underexploited sector/products for the selected markets in order to increase their exportations. The Feitoria Model is based on the comparative advantage concept of Ricardo with the incorporation of economic, political and competitiveness dimensions. The methodology presented in the study is configured comparing the potential trade indicators to effectively verified ones among the countries and uses a trade database of 2014–2018 period extracted from the United Nations Comtrade free database (UN Comtrade – International Trade Statistics Database).

## Key words:

comparative advantages; Feitoria Model; index of complementarity; index of commerce effectiveness; international trade.

**JEL:** F10, F11, F17.

13 Tables, 2 Formulae, 30 References.

## Introduction

If there is a point on which most economists agree, it is that trade among nations makes the world better off. When a firm or an individual buys a good or a service produced more cheaply abroad, living standards in both countries increase. There are other reasons consumers and firms buy abroad that also make them better off – the product may better fit their needs than similar domestic offerings or it may not be available domestically. In any case, the foreign producer also benefits by making more sales than it could selling solely in its own market and by earning foreign exchange (currency) that can be used by themselves or others in the country to purchase foreign-made products (McDonald, 2020).

The theories of international trade consolidate the idea that there are gains when different regions are related – a developed export sector is capable of making strong impact on the generation of jobs and income, as well as on the distri-

bution of wealth in the population. On the import side, it is possible to generate welfare gains when a greater variety of products are available to be consumed; with regard to international relations in the financial system and in the flow of labor, it facilitates the entry of valuable productive resources into the country (Xavier, 2009). As Galvão (2000) explains, international trade ceased to be a simple possibility of exporting productive surpluses; nowadays it has an important role for growth and for the improvement of economic well-being.

The aim of this study is to estimate the underexploited products for the trade between Portugal and Latvia, Poland and Ukraine. The estimation is based on The Feitoria Model developed by Botelho & Kulishov in 2018 and improved by Botelho & Kulishov in 2019 with the introduction of the Most Favoured Nation Tariff (MFN Tariff).

According to European Commission (2020a), «Small and medium-sized enterprises (SMEs) are the backbone of Europe's economy. They represent 99% of all businesses in the EU. They employ around 100 million people, account for more than half of Europe's GDP and play a key role in adding value in every sector of the economy (Estrin et al., 2017). SMEs bring innovative solutions to challenges like climate change, resource efficiency and social cohesion and help spread this innovation throughout Europe's regions (Rehm & Goel, 2017). They are therefore central to the EU's twin transitions to a sustainable and digital economy. They are essential to Europe's competitiveness and prosperity, industrial ecosystems, economic and technological sovereignty, and resilience to external shocks». One of the ways of remaining competitive, achieving a long-term profitability, competitive success, and actually surviving lies in the internationalization process, not only for SMEs but also for large enterprises (Kubíčkováa et al. 2014).

Some of the reasons behind the popularity of internationalization among current companies include opening up of trade borders by most countries across the world and elimination of trade barriers among many others. Companies are no longer secure staying in the domestic market and therefore most companies tend to go for internationalization to be able to spread their risks (Ricard et al., 2020). Internationalization has become much easier due to the communication and technological advancement (Azuayi, 2014).

Exporting often represents an initial step for the internationalization of a firm that normally does not need a physical presence in the host market (Malhotra & Hinings, 2010). Thus, the nonlinear internationalization of exporting activities becomes a particularly viable process (Bernini et al., 2016).

Finding an underexploited market or product is not an easy task. In order to achieve this objective, the Feitoria Model developed by Botelho & Kulishov in 2018 and upgraded by Botelho & Kulishov in 2019 is suggested.

José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

## **Literature Review**

The comparative advantage concept, proposed by Ricardo (1817), is one of the most used models both in the classical and neoclassical theories. According to Ricardo's theory, a country will benefit if it specializes in the production of goods whose manufacture is intensive in its abundant resources. Thus, in developing countries where the reserve labor force is very large owing to open or disguised unemployment (Myrdal, 1956; Prebisch, 1959), best results can be achieved by specializing in the production of labor-intensive goods.

Vaillant & Ons (2003), Xavier et al. (2008) and Xavier (2009), use the comparative advantage of the exporter and comparative disadvantage of the importer crossed, through the so-called Index of Complementarity (IC) in conjugation with the Index of Effectiveness Commerce (EC), with the aim of confronting the potential trade of two regions against what was actually observed in a given period.

The Feitoria Model was created by Botelho & Kulishov in 2018, regarding the bilateral trade opportunities between Portugal and Poland base on the 2012-2016 trade database. In 2019, the Feitoria Model was upgraded by Botelho & Kulishov through the introduction of the concept of competitiveness of products in markets using the Most-Favored Nation Tariff (MFN Tariff). The bilateral trade opportunities between Portugal and Poland were recalculated and Ukraine was added into the analysis based on the 2013-2017 trade database.

In this paper, authors estimate the underexploited products for three European countries; recalculate the underexploited products for Poland and Ukraine and add Latvia into the analysis based on the 2014-2018 trade database.

## **Macroeconomic Outlook**

It is fundamental to know the economic outlook of each country in order to study and decide the market that has the best economic environment. Therefore, the economic outlook for Latvia, Poland, Portugal and Ukraine is as follows.

Latvia outlook. According to the European Commission (2020b), «...in the first quarter of 2020, the economy declined by 2.9% compared to the previous quarter, somewhat less than expected in the spring. Consumption took by far the largest hit as containment measures enacted in the middle of March shut many services down and uncertainty over future incomes made consumers hold back on purchases of durable goods. Exports of services declined substantially

due to border closures and falling demand. Government consumption picked-up because of increased spending on healthcare.

The drag on consumer activity is estimated to have peaked in April as containment measures have gradually been eased since the start of May. A notable improvement in expectations among key industries together with a resumption of mobility patterns, both in May, further support this view. However, demand from European trading partners appears to be taking longer to recover and as a result, exports may still show a decline in May before resuming growth. Also, the pace of recovery is set to differ significantly across the economy - private investment and exports may still struggle in the third quarter while consumption is forecast to pick up at a brisk pace relatively soon. Public consumption and investment are set to get a boost from the government stimulus package. Overall, GDP is forecast to decline by some 13% in the first half of 2020 compared to the last guarter of 2019. It is expected to recover rather guickly receiving a particular boost at the end of the year when work begins on the Rail Baltica project, which will integrate the rail systems of the Baltic countries with the rest of the EU. Overall, GDP is projected to contract in 2020 by 7%. In 2021, GDP growth is forecast to exceed 6%.

Inflation is forecast to slow to a near standstill due to declining energy prices and deflationary pressure stemming from a sizeable demand shortfall. Conversely, it should pick up again in 2021, as demand recovers, led primarily by food and services prices».

**Poland outlook.** According to the European Commission (2020c), «Poland's economy proved relatively resilient in the first quarter of 2020, mainly due to its low exposure to hard-hit sectors and diversified economic structure. GDP fell by -0.4% quarter-on-quarter driven by a significant fall in private consumption, while investment decreased only moderately as the construction sector kept expanding and industrial production recorded just a mild contraction.

GDP is expected to plunge in the second quarter and to gradually recover from then onwards, leaving annual GDP growth at around -4.5% in 2020 and 4.25% in 2021. Despite the government measures put in place, private consumption is likely to suffer in 2020 as consumers accumulate precautionary savings and withhold spending due to social distancing and high uncertainty. Coupled with supply chain disruptions and a fall in orders in March and April, low business confidence will likely have an impact on investment, which is projected to plunge in the second quarter and to recover only partially over the forecast horizon. Furthermore, a fall in demand in Poland's main trading partners will likely take its toll on exports in 2020, especially in the transport and tourism sectors. As the drop in imports is expected to be less pronounced, the trade balance is set to be a drag on growth in 2020.

HICP inflation accelerated significantly at the end of 2019 and the beginning of 2020, driven by a sustained increase in service and food prices. However,

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

slower wage growth and weak demand caused by the COVID-19 pandemic is set to put an end to a nearly two-year-long trend of uninterrupted increases in service price inflation, which is expected to drop in the second half of 2020 and early 2021. Moreover, a significant fall in oil prices in the first four months of the year is likely to bring energy prices down in 2020. As a result, HICP inflation is expected to average 2.7% y-o-y in 2020 and to reach 2.8% in 2021 as economic activity recovers».

Portugal outlook. According to OECD (2020), «the economy is projected to shrink by 11.3% in 2020, should a second pandemic outbreak hit at the end of 2020 (the double-hit scenario). Assuming a single wave of the pandemic (the single-hit scenario), GDP is expected to decline by 9.4% in 2020, with a rebound of 6.3% in 2021. In the double-hit scenario, the recovery will be slower due to prolonged export weaknesses, heightened uncertainty, additional bankruptcies, and prolonged unemployment spells. By the end of 2021, public debt (Maastricht definition) is expected to increase to 131% of GDP if the virus outbreak subsides by this summer and 138% of GDP if there is a second wave later this year. The government has implemented a number of measures to support firms and households and announced further measures to revamp the economy after the general confinement. The short-term work scheme is containing the rise in unemployment. Tax and social security contribution deferrals alongside credit guarantees provide financial support to companies. The central bank provides ample liquidity along with eased macro-prudential rules. If the crisis wears on, additional measures need to be considered. Debt reduction policies can help firms remain viable in the long term. Further revamping out-of-court insolvency processes could speed up debt resolution in case of substantial loan foreclosures.

Strong macroeconomic policies should be sustained. Pushing forward with the multi-year fiscal consolidation effort would help reduce vulnerabilities. In the event of a material downturn, a neutral fiscal stance would be appropriate, allowing the nominal deficit to widen as automatic stabilizers operate, as long as the public debt ratio remains on a downward trajectory. Supervisors should ensure that banks follow through with their NPL reduction targets and strengthen their corporate governance, internal controls, and risk management. Strengthening domestic saving rates is necessary to continue deleveraging and sustain higher investment rates without creating new external imbalances. The authorities should consider steps to encourage complementary second- and third-pillar pension schemes to boost private saving».

**Ukraine outlook.** According to the World Bank (2020b), "The economy is expected to contract by 5.5 percent in 2020, as weakness in the first half of the year is only partly offset by a recovery in domestic demand in the second half and positive contributions from net exports. The baseline assumes a possible reimposition of containment measures in response to a "second wave" (given that daily reported infections are still increasing) and a slower pace of reforms. Ukraine still expects to raise US\$2.9 billion in additional official financing (from the IMF, World Bank, and EU) in the remainder of the year. If these funds are delayed, the government will have to contain spending or borrow more domestically.

Going forward, growth is expected to remain modest at 1.5 percent in 2021, rising to about 3.7 percent by 2023. The outlook depends on the duration of the health crisis and reforms that address bottlenecks to investment and safe-guard macroeconomic sustainability. With the recent loss of reform momentum, fixed investment is expected to reach its pre-crisis level only at the end of 2022, and net exports (as import demand revives but the pace of export diversification remains slow) will continue to be a drag on growth in 2021. Poverty based on the international US\$5.5 a day poverty line is low in Ukraine and is expected to increase by 0.2 percentage points in 2020. At higher thresholds, the poverty increase will be larger, with poverty based on the World Bank's national poverty line for Ukraine expected to increase by 2 percentage points. Sustainable economic growth is needed to reduce poverty rates in the medium term».

**Governance case.** The Feitoria Model incorporates economic and political concepts such as the Ease of Doing Business (World Bank, 2020a), Worldwide Governance Indicators (2020), the Credit Rating and the Free Commerce.

According to World Bank's (2020a) the Ease of Doing Business, economies are ranked on their ease of doing business from 1–190. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm. The rankings are determined by sorting the aggregate distance to frontier scores on 10 topics, each consisting of several indicators, giving equal weight to each topic. In Doing Business 2020, Latvia is the 19<sup>th</sup> country (2019: 19<sup>th</sup>), Poland is the 40<sup>th</sup> country (2019: 33<sup>th</sup>) and Portugal is the 39<sup>th</sup> (2019: 34<sup>th</sup>) (World Bank, 2020a).

Worldwide Governance Indicators (2020) project reports aggregate and individual governance indicators for over 200 countries and territories over the period of 1996–2019 for six dimensions of governance: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption. The position of each country in this work is presented in Table 1.

The Credit Rating of Standard & Poors (2020): For S&P, a bond is considered investment grade if its credit rating is BBB- or higher. Bonds rated BB+ and below are considered to be speculative grade, sometimes also referred to as «junk» bonds. In December/2020 Latvia had «A+», Poland «A-», Portugal had «BBB» and Ukraine had «B» ratings.

The free commerce is an indicator in Feitoria Model that characterizes restrictions on imports or exports due to any kind of embargo – political, religious or other. In practice if there is any import or export restriction, the product is elected not to be selected as an opportunity.



#### Table 1

## **Worldwide Governance Indicators**

Dimonsion		Positio	n 2019	
Dimension	Latvia	Poland	Portugal	Ukraine
Voice and Accountability	53	60	23	106
Political Stability and Absence	85	76	20	193
Government Effectiveness	35	57	34	126
Regulatory Quality	35	40	47	121
Rule of Law	41	71	33	156
Control of Corruption	67	61	48	154

Source: compiled by the authors using the data of Worldwide Governance Indicators (2020).

## Methodology

The underexploited products for the bilateral trade between Portugal and three other European countries, Latvia, Poland and Ukraine are identified by the Feitoria Model. In order to determine the underexploited products, the model determines the comparative advantage of each product in each country by using two indexes. The first one is the Index of Effective Commerce (EC), which compares the potential trade of two countries against what was actually observed in a given period (Vaillant & Ons, 2003). The second one is the Index of Complementarity (IC), which analyses the crossover between supply and demand for the studied products taking into account the world context, that is, the comparative advantages of the exporter and the comparative disadvantages of the importer (Xavier et al., 2008; Xavier, 2009).

According Botelho & Kulishov (2018, 2019), after selecting a new market (country) based on EC and IC indexes and other variables of the Feitoria Model, the next step is to study the selected markets in order to choose the country with the best macroeconomic situation. The economic situation warns about economic risks that could inflict severe and long-lasting damage on development prospects. The Gross Domestic Product (GDP) growth included in economic outlook provides an economic snapshot of a country, used to estimate the size of an economy and growth rate. The GDP growth leads to a more competitive economy. GDP growth is in fact an outcome of competitiveness and the level of competitiveness of a country is determined by the way the resources and competencies are managed. Therefore, countries are interested in increasing the competi-

tiveness to attract business investments and, therefore, it is fundamentally important to know the economic outlook of the country.

Index of Complementarity (IC) is used to identify trade potential. The indicator analyzes crossover between supply and demand for the studied products, taking into account the world context, that is, the comparative advantages of the exporter and the comparative disadvantages of the importer (Xavier et al., 2008 and Xavier, 2009). The indicator is as follows:

$$IC_{ij}^{s} = \begin{pmatrix} X_{iW}^{s} \\ \sum X_{iW}^{s} \\ \frac{s}{\sum X_{WW}^{s}} \\ \frac{s}{\sum X_{WW}^{s}} \end{pmatrix} \cdot \begin{pmatrix} \frac{M_{jW}^{s}}{\sum M_{jW}^{s}} \\ \frac{M_{WW}^{s}}{\sum M_{WW}^{s}} \\ \frac{M_{WW}^{s}}{\sum M_{WW}^{s}} \end{pmatrix} = \frac{\frac{X_{iW}^{s}}{\sum X_{iW}^{s}} \cdot \frac{M_{jW}^{s}}{\sum M_{jW}^{s}} \\ \frac{M_{WW}^{s}}{\sum M_{WW}^{s}} \end{pmatrix}^{2}$$
(1)

where: *i*, exporting region; *j*, importing region; *W*, all regions of the world; *s*, sector considered in the analysis;  $X_{iW}^s$ , exports, for each sector *s*, from *i* to the world;  $\sum_{s} X_{iW}^s$ , total exports from *i* to the world;  $M_{jW}^s$ , imports, for each sector *s*,

from *j* of the world;  $\sum_{s} M_{jW}^{s}$ , total imports from *j* of the world;  $M_{WW}^{s}$ , total world

 $\sum_{s} M_{s}^{s} = 1$ 

imports, for each sector s;  $\sum_{s} \mathcal{M}_{WW}^{s}$ , total world imports.

When IC > 1, there is complementarity between *i* and *j*; below this value, there isn't trade potential between the two.

In order to compare the results of complementarity to the trade actually carried out between two partners, the Index of Effective Commerce (EC) is used (Xavier et al., 2008 and Xavier, 2009).

$$EC_{ij}^{s} = \left(\frac{X_{ij}^{s}}{\sum\limits_{s} X_{ij}^{s}}}{\left(\frac{X_{ij}^{s}}{\sum\limits_{s} X_{iW}^{s}}\right)} \cdot \left(\frac{M_{ji}^{s}}{\sum\limits_{s} M_{ji}^{s}}}{\frac{M_{jW}^{s}}{\sum\limits_{s} M_{jW}^{s}}}\right) = \frac{\left(\frac{X_{ij}^{s}}{\sum\limits_{s} X_{ij}^{s}}\right)^{2}}{\frac{X_{ij}^{s}}{\sum\limits_{s} X_{iW}^{s}} \cdot \frac{M_{jW}^{s}}{\sum\limits_{s} M_{jW}^{s}}}$$
(2)

101

where: *i*, exporting region; *j*, importing region; *W*, all regions of the world; *s*, sector considered in the analysis;  $X_{ij}^s$ , exports, for each sector *s*, from *i* to *j*;  $\sum_{s} X_{ij}^s$ ,

total exports from *i* to *j*;  $M_{ji}^{s}$ , imports, for each sector *s*, of *j* from *i*;  $\sum_{s} M_{ji}^{s}$ , total

imports of *j* from *i*;  $X_{iW}^s$ , exports, for each sector *s*, from *i* to the world;  $\sum_s X_{iW}^s$ ,

total exports from *i* to world;  $M_{jW}^s$ , imports, for each sector s, of *j* from the world;  $\sum M_{jW}^s$ , total imports of *j* from the world.

According Xavier et al. (2008) and Xavier (2009), for a given sector s, if the value of EC is greater (smaller) than the unity, then the effective trade from i to j would be beyond (below) the average expectations; and for a given sector s, if the value of EC is equal to the unity, then the effective trade from i to j would only reflect the average expectations.

According to Xavier et al. (2008) and Xavier (2009), the main use of this index is the comparison with the Index of Complementarity (IC). For a given sector *s*, it is expected that the result of EC>1 is compatible with the existence of complementarity between regions *i* and *j* (IC>1). On the other hand, it is also expected that, for given sector *s*, the result of EC<1 is compatible with the absence of complementarity between *i* and *j* (IC<1).

According to Xavier et al. (2008) and Xavier (2009), when EC>1 and IC<1, it means that, exceeding average expectations in an environment of noncomplementarity between *i* and *j*, the sector *s* showed a trade surplus. On the other hand, if EC<1 and IC>1 there is complementarity between *i* and *j* but the sector *s* should demonstrate better commercial performance, which was not observed. Therefore, the sectors with opportunities to exploit have IC>1 and EC<1, that is, these sectors do not take advantage of the complementarity existing between *i* and *j*. The identification of these opportunities is the main objective of this article.

The combination of the Index of Complementarity (IC) and the Index of Effective Commerce (EC) indicates underexploited sectors in trade relations between two markets (countries/regions). Index of Complementarity (IC) evaluates the existing potential. If IC>1, the two markets (countries/regions) studied would be complementary, that is, the two markets (countries/regions) have potential for trade relations. The Index of Effective Commerce (EC) indicates the effectiveness of trade: first the potential sectors are selected, those with index IC>1, and then, among the potential sectors, those with EC<1 are eliminated, as they would not have effective trade (Xavier et al., 2008; Xavier, 2009).

According to Botelho & Kulishov (2018, 2019), the Feitoria Model incorporates Fundamental Concepts: the comparative advantage concept, the size (amount of trade) and the dynamism (given by growth of trade, expressed by CAGR – Compound Annual Growth Rate) and Economic and Political Concepts: the Ease of Doing Business, Worldwide Governance Indicators, the Credit Rating, the Free Commerce and the Competitiveness Concept MFN Tariff (Most-Favored Nation Tariff).

The Feitoria Model incorporates an important concept – the MFN Tariff. MFN tariffs are what countries promise to impose on imports from other members of the World Trade Organization, unless the country is part of a preferential trade agreement (such as a free trade area or customs union). This means that, in practice, MFN rates are the highest (most restrictive) rates that WTO members charge one another (World Integrated Trade Solution, 2020).

Successive rounds of multilateral trade negotiations since 1947 have helped achieve significant reductions in import duties. This is particularly true for industrial goods, on which tariffs have fallen from around 40% at the end of World War II to a tenth of that today. They also alter the relative prices of products, and can protect uncompetitive companies and their overpriced products. These distortions are particularly pronounced in many non-OECD countries where tariffs remain substantially higher than in the OECD area (Love & Lattimore, 2009).

## **Bilateral Trade Data Overview**

The trade database refers to 2014-2018 and it uses the Harmonized System (HS four-digit code). The structure of HS therefore comprises 97 chapters which, in turn, can be disaggregated into 1,254 four-digit levels - for example, Chapter 01 can be disaggregated into six subsectors, which are characterized in codes from 0101 to 0106, Chapter 02 can be disaggregated into ten subsectors, which are characterized in codes from 0201 to 0210. Harmonized Commodity Description and Coding Systems (HS) is an international nomenclature for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes. At the international level, the Harmonized System (HS) for classifying goods is a six-digit code system. The HS comprises approximately 5,300 article/product descriptions that appear as headings and subheadings, arranged in 99 chapters, grouped in 21 sections. The six digits can be broken down into three parts. The first two digits (HS-2) identify the chapter the goods are classified in, e.g. 09 = Coffee, Tea, Maté and Spices. The next two digits (HS-4) identify groupings within that chapter, e.g. 09.02 = Tea, whether or not flavoured. The next two digits (HS-6) are even more specific, e.g. 09.02.10 Green tea (not fermented). Up to the HS-6 digit level, all countries classify products in the same way (a few exceptions exist where some countries apply old versions of the HS).

José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

The bilateral trade overview based on HS-4 products between Portugal and the three European countries Latvia, Poland and Ukraine is as follows.

**Portugal – Latvia.** Latvia reestablished its independence in 1991 following the breakup of the Soviet Union. The commercial relations between Portugal and Latvia increased significantly since Latvia integrated into the European Union in 2004. In 2006, the bilateral trade between Portugal and Latvia was around €29,7 million and in 2018 it was around €47,1 million, showing an increase of 58,2%.

In 2018, Portugal exported 236 products to Latvia (of 1,254 products total). Between 2014 and 2018, the exports from Portugal to Latvia had grown 12.5% to €36.4 million (more than the exports to the World: 5.5%). The 10 largest products in value represent 71.6% of total products exported from Portugal to Latvia. Table 2 presents the Top 10 exported products in value from Portugal to Latvia.

## Table 2

104

#### Top 10 products in value exported: Portugal to Latvia

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
TOTAL – All products	20,2	36,4	12,5%		
8703 – Motor cars and other motor vehicles principally designed for the transport	1,1	9,5	53,4%	1	25,9%
4802 – Uncoated paper and paperboard, of a kind used for writing, printing,	5,2	4,9	-1,3%	2	13,3%
3901 – Polymers of eth- ylene, in primary forms	0,0	2,2	n.a.	3	6,0%
8473 – Parts and ac- cessories (other than covers, carrying cases and the like)	0,0	2,1	n.a.	4	5,8%
8471 – Automatic data- processing machines and units thereof; ma- chines	0,7	2,0	22,4%	5	5,5%
2204 – Wine of fresh grapes, incl. fortified wines; grape must,	1,2	1,7	7,5%	6	4,6%

## Journal of European Economy

105

-		•					•						9 0		••		•	•	••	•	
ł	Ēt	ng	glis	sh	Εc	litio	n.	Vol	. 20.	Ng	1	(76	). J:	anu	ıary∙	-M	aro	ch	20	21	
Ι	S	SI	Ν	25	519	-40	70														

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
6403 – Footwear with outer soles of rubber, plastics, leather	0,4	1,6	33,6%	7	4,5%
0706 – Carrots, turnips, salad beetroot, salsify, celeriac, radishes	0,4	1,0	20,2%	8	2,8%
8517 – Telephone sets, incl. telephones for cel- lular networks or for wireless networks;	0,1	0,6	46,4%	9	1,7%
3004 – Medicaments consisting of mixed or unmixed products for therapeutic	0,1	0,5	42,0%	10	1,4%

Sources: COMTRADE, Feitoria Model

CAGR: Compound Annual Growth Rate; n.a.: not available.

**Latvia – Portugal.** In 2018, Latvia exported 117 products to Portugal (of 1,254 products total). Between 2014 and 2018, the exports from Latvia to Portugal had grown 12% to  $\in$ 10.6 million (more than the exports to the World: 4.2%). The 10 largest products in value represent 73.5% of total products exported from Latvia to Portugal. Table 3 presents the Top 10 exported products in value from Latvia to Portugal.

#### Table 3

#### Top 10 products in value exported: Latvia to Portugal

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
TOTAL – All products	6,0	10,6	12,0%		
3102 – Mineral or chemical nitrogenous fertilisers	0,0	2,2	207,5%	1	20,7%
8517 – Telephone sets, incl. telephones for cel- lular networks; other	0,6	1,2	12,7%	2	11,0%

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
4407 – Wood sawn or chipped lengthwise, sliced or peeled,	0,9	1,1	4,4%	3	10,0%
7019 – Glass fibres, incl. glass wool, and ar- ticles thereof	0,1	0,8	55,2%	4	7,4%
0304 – Fish fillets and other fish meat, whether or not minced, fresh, chilled or frozen	0,0	0,7	n.a.	5	7,0%
5402 – Synthetic fila- ment yarn, incl. syn- thetic monofilaments of < 67 decitex	0,0	0,6	92,3%	6	5,7%
2703 – Peat, incl. peat litter, whether or not agglomerated	0,3	0,6	16,6%	7	5,4%
3208 – Paints and var- nishes, incl. enamels and lacquers, based on synthetic polymers	0,0	0,3	67,4%	8	2,6%
4412 – Plywood, ve- neered panel and simi- lar laminated wood, cel- lular	0,1	0,2	14,5%	9	2,0%
2834 – Nitrites: nitrates	0.0	0.2	n.a.	10	1.7%

Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Sources: COMTRADE, Feitoria Model

CAGR: Compound Annual Growth Rate; n.a.: not available.

**Portugal – Poland.** The commercial relations between Portugal and Poland increased significantly since Poland integrated into the European Union in 2004. In 2006 the bilateral trade between Portugal and Poland was around €620.5 million and in 2018 it was around €1,779.9 million, representing an increase of 186.9%.

In 2018, Portugal exported 589 products to Poland (of 1,254 products total). Between 2014 and 2018, the exports from Portugal to Poland had growth 11.9% to  $\in$ 828.3 million (more than the exports to the World: 5.5%). The 10 largest products in value represent 44.1% of total products exported from Portugal to Poland. Table 4 presents the Top 10 exported products in value.

## Table 4

## Top 10 products in value exported: Portugal to Poland

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
TOTAL – All products	473,0	828,3	11,9%		
4703 – Chemical wood pulp, soda or sulphate (excluding dissolving grades)	36,1	83,4	18,2%	1	10,1%
8703 – Motor cars and other motor vehicles principally	0,0	65,1	n.a.	2	7,9%
8708 – Parts and ac- cessories for tractors, motor vehicles for the transport of,	32,2	54,8	11,2%	3	6,6%
8480 – Moulding boxes for metal foundry; mould bases; moulding patterns; moulds	19,9	34,6	11,7%	4	4,2%
2204 – Wine of fresh grapes, incl. fortified wines; grape must	14,6	25,1	11,4%	5	3,0%
8544 – Insulated «incl. enamelled or anodised» wire, cable «incl. coax- ial cable»	16,8	24,1	7,5%	6	2,9%
4011 – New pneumatic tyres, of rubber	17,3	21,9	4,8%	7	2,6%
6403 – Footwear with outer soles of rubber, plastics, leather	6,3	21,4	27,5%	8	2,6%
0805 – Citrus fruit, fresh or dried	8,0	20,7	20,8%	9	2,5%
3004 – Medicaments consisting of mixed or unmixed products for therapeutic	5,5	14,8	21,9%	10	1,8%

Sources: COMTRADE, Feitoria Model

CAGR: Compound Annual Growth Rate; n.a.: not available.



**Poland – Portugal.** In 2018, Poland exported 638 products to Portugal (of 1,254 products total). Between 2014 and 2018, the exports from Poland to Portugal had grown 12.1% to €951.6 million (more than the export growth to the World: 6.6%). The 10 largest products in value represent 50.5% of total products exported from Poland to Portugal.

Table 5 presents the Top 10 exported products in value.

## Table 5

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
TOTAL – All products	536,9	951,6	12,1%		
9401 – Seats, whether or not convertible into beds, and parts thereof, n.e.s.,	64,5	121,5	13,5%	1	12,8%
8528 – Monitors and projectors, not incorpo- rating television recep- tion apparatus;	46,2	82,7	12,3%	2	8,7%
8708 – Parts and ac- cessories for tractors, motor vehicles for the transport of ten,	33,1	72,6	17,0%	3	7,6%
8703 – Motor cars and other motor vehicles principally for the trans- port of persons,	3,4	45,9	67,9%	4	4,8%
3815 – Reaction initia- tors, reaction accelera- tors and catalytic prepa- rations, n.e.s.,	0,0	36,6	326,4%	5	3,8%
0201 – Meat of bovine animals, fresh or chilled	25,3	31,2	4,3%	6	3,3%
2402 – Cigars, che- roots, cigarillos and cigarettes of tobacco or of tobacco substitutes	6,8	30,5	35,0%	7	3,2%
8471 – Automatic data- processing machines and units thereof;	11,0	22,3	15,3%	8	2,3%

## Top 10 products in value exported: Poland to Portugal

#### Journal of European Economy

109

				•••	_			ЧЧ						••	•	
Е	nglis	h Eo	litior	n. Vol	. 20.	N⁰	1	(76)	. Ja	inua	ry–I	Mar	ch	202	21.	
IS	SN 3	2519	-407	0												

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share
8418 – Refrigerators, freezers and other re- frigerating or freezing equipment,	9,5	21,9	18,1%	9	2,3%
8450 – Household or laundry-type washing machines, incl. Ma- chines	12,2	15,9	5,4%	10	1,7%

Sources: COMTRADE, Feitoria Model CAGR: Compound Annual Growth Rate

**Portugal – Ukraine.** In 2006, the bilateral trade between Portugal and Ukraine was around €44.3 million and in 2018 it was around €288.1 million, representing an increase of 550.3%. In 2018, Portugal exported 221 products to Ukraine (of 1,254 products total). Between 2014 and 2018, the exports from Portugal to Ukraine had growth 2.2% to €24.9 million (less than the exports to the World: 5.5%). The 10 largest products in value represent 58.3% of total products exported from Portugal to Ukraine. Table 6 presents the Top 10 exported products in value.

### Table 6

#### Top 10 products in value exported: Portugal to Ukraine

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share	MFN Applied Tariff
TOTAL – All prod- ucts	22,4	24,9	2,2%			
4504 – Agglomer- ated cork, with or without a binding substance,	3,8	3,5	-1,4%	1	14,1%	1,88%
6403 – Footwear with outer soles of rubber, plastics, leather	1,6	2,3	7,0%	2	9,0%	6,67%

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share	MFN Applied Tariff
7324 – Sanitary ware, and parts thereof, of iron or steel	1,0	1,5	8,3%	3	6,2%	3,58%
4503 – Articles of natural cork	1,2	1,4	3,6%	4	5,6%	10,00%
0901 – Coffee, whether or not roasted or decaf- feinated; coffee husks and skins;	1,3	1,4	1,9%	5	5,5%	4,00%
2204 – Wine of fresh grapes, incl. fortified wines; grape must	0,5	1,2	16,4%	6	4,7%	6,25%
8536 – Electrical apparatus for switching or pro- tecting electrical circuits,	0,8	1,0	4,4%	7	4,0%	5,00%
8419 – Machinery, plant or laboratory equipment	0,7	1,0	8,1%	8	3,9%	0,89%
0402 – Milk and cream, concen- trated or contain- ing added sugar	0,7	0,7	-2,3%	9	2,6%	10,00%
8428 – Lifting, handling, loading or unloading ma- chinery, e.g. lifts, escalators,	0,0	0,7	67,7%	10	2,6%	10,00%

José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Sources: COMTRADE, Feitoria Model CAGR: Compound Annual Growth Rate

#### JOURNAI OF EUROPEAN ECONOMY English Edition. Vol. 20. № 1 (76). January–March 2021. ISSN 2519-4070

**Ukraine – Portugal.** In 2018, Ukraine exported 128 products to Portugal (of 1,254 products total). Between 2014 and 2018, the exports from Ukraine to Portugal had grown 2.1% to  $\leq$ 261.2 million (more than the export growth to the World: -0.2%). The 10 largest products in value represent 96.1% of total products exported from Ukraine to Portugal. Table 7 presents the Top 10 exported products in value.

## Table 7

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	Rank 2018	Share	MFN Applied Tariff
TOTAL – All prod- ucts	235,5	261,2	2,1%			-
1005 – Maize or corn	107,4	150,3	7,0%	1	57,6%	0,0%
1205 – Rape or colza seeds, whether or not broken	59,2	31,6	-11,8%	2	12,1%	0,0%
7209 – Flat-rolled products of iron or non-alloy steel, cold-rolled «cold- reduced»,	4,6	22,5	37,3%	3	8,6%	0,0%
7208 – Flat-rolled products of iron or non-alloy steel, hot- rolled, not clad,	25,7	19,5	-5,4%	4	7,4%	0,0%
7202 – Ferro- alloys	4,2	6,0	7,2%	5	2,3%	60.5 EUR TNE
1001 – Wheat and meslin	0,0	5,8	n.a.	6	2,2%	0,0%
2306 – Oilcake and other solid residues, whether or not ground	0,0	5,5	n.a.	7	2,1%	0.0% to 2.8%
1512 – Sunflower- seed, safflower or cotton-seed oil and fractions thereof,	8,9	4,0	-14,8%	8	1,5%	0,0%

## Top 10 products in value exported: Ukraine to Portugal

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova

MFN 2014 2018 CAGR<sub>14-18</sub> Rank Products (HS-4) Share Applied (€ Million) (€ Million) 2018 (%) Tariff 7210 – Flat-rolled products of iron or 0,0 3,7 9 1,4% 0,0% n.a. non-alloy steel, of a width >= 600 mm, ... 2711 – Petroleum gas and other 0,0 0,8% 0,0% 2,1 n.a. 10 gaseous hydrocarbons

Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Sources: COMTRADE, Feitoria Model

CAGR: Compound Annual Growth Rate; n.a.: not available.

## **Modelling Results**

The Feitoria Model results for bilateral export opportunities between Portugal and Latvia, Poland and Ukraine are as follows.

**Feitoria Model results** «**Portugal to Latvia**». According to the results of Feitoria Model, there are 79 export opportunities from Portugal to Latvia. Table 8 presents the Top 10 export opportunities from Portugal to Latvia, sorted by value of Latvia imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017–2018).

#### Table 8

Top 10 Export Opportunities from Portugal to Latvia

Products (HS-4)	; (HS-4) 2014 (€ Million)		CAGR <sub>14-18</sub>	CAGR <sub>17-18</sub>	Rank	Share
TOTAL – All prod-			( /0)	( /0)	2010	( /0)
ucts	12 885,4	15 /61,0	4,1%	5,3%	-	-
2208 – Undena- tured ethyl alcohol of an alcoholic strength of < 80%; spirits, liqueurs,	136,8	338,6	19,9%	5,1%	9	2,1%

Journal of European Economy English Edition. Vol. 20. № 1 (76). January–March 2021. ISSN 2519-4070

113

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)
7208 – Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, hot-rolled,	125,9	202,7	10,0%	19,4%	13	1,3%
4407 – Wood sawn or chipped length- wise, sliced or peeled, whether or not planed,	80,0	190,0	18,9%	15,4%	14	1,2%
7306 – Tubes, pipes and hollow profiles «e.g., open seam or welded, riveted,	45,7	65,6	7,5%	14,4%	37	0,4%
0207 – Meat and edible offal of fowls of the species Gal- lus domesticus, ducks, geese,	35,7	52,3	7,9%	8,9%	54	0,3%
2203 – Beer made from malt	27,2	48,6	12,3%	7,9%	59	0,3%
8526 – Radar appa- ratus, radio naviga- tional aid apparatus and radio remote control	15,3	34,2	17,4%	136,9%	89	0,2%
4819 – Cartons, boxes, cases, bags and other packing containers, of pa- per, paperboard,	23,8	32,9	6,7%	5,3%	93	0,2%
3208 – Paints and varnishes, incl. ena- mels and lacquers, based on synthetic polymers	20,4	28,4	6,9%	8,7%	108	0,2%
6810 – Articles of cement, concrete or artificial stone, whether or not rein- forced	15,6	28,2	12,6%	12,4%	110	0,2%

Source: Feitoria Model developed by authors.



**Feitoria Model results** «Latvia to Portugal». According to the results of Feitoria Model, there are 122 export opportunities from Latvia to Portugal. Table 9 presents the Top 10 export opportunities from Poland to Portugal, sorted by value of Portugal imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017–2018).

## Table 9

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)
TOTAL – All prod- ucts	58 977,7	80 974,8	6,5%	7,8%	-	-
8708 – Parts and accessories for trac- tors, motor vehicles for the transport of 10 or more,	2 078,3	3 034,6	7,9%	11,4%	3	3,7%
7208 – Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, hot-rolled,	401,9	640,8	9,8%	13,8%	11	0,8%
0201 – Meat of bo- vine animals, fresh or chilled	356,1	508,1	7,4%	10,0%	16	0,6%
3907 – Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates,	350,2	497,2	7,3%	9,2%	18	0,6%
1005 – Maize or corn	325,0	485,0	8,3%	15,3%	21	0,6%
0305 – Fish, fit for human consumption, dried, salted or in bri- ne; smoked fish,	276,3	390,3	7,2%	5,6%	32	0,5%
8528 – Monitors and projectors, not incorporating tele- vision reception apparatus;	272,1	377,0	6,7%	13,0%	34	0,5%

## Top 10 Export Opportunities from Latvia to Portugal

#### Journal of European Economy

115

English Edition. Vol. 20. № 1 (76). January–March 2021. ISSN 2519-4070

	0014	0010		0400	<b>D</b> /	01
Products (HS-4)	2014	2018	CAGR <sub>14-18</sub>	CAGR <sub>17-18</sub>	капк	Snare
	(€ Million)	(€ Million)	(%)	(%)	2018	(%)
1905 – Bread, pas- try, cakes, biscuits and other bakers' wares,	290,0	376,7	5,4%	6,5%	35	0,5%
8411 – Turbojets, turbopropellers and other gas turbines	132,6	375,5	23,2%	28,5%	36	0,5%
2309 – Prepara- tions of a kind used in animal feeding	224,6	302,2	6,1%	6,5%	50	0,4%

Source: Feitoria Model developed by authors.

**Feitoria Model results «Portugal to Poland».** According to the results of Feitoria Model, there are 162 export opportunities from Portugal to Poland. Table 10 presents the Top 10 export opportunities from Portugal to Poland, sorted by value of Poland imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017 – 2018).

## Table 10

## Top 10 Export Opportunities from Portugal to Poland

Products (HS-4)	2014	2018	CAGR <sub>14-18</sub>	CAGR <sub>17-18</sub>	Rank	Share
	(€ Million)	(€ Million)	(%)	(%)	2018	(%)
TOTAL – All prod-	163	226	6.8%	8 /0/	_	_
ucts	015,1	676,7	0,0 /8	0,4 /0	_	-
8704 – Motor vehi- cles for the trans- port of goods, incl. chassis with engine and cab	1 057,5	1 772,0	10,9%	12,0%	14	0,8%
7208 – Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, hot-rolled,	1 067,5	1 669,9	9,4%	13,4%	17	0,7%

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)
3901 – Polymers of ethylene, in primary forms	1 040,6	1 437,3	6,7%	5,8%	24	0,6%
9401 – Seats, whether or not con- vertible into beds, and parts thereof, n.e.s.,	745,3	1 390,1	13,3%	7,1%	28	0,6%
8481 – Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks,	847,9	1 217,9	7,5%	7,6%	34	0,5%
7326 – Articles of iron or steel, n.e.s. (excluding cast ar- ticles)	833,6	1 190,2	7,4%	7,7%	36	0,5%
6204 – Women's or girls' suits, ensem- bles, jackets, blaz- ers, dresses, skirts, divided skirts,	584,5	1 133,6	14,2%	22,8%	40	0,5%
3923 – Articles for the conveyance or packaging of goods, of plastics; stoppers, lids,	767,0	1 087,3	7,2%	8,4%	41	0,5%
8507 – Electric ac- cumulators, incl. separators therefor, whether or not square or rectangu- lar;	403,0	1 077,7	21,7%	34,2%	43	0,5%
0302 – Fish, fresh or chilled (exclud- ing fish fillets and other fish meat of heading 0304)	692,2	1 048,6	8,7%	5,4%	45	0,5%

Source: Feitoria Model developed by authors

**Feitoria Model results «Poland to Portugal».** According to the results of Feitoria Model, there are 145 export opportunities from Poland to Portugal. Table 11 presents the Top 10 export opportunities from Poland to Portugal, sorted by value of Portugal imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017–2018).

## Table 11

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)
TOTAL – All prod- ucts	58 977,7	80 974,8	6,5%	7,8%	-	-
8704 – Motor vehi- cles for the trans- port of goods, incl. chassis with engine and cab	276,5	596,9	16,6%	8,3%	12	0,7%
3907 – Polyacet- als, other polyeth- ers and epoxide resins, in primary forms;	350,2	497,2	7,3%	9,2%	18	0,6%
7210 – Flat-rolled products of iron or non-alloy steel, of a width >= 600 mm, 	293,5	486,8	10,7%	7,4%	20	0,6%
1005 – Maize or corn	325,0	485,0	8,3%	15,3%	21	0,6%
8544 – Insulated «incl. enamelled or anodised» wire, cable «incl. coaxial cable»	324,9	478,9	8,1%	13,0%	23	0,6%
0305 – Fish, fit for human consump- tion, dried, salted or in brine; smoked fish,	276,3	390,3	7,2%	5,6%	32	0,5%

## **Top 10 Export Opportunities from Poland to Portugal**

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)
8408 – Compres- sion-ignition inter- nal combustion pis- ton engine «diesel»	217,6	352,3	10,1%	10,3%	42	0,4%
6204 – Women's or girls' suits, ensem- bles, jackets, blaz- ers, dresses, skirts, divided skirts	252,5	343,2	6,3%	7,6%	44	0,4%
6110 – Jerseys, pullovers, cardi- gans, waistcoats and similar articles, knitted or cro- cheted	218,8	282,5	5,2%	8,7%	54	0,3%
7326 – Articles of iron or steel, n.e.s. (excluding cast ar- ticles)	174,8	259,6	8,2%	16,4%	62	0,3%

Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Source: Feitoria Model developed by authors

**Feitoria Model results «Portugal to Ukraine».** According to the results of Feitoria Model, there are 70 export opportunities from Portugal to Ukraine. Table 12 presents the Top 10 export opportunities from Portugal to Ukraine, sorted by value of Ukraine imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017–2018).

#### Table 12

Top 10 Export Opportunities from Portugal to Ukraine

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)	MFN Applied Tariff
TOTAL – All products	40 911,4	48 423,6	3,4%	5,2%	-	-	-

## Journal of European Economy

119

English Edition.	Vol.	20. N	№ 1	(76).	Januar	y–Mar	ch 20	21.	
ISSN 2519-4070	)								

	1	1	1	1		1	-
Products	2014	2018	CAGB	CAGB	Rank	Shara	MFN
	(F Million)	(F Million)	(9/)	(9/)	2010	(0/)	Applied
(ПЗ-4)			(%)	(70)	2010	(70)	Tariff
2713 - Petro-	42.8	243.9	41.6%	22.7%	29	0.5%	3.0%
leum coke.							
petroleum bi-							
tumen							
8502 - Elec-	95.2	176 1	13.1%	39.2%	47	0.4%	21%
tric generating	00.L	170.1	10.170	00.270	77	0.470	2.170
sote and ro-							
tary convert-							
5407 - Woyon	90.1	157.3	11.8%	13 /0/	54	0.3%	1.6%
fabrice of eve-	30.1	107.0	11.078	10.478	54	0.078	4.070
thotic filomont							
yarri	40.0	144.0	05.00/	10.40/	<u> </u>	0.00/	0.00/
7214 - Bars	46.8	144.6	25.3%	13.4%	62	0.3%	0.0%
Iron or non-							
alloy steel, not							
further worked							
than forged,							
hot-rolled				/			
8302 – Base	101.9	132.8	5.4%	5.7%	72	0.3%	6.0%
metal mount-							
ings, fittings							
and similar ar-							
ticles suitable							
furniture,							
doors,							
4411 – Fibre-	79.6	102.1	5.1%	9.9%	96	0.2%	0.0%
board of wood							
or other ligne-							
ous materials							
3909 – Amino-	76.9	99.8	5.3%	7.5%	98	0.2%	3.7%
resins, pheno-							
lic resins and							
polyure-							
thanes, in pri-							
mary forms							
0302 – Fish,	69.6	90.9	5.5%	8.8%	113	0.2%	0.6%
fresh or chilled							

José Manuel M. Botelho, lveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova

MFN 2014 Products 2018 CAGR14-18 CAGR17-18 Rank Share Applied (HS-4) (€ Million) (€ Million) 2018 (%) (%) (%) Tariff 2403 - Manu-67.7 6.0% 17.6% 90.4 114 0.2% 20.0% factured tobacco and manufactured tobacco substitutes ... 8438 – Ma-45.3 74.4 10.4% 14.5% 124 0.2% 3.9% chinery for the industrial preparation ...

Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

Source: Feitoria Model developed by authors.

**Feitoria Model results** «**Ukraine to Portugal**». According to the results of Feitoria Model, there are 95 export opportunities from Ukraine to Portugal. Table 13 presents the Top 10 export opportunities from Ukraine to Portugal, sorted by value of Portugal imports from the World (largest to smallest) and complemented with the imports dynamism (the average growth rate in medium term, 2014–2018, and short term, 2017–2018).

## Table 13

#### Top 10 Export Opportunities from Ukraine to Portugal

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)	MFN Applied Tariff
TOTAL – All products	58 977,7	80 974,8	6,5%	7,8%	-	-	-
0201 – Meat of bovine ani- mals, fresh or chilled	356,1	508,1	7,4%	10,0%	16	0,6%	9,0%
8544 – Insu- lated «incl. enamelled or anodised» wire, cable	324,9	478,9	8,1%	13,0%	23	0,6%	5,7%

# Journal of European Economy

121

-	•				•••			-	•	P 4			_	•	•		•	
F	'nĘ	glish	ı Edi	tion.	Vol	. 20.	N⁰	1	(76	5). J	anı	lary-	-Ma	arc	h 2	202	21.	
IS	SSI	N 2	519-	4070														

Products (HS-4)	2014 (€ Million)	2018 (€ Million)	CAGR <sub>14-18</sub> (%)	CAGR <sub>17-18</sub> (%)	Rank 2018	Share (%)	MFN Applied Tariff
1201 – Soya beans, whether or not broken	300,3	435,6	7,7%	19,2%	27	0,5%	2,5%
0305 – Fish, fit for human consumption, dried, salted or in brine; smo- ked fish,	276,3	390,3	7,2%	5,6%	32	0,5%	14,4%
1905 – Bread, pastry, cakes, biscuits and other bakers' wares,	290,0	376,7	5,4%	6,5%	35	0,5%	77,0%
9403 – Furni- ture and parts thereof, n.e.s.	225,5	351,1	9,3%	7,6%	43	0,4%	11,7%
6204 – Women's or girls' suits, en- sembles, jack- ets, blazers, dresses, skirts, divided skirts, 	252,5	343,2	6,3%	7,6%	44	0,4%	18,0%
8516 – Electric instantaneous or storage wa- ter heaters and immersion heaters;	181,9	280,8	9,1%	7,3%	55	0,3%	10,4%
4805 – Other paper and pa- perboard, un- coated, in rolls of a width > 36 cm or in square	140,9	213,4	8,7%	10,7%	80	0,3%	9,0%

José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities

Portugal – Latvia, Portugal – Poland and Portugal – Ukraine MFN CAGR14-18 Products 2014 2018 CAGR<sub>17-18</sub> Rank Share Applied (HS-4) (€ Million) (€ Million) (%) (%) 2018 (%) Tariff 7216 - Angles, shapes and sections of 111,6 160.7 7,6% 10.0% 110 0.2% 12,0% iron or nonalloy steel, n.e.s.

Source: Feitoria Model developed by authors.

## Conclusions

Internationalization is more of an expansion of business from its home market into foreign markets. The decision to internationalize is one of the strategic decisions that have a fundamental effect on any firm and all its internal and external operations. Even though internationalization has become a very popular thing amongst many companies around the world, it is highly important for every company to consider their motives for going international.

The reason behind going for international market varies from one company to another. However, most firms pursue internationalization because domestic market has become inadequate because of the economies of scale and multiple opportunities that are available in the foreign markets. Most successful executives will always want to try another market after any successful one.

The other good reason for going to a foreign market is to avoid the risk that comes with operating in a single market. Most firms go international with an aim of diversifying risk. An alternative market in a foreign land can be of great help in offsetting negative results of various uncertainties such as economic downturns or political intolerance. Foreign market covers company's loses through the overwhelming performance overseas.

As the companies have varied reasons for pursuing internationalization, every firm that decides to go overseas has a specific objective that it wants to accomplish. This, therefore, means that most businesses would always adopt different modes of entry in specific markets. Since there are numerous reasons for going international, there can never be a right or wrong mode of entry. All the many modes of entry are either right or wrong depending on the reason why the company is going international. The Feitoria Model incorporates the Fundamental Concepts and the Economic and Political Concepts that, together, select new markets and therefore indicate the way for companies to follow an internationalization strategy. The application of Feitoria Model is done in two steps. In the first step the Fundamental Concepts are applied, which are the basis of the model; the result is the selection of opportunities for new markets where to export their products. In the second step, the Economic and Political Concepts are applied to the new markets previously chosen in step one; the result is the rejection of economically and politically unstable markets and therefore the acceptance of economically and politically stable markets.

The Economic and Political Concepts are a very important construct that is incorporated in Feitoria Model by the introduction of the dimensions of Governance, Ease of Doing Business, Free Commerce and the Credit Rating. The better the capacity of government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them, and the fewer the barriers to the cross-border flow of goods, services, capital and labour, the greater the openness of an economy.

The Competitiveness Concept (MFN Tariff) incorporated in Feitoria Model is a concept which recognizes that lower tariffs may help the country to substantially improve domestic company competitiveness. The increases in trade from tariff elimination are similar in magnitude to those associated with trade facilitation.

In terms of bilateral trade overview between 2014 and 2019, the commercial relations Portugal – Latvia, Latvia – Portugal, Portugal – Poland, Poland – Portugal and Ukraine – Portugal increased 12.5%, 12%, 11.9%, 12.1% and 2.1% respectively. This is more than the commercial relations with World have grown (Portugal to World 5.5%, Latvia to World 4.2%, Poland to World 6.6% and Ukraine to World -0.2%), which underlines the importance of trade between these markets. The commercial relations Portugal – Ukraine increased 2.2%, but the commercial relations between Portugal and World experienced sharper incline (5.5%). This means that there is an opportunity to increase the commercial relations Portugal – Ukraine based on the list of 10 export opportunities published here (table 11) of the total 70 export opportunities for Portugal – Ukraine.

The strategic management model, the Feitoria Model, built to help the economic development of Latvia, Poland, Portugal and Ukraine through the companies of each country, reveals 79 Portugal – Latvia export opportunities, 122 Latvia – Portugal export opportunities, 162 Portugal – Poland export opportunities, 145 Poland – Portugal export opportunities, 70 Portugal – Ukraine export opportunities and 95 Ukraine – Portugal export opportunities. These opportunities are considered as the latest strategic trends and should be explored analyzing the outlook of the country in order to improve the economic development of these countries.



#### References

- Azuayi, R. (2016). Internationalization strategies for global companies: A case study of Arla Foods, Denmark. *Journal of Accounting & Marketing*, *5*(4), 1-9.
- Bernini, M., Du, J., & Love, J. H. (2016). Explaining intermittent exporting: Exit and conditional re-entry in export markets. *Journal of International Business Studies*, 47(9), 1058–1076.
- Botelho, J. & Kulishov, V. (2018). The Feitoria Prime Market Model: A case study of bilateral trade opportunities Portugal – Poland. *Scientific Journal of Polonia University*, 27(2), 11-17.
- Botelho, J. & Kulishov, V. (2019). A strategic management model for economic development: The Feitoria Prime Market Model – The competitiveness concept: Most Favoured Nation Tariff (MFN Tariff). The bilateral trade opportunities Portugal – Poland and Portugal – Ukraine. *Scientific Journal of Polonia University*, 33(2), 56-67.
- European Commission. (2020a). *Entrepreneurship and small and medium-sized enterprises (SMEs)*. https://ec.europa.eu/growth/smes\_en (accessed 29.12.2020).
- European Commission. (2020b). *European Commission forecast for Latvia*. https://ec.europa.eu/economy\_finance/forecasts/2020/summer/ecfin\_forec ast\_summer\_2020\_lv\_en.pdf
- European Commission. (2020c). European Commission forecast for Poland. https://ec.europa.eu/economy\_finance/forecasts/2020/summer/ecfin\_forec ast\_summer\_2020\_pl\_en.pdf
- Estrin, S., Nielsen, B., & Nielsen, B. (2017). Emerging market multinational companies and internationalization: The role of home country urbanization. *Journal of International Management*, *23*(3), 326-339.
- Galvão, O. J. D. A. (2000). The Northeast and multilateral trade negotiations: From GATT to the WTO [in Portuguese]. Fortaleza: BNB.
- Kubíčkováa, L., Votoupalováb, M., & Toulováb, M. (2014). Key motives for internationalization process of small and medium-sized enterprises. *Procedia Economics and Finance*, *12*, 319 – 328.
- Kiefer, L., & Carter, S. (2005). *Global marketing management: Changes. challenges, and new strategies.* Oxford University Press.
- Love, P., & Lattimore, R. (2009). *International trade. Free, fair and open?* OECD Insights.

ISSN 2519-4070

- Malhotra, N., & Hinings, C. (2010). An organizational model for understanding internationalization processes. *Journal of International Business Studies*, *41*(2), 330–349.
- McDonald, B. (2020). International trade: Commerce among nations. International Monetary Fund. https://www.imf.org/external/pubs/ft/fandd/basics/ trade.htm
- Myrdal, G. (1956). An international economy. Harper and Row Publishers.
- OECD. (2020). Portugal. OECD Economic Outlook, 2020(1), 230-232. http://www.oecd.org/economy/portugal-economic-snapshot (accessed 02.11.2020).
- Prebisch, R. (1959). Commercial policy in the underdeveloped countries. *The American economic review*, *49*(2), 251-273.
- Rehm, S., & Goel, L. (2017). Using information systems to achieve complementarity in SME innovation networks. *Information & Management*, *54*(4), 438-451.
- Ricard, A., Katsuhiko, S., & Shimizu, M. (2020). Deepening the timing dimension of emerging market multinational companies' internationalization – An exploratory perspective. *Journal of International Management*, *100799*. https://doi.org/10.1016/j.intman.2020.100799
- Ricardo, D. (1817). *On the principles of political economy and taxation*. John Murray.
- Standard & Poor's. (2020). S&P Global Ratings. https://www.standardandpoors.com (accessed 29.12.2020).
- Topalova, P. (2010). Factor immobility and regional impacts of trade liberalization: Evidence on poverty from India. *American Economic Journal: Applied Economics*, *2*(4), 1-41.
- Vaillant, M., & Ons, A. (2003). Winners and losers in a free trade area between the United States and MERCOSUR. Working Papers, 1403. https://ideas.repec.org/p/ude/wpaper/1403.html
- World Bank. (2020a). *Doing Business 2020*. World Bank. https://www.doi.org/10.1596/978-1-4648-1440-2
- World Bank (2020b). Ukraine Overview. Economy. https://www.worldbank.org/ en/country/ukraine/overview#3 (accessed 02.11.2020).
- World Economic Forum. (2013). *Enabling trade valuing growth opportunities*. http://www3.weforum.org/docs/WEF\_SCT\_EnablingTrade\_Report\_2013.pdf
- World Integrated Trade Solution. (2020b). *Types of tariffs*. World Bank https://wits.worldbank.org/wits/wits/witshelp/content/data\_retrieval/p/intro/c 2.types\_of\_tariffs.htm (accessed 29.12.2020).

José Manuel M. Botelho, Iveta Mietule, Serhii Hushko, Volodymyr Kulishov, Irina Maksymova Comparative advantages of international trade: the bilateral opportunities Portugal – Latvia, Portugal – Poland and Portugal – Ukraine

- Worldwide Governance Indicators. (2020). WGI 2020 Interactive. https://info.worldbank.org/governance/wgi/ (accessed 23.11.2020).
- Xavier, L. F. (2009). Potential trade versus effective trade: an analysis of the use of relations between the Brazilian Northeast and the European Union [in Portuguese] [Master's Thesis, Federal University of Pernambuco UFPE]. Recife: PIMES/UFPE. https://repositorio.ufpe.br/handle/123456789/4055
- Xavier, L. F., Carvalho, R. G., Tenorio Junior, A. J. A., Sousa, E. S., & Costa, E. C. (2008). Harnessing the relations between Pernambuco and Portugal: an analysis of potential versus actual trade [in Portuguese]. *Anais do Fórum BNB de Desenvolvimento e XIII Encontro de Economia Regional.* ANPEC/BNB.

Received: November 30, 2020. Revised: December 8, 2020. Accepted: January 5, 2020.