

Export into EFTA and transportation costs¹

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Abstract

The Member States of the European Free Trade Association are the considerable opportunity for export, especially for countries of the European Union. The European Economic Area unites the Member States of European Union and Norway, Liechtenstein and Iceland (the three EFTA countries) into an Internal Market. The paper deals with comparison the basic data of EFTA Member States such as geography, infrastructure, GDP. Due to Logistics Performance Index, it is possible to compare the level of logistics and transportation conditions in selected countries. The export costs and delivery time from a one Member State of European Union to capital cities of EFTA Member States are identified by using online calculator of chosen integrators.

Key words

LPI index, export price, market entry, strategy, infrastructure

JEL Classification: N70, M13

Introduction

The aim of many countries is to support the economic, business collaboration and growth through the promotion of free trade or economic integration. It is possible be a part of free trade area, or customs union or common market or economic, monetary union or create complete economic integration. To avoid the strong regulations and receiving only a specific rules the best solution is be a part of free trade area, that means to reduce trade barriers (for example tariffs, import quotas). This fact support export activities as well.

The objective of the paper is to specify the basic characteristics Member States of The European Free Trade Association (EFTA) that means Switzerland, Iceland, Liechtenstein and Norway. We are focusing on transportation costs as well, because they are one of another factor influencing the selection of target market.

1 Methodology

A theoretical outline of research problem was received by the literature research method to describe the basic terms such as EFTA, logistics performance index, transportation costs or free trade area. For the purposes of research, problem four coun-

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tries were characterized (Switzerland, Iceland, Liechtenstein and Norway) and used the basic specification of each country (see chapter 2, figure 1). According to characteristic of EFTA countries, we were able to specify transportation costs as a part of market entry decision in case study and compare the potential for export activities. By calculating export prices the online calculator was used, that means DHL Capability Tool and FEDEX Rates & Transit Times calculator. The logistics performance index (LPI index) helped us to recognize the best delivery indicators in each country. So, the research problem is solved from macroeconomic view (characteristics each country, LPI index) to microeconomic level (express delivery and transportation costs).

2 Results and Discussion

EFTA represent an intergovernmental organisation found for the support of free trade, economic collaboration and integration to the benefit of its Member States. Founders were seven states: Denmark, Norway, Portugal, Switzerland (including Liechtenstein), Sweden and the United Kingdom. Finland was associated state and later Island became a member. Today's membership includes four countries: Norway (NO), Liechtenstein (LI), Iceland (IS), and Switzerland (CH) (Kašťáková & Ružeková, 2014).

EFTA was set up by the Stockholm Convention in 1960 to promote closer economic cooperation, liberalisation of trade in goods. It was founded as a counterbalance to the European Economic Community – EEC (note: later the European Community and the European Union). The free trade between Member States of EFTA are regulated by The EFTA Convention and covers areas such as free movement of persons, investment and trade in goods and services (EFTA, 2016).

For more than 20 years, the Agreement on the European Economic Area (EEA) has extended the internal market of the European Union to the participating Member States of the EFTA (except Switzerland) (Fredriksen & Franklin, 2015).

2.1 EFTA countries

EFTA is the third largest trading partner of the European Union. Each Member State of EFTA has specific comparative advantages and is competitive in several sectors at global economic level, for example, Switzerland is a world leader in banking, pharmaceutical industry or insurance. Liechtenstein is specialized in research and development, technology products. Iceland is interesting because of renewable natural sources. Norway is interesting for energy services, maritime transport or fishing (EIB, 2016).

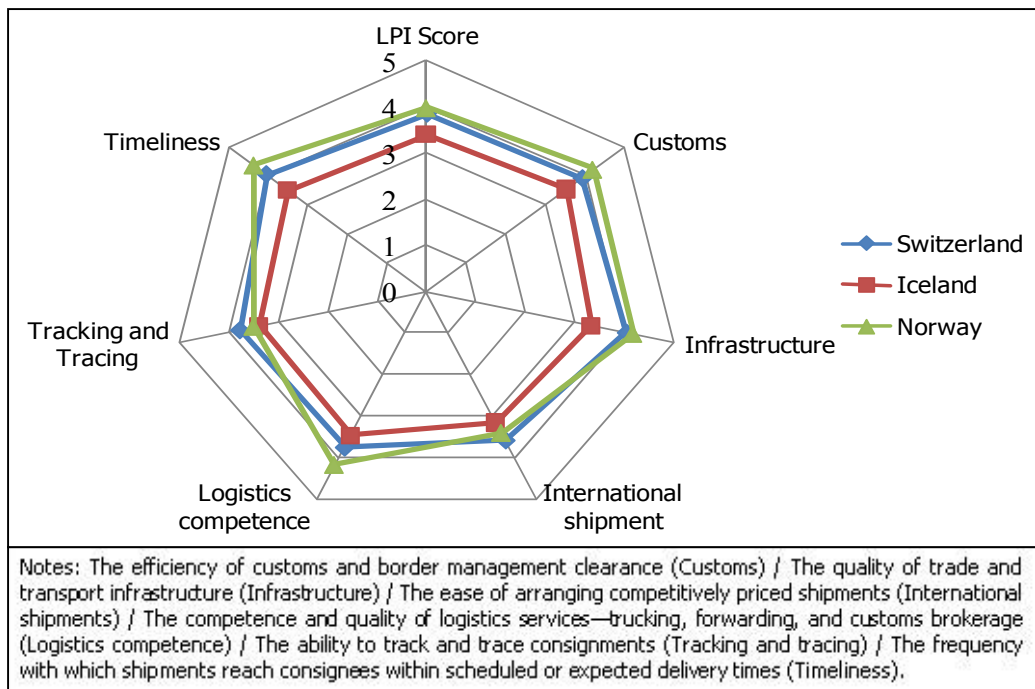
We can compare the Member States of EFTA according to basic dates (e.g. GDP, geography) and for the purpose the paper we are focusing on transportation and logistics conditions that are important for export activities as well. The following table point out, that each EFTA countries noted economic growth and the most important sector are services. The best infrastructure is in Norway and Switzerland, what obviously depends on geography potential of each country.

Table 1 Basic facts of EFTA countries

Overview	Facts / Countries	CH	IS	LI	NO
<i>Geography</i>	Area / total (km2)	41,277	103,000	160	323,802
	Area / land (km2)	39,997	100,250	160	304,282
	Area / water (km2)	1,280	2,750	0	19,520
	Land boundaries (km)	1,770	0	75	2,566
	Border countries (number)	5	0	2	3
<i>Infrastructure (mode of transportation)</i>	Airports - with paved runways	40	7	0	67
	Railways (km)	5,651.5	0	9	4,250
	Roadways – paved (km)	71,464	4,782	380	75,754
	Inland waterways (km)	1,292	0	28	1,577
<i>Economy (GDP, 2015)</i>	official exchange rate (billion \$)	677	16.74	5.113	397.6
	real growth rate	1%	3.7%	1.8%	0.9%
	by sector of origin / agriculture	0.8%	5.8%	8%	1.7%
	by sector of origin / industry	26.7%	20.9%	37%	38.9%
	by sector of origin / services	72.6%	73.3%	55%	59.4%

Source: Own elaboration according to: www.cia.gov/library/publications/resources/the-world-factbook

Another view of quality and potential of transport and logistics represent the value of logistics performance index (LPI) issued by the World Bank. LPI index represents benchmarking tool and identifies the opportunities and challenges. It compares 160 countries around the world. Germany has the best LPI score in 2014 (LPI rank 1) and Somalia has the worst LPI rank (160) in 2014. From EFTA countries, the best LPI rank was in Norway (7), subsequently in Switzerland (14). The LPI rank 37 was in Iceland and for Lichtenstein was not available data. It was compared six sub indicators: timeliness, customs, tracking and tracing, infrastructure, logistics competence and international shipment. The following graph (fig. 1) shows the comparison of LPI index and their sub indicators of three Member States of EFTA. (Interval of ranking is 1-5, that means 1 the worst value, 5 the best value. Data's are issued by the World Bank).

Figure 1 LPI index (Switzerland, Iceland, Norway / 2014)

Source: Own elaboration according to: www.lpi.worldbank.org/international

Each Member State of EFTA has individual environment for import that means delivery strategy (including transportation costs), market entry strategies at a micro level and on the other hand the customs conditions, legislation at a macro level. By export into EFTA countries, it is necessary to identify the potential of each market.

Liechtenstein is a highly developed industrial country, which is related to Switzerland as a major trading partner. The location is its primary benefit that means to be near Germany, Austria, or Switzerland. The licensing requirements are necessary for establishment the company. Special conditions are applied for freelancers and for banks, insurance companies and investment firms. Permits are granted by "Amt für Volkswirtschaft". Liechtenstein is a member of the EEA, but the state retains the import restrictions, import permit in a specific areas. Military equipment's and products of agrarian sector are a protected areas, mainly fruit, vegetables, meat, meat products, wine, flowers, grain, sugar (SARIO, 2015).

For example, the building and engineering industry or services in area of computer programming and consulting are the opportunity for export to Liechtenstein according to CzechTrade (in cooperation with the Ministry of Foreign Affairs CZ).

Norway belongs to the world's richest countries. Downturn in economic growth is caused by the situation in the oil industry, which is one of the main pillars of the Norwegian economy. It is possible to import most of goods without restrictions. Norway is a member of the EEA. Import licenses are required to import food, agricultural products, medicines, weapons and registered ships. Norway has ports known as a free trade zones and transit warehouses. Duty free regime is valid for exports from Member

States of European Union to Norway, except food and live animals. By importing foods, meat products, honey and others is used auction system that means importers are obtaining the import quotas for each product through internet auctions. By imports above the quotas, import duties following the Customs Tariff are charged. Auctions are realized by the Agricultural Directorate in Oslo. In Norway, the Association of traders and importers - agents exists, where foreign traders can turn for help by finding the appropriate business partners (SARIO, 2015).

For example, the energy industry (turbines, water regulators and so on) or branch like automotive and railway transport represent the opportunity for export to Norway according to CzechTrade (in cooperation with the Ministry of Foreign Affairs CZ).

Iceland is part of the EEA. Icelandic market is open. The trades in alcohol and food are the only protected and regulated areas. Based on the EEA agreement this area is liberalizing as well. According to Icelandic experience it is preferred the role of agents with Icelandic citizenship in the first phase of business contacts. Their role is almost irreplaceable (SARIO, 2015).

Switzerland is a country with added value production (e.g. pharmaceuticals). The state belongs to the leaders in innovation and competitiveness. As a member of EFTA Switzerland is also an important trading partner for the EU, but is not a member of the EEA. Nevertheless, only a small part of the products imported into Switzerland requires the authorization (e.g. alcohol, sugar, wine, meat and military equipment's). The perspective method of market entry is production cooperation; it is useful to collaborate with agents or to find directly Swiss investors. The most significant companies export to the Swiss market, that means the strong competition and the emphasis is on the quality (SARIO, 2015).

For example, the chemistry and construction industries (floor tiles, cement and so on) or branch like automotive transport represent the opportunity for export to Switzerland according to CzechTrade (in cooperation with the Ministry of Foreign Affairs CZ).

2.2 Transportation costs

The country's ability to establish itself in international trade, in a certain sector is determined by a combination of factors - the availability of production factors, the nature of domestic demand, domestic competition and cluster concentration and transfer of know how within the industries (Baláž et al, 2010).

The entry of companies into foreign markets is influenced by several factors, such as (Grant et al, 2006):

- the market potential, surplus production capacity and the benefits of low-cost leader,
- the product is near the end of the life cycle on the domestic market, but for foreign markets it can be interesting,
- the source of new products and ideas,
- the foreign competition on the domestic market.

Taking into account the decisions about the method of entry into foreign markets, we distinguish two basic strategies: a) production in the country (direct, indirect export) and production abroad (without or with direct investment). In other words, the strategies are about allocation of production, where the starting point is to export production from the domestic market and the end is to establish multinational company in foreign country. The important part of this decision is influence of transportation costs as a part of export price.

Export price provides basic information about the ratio between credit (what you receive in the international business environment) and debit / cost (what you have to give). Exporter determines and calculates the export price. It is his credit, often the only income. Export price consists of the three parts: production costs, exchange costs – including the transport, delivery, and logistics and added value – including profit. (Furdová & Hansenová, 2015).

Case study

On the following model example we point out the importance of transport costs (a part of exchange costs) by deciding on export into EFTA countries from member state of European Union (e.g. Slovakia). The map (figure 2) illustrates the transportation relation / distance from point of origin (Bratislava) to point of delivery (Reykjavik, Oslo, Vaduz, Bern).

Figure 2 Export from Slovakia – Bratislava to capital cities of Member States of EFTA



Source: Own elaboration according to: www.efta.int/about-efta

The company from pharmaceutical industry operates on the Slovak market based in Bratislava. Transportation costs significantly affect the export of products. In order to implement the strategy Just-In-Time, the company minimizes its stocks. In case of the need to deliver the shipment immediately, it uses the integrator's services.

The companies such as DHL, UPS or FedEx are the leaders of express delivery in global range (note: FedEx has acquired TNT Express current year). Regard the example of price calculation according to DHL's and FedEx's calculators, we can compare

the offered price for delivery the shipment from Slovakia – Bratislava to capital cities of EFTA countries, where the company exports.

The following table shows the calculation of transport costs. The transportation relation is according to data:

- date of pick up: 6.6.2016 (latest booking 16:15, latest pick up 17:15),
- collection zip code: 85000 (Bratislava, Slovakia),
- goods value: 10,000 EUR, shipment: 1 package, 50kg, 50x50x50cm,
- destination zip codes: 0010, 101, 3000, 9490.

Table 2 Transportation costs / express delivery of package

		<i>Norway</i>	<i>Iceland</i>	<i>Switzerland</i>	<i>Liechtenstein</i>
General data	Capital city (CC)	Oslo	Reykjavik	Bern	Vaduz
	Destination Zip Code	0010	101	3000	9490
	Distance (from Slovakia, Bratislava to CC)	1729 km	3726km	948km	756km
DHL	EXPRESS 12:00	€1,040.40	€1,040.40	€824.90	€824.90
	+ 12:00 premium	€5.00	€5.00	€5.00	€5.00
	+ fuel surcharge	€93.64	€93.64	€74.24	€74.24
	TOTAL	€1,139.04	€1,139.04	€904.14	€904.14
	Delivery date (by 12:00)	7.6.2016	8.6.2016	7.6.2016	7.6.2016
	EXPRESS WORLD-WIDE	€1,040.40	€1,040.40	€824.90	€824.90
	+ fuel surcharge	€93.64	€93.64	€74.24	€74.24
	TOTAL	€1,134.04	€1,134.04	€899.14	€899.14
Fedex	Delivery date (by the end of the day)	7.6.2016	8.6.2016	7.6.2016	7.6.2016
	PRIORITY	€1,862.74	€2978.73	€1729.06	€1729.06
	+ fuel surcharge	€139.71	€223.40	€129.68	€129.68
	+ declared value	€107.26	€107.26	€107.26	€107.26
	TOTAL	€2109.71	€3309.39	€1966.00	€1966.00
Delivery date (by 6:00 PM)		7.6.2016	9.6.2016	7.6.2016	7.6.2016

Note: DHL EXPRESS WORLDWIDE - delivery by the end of the day, EXPRESS 12 - delivery by 12:00, Fedex – service: package.

Source: Own elaboration according to: www.dhl.com/en/express/shipping.html;
www.fedex.com/ratefinder/home?cc=sk&language=en; www.google.sk/maps;
[www.cia.gov/library/publications/ resources/the-world-factbook/](http://www.cia.gov/library/publications/resources/the-world-factbook/).

Transportation costs represent 15% an average of the value of shipment, what influences the final export price considerably. Not only the attractiveness of the market is interesting, but also the distance, transport costs represent the important part of market entry decision, export strategy. From a macroeconomic view, the EFTA countries are important trading partners of the European Union and from a microeconomic perspective for Slovakia, the markets with the best availability are interesting in term of the structure of export price and transportation costs. That means Switzerland and Liechtenstein, because the integrators are able to deliver the shipment as soon as possible with the lowest price for transportation. On the other hand, Iceland represents a challenge but also a potential, where exporters have to take into account later delivery

dates, or highest delivery prices. This fact it is possible to eliminate by choosing effective market entry strategy, such as Joint Ventures.

Conclusion

Export into EFTA countries represents a potential for expanding business activities. From an economic level, these states belong to the most significant economies with GDP growth and high scores of LPI index. From a macroeconomic view, Switzerland and Norway have the most effective and developed infrastructure in all transport modalities. This fact represents a potential for use of combined transportation and for elimination delivery costs.

In the view of the market entry strategy (for all EFTA countries), it is important to use the experience of business intermediaries. In general, we recommend considering several factors by analysing export opportunities such as potential and size of market, competition, but also by doing business the costs of delivery, or the possibility of modifying transport modalities. In terms of transport costs, export to Switzerland and Liechtenstein is more cost-effective with a guaranteed next day delivery versus Iceland. On the other hand, Iceland is a challenge and an opportunity for export with respect to competition in comparison with Switzerland.

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