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IMPACT OF EXPORT PLANT PRODUCTS IN BRANDING OF THE COUNTRY

SUMMARY

This paper examines the effects of plant products export in branding of the country. Branding of the country begins by defining the strategy of promoting products, especially export brands, since the development of high quality local brands and their presence on the foreign market improves the image of the country. According to the Anholt Nation Brands Index, which shows maps of the individuals responses to their perception along different dimensions in one index number, one dimension of the Anholt's hexagon is and export regarding customer's perceptions and stereotypes about the products from that country.

An econometric model was used in order to determine the export of plant products from 40 countries (the data presented in the table for the UN). The observed period was from 2006 to 2015, including 2006 and 2015. The test article consisted 500 plant products divided into 100 sub-categories, marked with 4-digit and 10 categories marked with two figures. The data presented in the table are: the share of exports of plant products in total exports, RCA, domestic credit to private sector (% of GDP), employment in agriculture (% of total employment), fertilizer consumption (kilograms per hectare of arable land), foreign direct investment, net inflows (% of GDP), GDP growth (annual %), GDP per capita growth (annual %), general government fil consumption expenditure (% of GDP), gross capital formation (% of GDP), rural population (% of total population), time to export (days), trade (% of GDP).

The result of this analysis, with the use of mentioned econometric model implies that if we increase the percentage of the population in rural areas to 1%, the export (plant products) of the country in total export will be reduced by 0.027%. Given that increased use of fertilizers per hectare of cultivated land by 1% share of the country's exports will increase by 0.009%.

The export, regarding plant product, is adequate component for branding of country. But, for nation's recognition and for better positioning in the minds of consumers, attention should not be paid to increase the number of inhabitants in rural areas, but the improvement of technology, knowledge and application of research which will result with the growth plant product's export in total exports.

Keywords: branding, plant production, export, model, country, organic product.

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INTRODUCTION

Philip Kotler (1980) also referred to marketing as satisfying needs and wants through an exchange process. Likewise, Kyle (2009) refers to the Merriam Webster's marketing definition as the process or technique of promoting, selling, and distributing a product or service. In these three traditional definitions, marketing is seen as a process. But, in the 21st century we can find slightly different definitions for marketing. Davis (2012) defines marketing, at a minimum, as "developing, building, and sustaining a positive reputation for a given offering so that it attracts support from members of a marketplace". In fact, another new definition of marketing points to the brand, to positioning as well as to differentiation, since building the brand is the key.²

The American Marketing Association (AMA) defines brand as a "name, term, design, symbol or any other features that identifies one seller's good or service as distinct from those of other sellers", that is, a combination of characteristics intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition.³

In the last few years there has been a change from place marketing to place branding. Many pages have been written on place branding but one of the most prolific writers on "nation branding" is Anholt (1998, 2003 & 2007 among others). Olins (2002) argues that branding a country is similar to branding a product. It is true that a country is considered more complex than a product since it usually involves many more variables. The changes in national identity and its elements and branding strategy can be compared (Ibid). It is clear that there are fundamental differences between the brand and the nation brand commercial products (Fan, 2006). For example, one nation cannot advertise its coast just as the coast, because the coasts are many, but only through a cultural experience of peoples who live on these coasts, which offers something different from all the others. The nation does not provide services and does not offer tangible products, on the contrary, it includes a number of associations and factors such as: the place (geography, tourist attractions), natural resources and local products, people (race, ethnicity), history, culture, language, political and economic systems, social institutions, infrastructure, famous people (faces), image or image.

As a measure of these soft factors – perceptions and stereotypes – we use the Anholt Nation Brands Index and its components. (Anholt, 2005). This index maps the answers of individuals on their perceptions along different dimensions into a single index number. Individuals are asked about their perceptions of other countries, which may be summarized by the following dimensions:

Tourism: the country's attractiveness from a tourism point of view

² A presentation by Triodos Bank (2010) is available at www.slideshare.net/bmmaShare/triodos-bank1980-kotler-marketing-30-2010 (Accessed 16 May 2017).

³ Definition available at www.marketingpower.com/_layouts/dictionary.aspx?dLetter=B (Accessed 19 May 2017)

Exports: their perceptions and stereotypes about the products from the specific country

Governance: their perceptions as regards the government in that country

Investment and Immigration: their personal willingness to work in that country and their perceptions about social and economic conditions in that country,

People: stereotypes about the people from the respective country as employees,

Culture: perceptions about the country's achievements in terms of culture, history and sports.

In the theory, there is difference between the brand image and identity of the nation. The brand image of the nation is a set of beliefs, opinions and impressions that people have of a country, a result of the information and experience that have. This information is gathered from early childhood, through education, media and information from the immediate surroundings. Buying products and countries, the level of economic development, people, etc. are also ways of gaining impressions and to construct an image. National identity is a complex set of elements that includes the nation's identity: its history, culture, legal and political system, geography, and its visual elements, such as flags and buildings that are symbols. These elements make it unique and distinctive (Veljković, 2010). On the identity of a nation affected by the following factors: export brands, promotion in terms of tourism, trade, attracting investments and experts, internal and external policies, the promotion of culture and customs, the people who go abroad and represent their culture, landscape and architecture of the country, media presence, state participation in international organizations, links with other countries, sport and entertainment. Kotler & Gertner (2002) examine how the image of a country influences the opinion about that country and its products as well as the capacity for attracting tourists, and they state that strategic place marketing mainly refers to "the enhancement of a country's position in the global market-place".

Overall, in this era of globalization, branding is often necessary. The reasons are manifold, and may be the following: tourism, attract investment, geopolitical influence, selling products in domestic and foreign markets, membership in international organizations and alliances, attract talent. First of all, the global market is the interest of every country to be more competitive and to present itself as a good environment for economic growth.

Architecture brand is crucial for product branding and the branding of the nation. "The architecture of the brand is a kind of structure that organizes the portfolio of brands in the company. It defines the role of the brand, hierarchical levels and relationships between brands within the company" (Veljković, 2010). In order to create a brand architecture that can adapt to the needs of the nation, was created NBAR model (*Nation Brand Architecture*). This model represents the structure and organization of the portfolio of brands nationwide, which investigates relations and the role of brands.

In this work, emphasis will be placed on research to export (in this case plant products) as one of the elements Anholt Nation Brands Index affect the branding of the nation and on this basis, creating the perception of consumers in a particular country and the positioning of that country in the minds of consumers. Several studies have been conducted to increase the yield and quality of fruits or vegetables (Kacjan Maršič *et al.*, 2009; Usenik *et al.*, 2009; Veberič *et al.*, 2010). In this respect, organic production, in this case, herbal products, are increasingly gaining in importance.

Organic food production is not the only, but it is the most far-reaching of currently applied measures to increase the sustainability of food production (Thøgersen, J., 2009). For example, Denmark stands out as the country with the highest increase in demand of these products per capita worldwide (Wier, M., and Calvery, C., 2002). However, share of organic products consumption in overall food consumption still remains at a relatively low level (Wier, M., Mette, 2003).

According to Padel, S., & Foster, C., (2005) most consumers associate organic at first with vegetables and fruit as well as with a healthy diet. Organic food consumption is part of a way of life (Schifferstein, H., and Peter AM Oude Ophuis, 1998). Food consumption in most developed countries has attained a saturation point in quantity terms, and consumer food choices are broader than in the past. In this saturated market environment, distribution channels, marketing activities, diversification strategies, and food quality are increasingly important. In addition, consumers have become more concerned about the nutrition, health, and quality of food they eat (Gil *et al.*, 2000). Income and organic knowledge positively influences the final decision to buy organic food products (Gracia, A., & de Magistris, T., 2013).

MATERIALS AND METHODS

An econometric model was used in order to determine the export of plant products from certain countries. The observed period was from 2006 to 2015, including 2006 and 2015. The test article consisted 500 plant products divided into 100 sub-categories, marked with 4-digit and 10 categories marked with two figures. Herbal products that are observed are: live trees & other plants, edible vegetables, ed. fruits & nuts, peel of citrus/melons, coffee, tea, mate & spices, cereals, milling industry products, oil seeds/misc. grains/med. plants/straw, lac, gums, resins, etc. vegetable plaiting materials, animal or vegetable fats, oils & waxes.

The sampling included the following countries: Albania, Azerbaijan, Austria, Armenia, Belgium, Bosnia Herzegovina, Bulgaria, Belarus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Rep. of Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Ukraine, FYR of Macedonia and United Kingdom

The econometric model that was tested according following:

$$lshare = a + b_1 * lrural + b_2 * lfertilizer$$

$$lshare = 0.0735 - 0.0272 * lrural + 0.00919 * lfertilizer, R^2_{adj} = 0.1542$$

Table 1. Variables of the econometric model

VARIABLES	(RE) lshare
lrural	-0.0272* (0.0161)
lfertilizer	0.00919** (0.00441)
Constant	0.0735 (0.0616)
R-sq	0.1542
Observations	167
Number of Reporters	40

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

lshare the natural logarithm of the two-year average share isozyms of plant products in total exports of 40 countries of Europe. Data on exports of plant products consists taken from the database of the UN.⁴ Include categories of HS-06 to HS-15 in the two-digit level of aggregation.

lrural the natural logarithm of the two-year average percentage of the population who live in rural areas. The data were obtained from the WDI database⁵. lfertilizer the natural logarithm of two years of average use of fertilizers (kg per hectare of cultivated land). The data were obtained from the WDI database.

RESULTS AND DISCUSSION

The model is considered as one of the most common ways of measuring comparative advantages (revealed comparative advantage-RCA), defined by B.Balasse (1965). The concept of comparative advantage explains the ability or the possibility of some countries with their exports to compete with the same products with the rest of the world. It is estimated as the ratio of export products of the country and exports of all products of the country to the same proportion of world exports in the reporting period. What is RCA higher, the more pronounced the comparative advantage of a certain sector of the country is

⁴ <http://data.un.org/Explorer.aspx>, (Accessed 23.April, 2017).

⁵ <http://databank.worldbank.org/data/home.aspx>, (Accessed 24.April, 2017).

increasing. The data presented in the table for the UN listed 40 countries are: the share of exports of plant products in total exports, RCA, domestic credit to private sector (% of GDP), employment in agriculture (% of total employment), fertilizer consumption (kilograms per hectare of arable land), foreign direct investment, net inflows (% of GDP), GDP growth (annual %), GDP per capita growth (annual %), general government fil consumption expenditure (% of GDP), gross capital formation (% of GDP), rural population (% of total population), time to export (days), trade (% of GDP).

Table 2: Used indicators on example of Montenegro from 2006 to 2015

	Share	RCA	Domestic credit to private sector (% of GDP)	Employment in agriculture (% of total)	Fertilizer consumption (kilograms per hectare of arable land)	Foreign direct investment ((% of GDP)	GDP growth (annual %)
2006	8,5E-05	0,729	36,302		18,701	23,071	8,566
2007	6,63E-05	0,588	80,260	8,7	15,632	25,553	10,657
2008	7,8E-05	0,794	87,019	7,6	14,791	21,574	6,922
2009	8,74E-05	1,084	76,537	6,5	11,329	37,410	-5,656
2100	9,4E-05	1,168	66,471	6,2	14,354	18,322	2,463
2011	9,34E-05	0,952	55,294	5,6	12,549	12,257	3,228
2012	0,000103	1,375	55,060	5,7	12,412	15,127	-2,723
2013	0,000102	1,351	53,048	4,5	324,743	10,001	3,548
2014	0,000106	1,567	51,386	5,7		10,829	1,783
2015	7,12E-05	1,149	50,555			17,525	3,374
	GDP per capita growth (annual %)	General government fil consumption expenditure (% of GDP),	Gross capital formation (% of GDP)	Rural population (% of total population)	Time to export (days)	Trade (% of GDP)	
2006	8,431	26,991	25,444	37,62	14	128,470	
2007	10,505	20,121	33,805	37,44	14	131,092	
2008	6,733	22,624	40,671	37,261	14	133,478	
2009	-5,859	22,188	27,121	37,082	14	97,539	
2100	2,276	22,093	21,769	36,904	14	99,780	
2011	3,120	21,062	19,328	36,726	14	106,658	
2012	-2,805	21,094	20,585	36,543	14	111,766	
2013	3,447	19,476	19,606	36,357	14	102,771	
2014	1,685	19,372	20,221	36,168	14	100,127	
2015	3,278	17,601	20,511	35,974	14	104,354	

If we perceive Montenegro only, the table shows that the share of exports of plant products in total exports is extremely low. RCA varies from 0,729, what was 2006 to 1,149 in 2015, with minor fluctuations in the years within this period. When it comes to domestic credit of private sector, since 2008, when it stood at around 87% this number is in constant decline. Employment in agriculture is steadily declining, from 8.7% in 2007 to 4.4 in 2013, to be increased in 2014 to 5.7%. When it comes to fertilizer consumption (kilograms per hectare of arable land), since 2006, when it was 18,701, is in permanent decline, and in 2013 it grew up to 324.743. FDI were the highest in 2009, when it was amounted to 37.4% of GDP, and it decreased steadily until 2014, when it was 10.829%, and then increased to 17,525% of GDP. If we look at GDP growth (annual %) since 2007 when it stood at 10.657%, in 2009 and 2012, I had even negative (-5.656 and -2.723%), that in 2013 increase to 3,548 in 2014 and fell again to 1,783. When it comes rural population (% of total population), this figure is about the same in the observed period-about 36% and the time to export is always 14 days.

The following table shows the Ishare I rural for the period 2006-2015 for the Western Balkans.

Table 3: Ishare and Irural indicators for the period 2006-2015 for the Western Balkans

	1	2	3	4	5
	Ishare	Ishare	Ishare	Ishare	Ishare
Albania	0,000247	0,000224	0,000249	0,00031	0,000487
BiH	0,000519	0,000612	0,000735	0,000693	0,001037
Croatia	0,001616	0,001784	0,001829	0,001968	0,002366
Montenegro	0,000075	0,000082	0,0000937	0,000102	0,000088
Macedonia	0,001046	0,000938	0,00115	0,000943	0,001067
Serbia	0,006085	0,006478	0,008471	0,008094	0,009306
	1	2	3	4	5
	lrural	lrural	lrural	lrural	lrural
Albania	3,963505	3,92131	3,877328	3,831756	3,786278
BiH	4,124381	4,124356	4,122956	4,120142	4,115918
Croatia	3,790646	3,780376	3,76888	3,756153	3,742183
Montenegro	3,651437	3,642089	3,632706	3,623007	3,612835
Macedonia	3,777291	3,782188	3,784712	3,784871	3,782677
Serbia	3,830238	3,825713	3,823563	3,821223	3,817624

1-the average for 2006 and 2007

2-the average for 2008 and 2009

3-average in 2010-2011

4-average 2012-2013

5 average for 2014 and 2015

If we perceive Ishare of Albania, as the natural logarithm of the two-year average share plant products export, we can notice that the exports fell in the period 2008-2009 and after that grew during the whole period. On the other hand,

l rural as the natural logarithm of two-year average percentage of the population living in rural areas is in constant decline in the reporting period. When it comes to Bosnia and Herzegovina, lshare grew during the entire period, excluding the average of 2012-2013, a l rural has been in constant decline. If we take Croatia for an example, the share of exports of plant products has steadily increased, while the percentage of population living in rural areas was in steady decline. In Montenegro lshare was increasing steadily until the period 2014-2015, when it began to fall, while l rural was in steady decline. The situation is similar in Serbia, while in Macedonia the share of exports of plant products decreased in the period 2008-2009, while in the next period it grew, but then again, l began to fall. In the period 2014-2015 it grew again.

The result of this analysis, with the use of mentioned econometric model implies that if we increase the percentage of the population in rural areas to 1%, the export (plant products) of the country in total export will be reduced by 0.027%. If the increased use of fertilizers per hectare of cultivated land by 1% share of the country's exports will increase by 0.009%. Changes in variables l rural and lfertilizer explained 15.42% change in the share of exports of vegetable land.

In order to export, in our case, mentioned plant product, is adequate component for branding (according Anholt Brand Nation Index) and recognition of the nation and its better positioning in the minds of consumers. A special attention should not be paid to increase the number of inhabitants in rural areas, but the improvement of technology, knowledge and application of research which will be a function of the growth of exports of plant products in total exports. Special attention should be paid to the production of organic products because organic food buyers considered themselves more responsible for their own health and were more likely to undertake preventive health action than the general population.

However, taking into account the overall consumption of agricultural-food products in Montenegro, import of agricultural-food products had a more dynamic growth than export (Jovanović, M and Despotović, A., 2014). The situation in Montenegro is generally characterized by continuous lack of cooperation between food producers and tourism industry in particular, which could be improved at the level of the regulator (state) and producers (Jovanović, M., 2004). In this context, Anholt's hexagon with export, tourism, governance, investment, people and culture in synergy has a very great importance to branding and recognizable image of country.

CONCLUSIONS

Marketing and branding are directly associated with country branding targets customers. This is related to the position of a country in the world, and in the potential consumer's mind. As Kotler & Keller (2006) state, 'positioning' is the act of designing the company's offering and image to occupy a distinctive place in the mind of the target market. A country brand could be described as the

total sum of all perceptions about a country or the nation in the mind of international stakeholder (Fan 2006). In a more complex approach, country branding is influenced by the country image, reputation and positioning – if the case (Gilmore 2002), country branding being in some cases similar to corporate branding implying the usage of similar branding techniques.

Nation branding isn't the holy grail of economic development, but it can provide a distinct advantage when it is aligned with a well-defined economic strategy and supported by public policy. Countries around the world now started to realize that nation branding works as a catalyst for growth. In this context, a good image of the country can be very beneficial to affect the sales of products outside the national borders and the growth of export brands.

When it comes to herbal products, research results that indicate that if we increase the percentage of the population in rural areas to 1%, the export (plant products) of the country in total export will be reduced by 0.027%. If the increased use of fertilizers per hectare of cultivated land by 1% share of the country's exports will increase by 0.009%. In this context, it should take into account not only the percentage of people living in rural areas or the use of fertilizers per hectare of cultivated land, but also on investments in technology, knowledge and application of research, especially in the field of organic and healthy plant products that consumers offer added value, which multiplicative positively affect the recognition, exclusivity and reputation of the country.

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