

Oleksii Chugaiev\*

## NATIONAL ECONOMIC IMAGE AND SOFT ECONOMIC POWER EVALUATION

**Abstract:** The article provides a review of national economic image, brand, and soft economic power evaluation methods based on opinion polls or objective indicators. The author elaborates and tests a webometric method for evaluation of specific components of national economic image and soft power. National economic image is measured as the share of positive messages in total number of messages about economy of a country. Soft economic power is described as national economic image adjusted for absolute amount of positive economic information about a country. Various key words and expressions are used for web search query to analyze specific components of economic image (trade, inflation, finance, budget, quality, competitiveness, investment, business, corruption, corporate governance, wages, economic cooperation or conflicts, economic growth or crisis). The advantages and limitations of the suggested approach are discussed. The sample for testing the method includes Poland, Ukraine, Russia, Turkey, Romania, Germany, and Moldova. Germany and Poland have almost no major weaknesses, while Russia and Ukraine have almost no major strengths among economic image components. Germany is a soft power leader in the majority of areas, followed by Russia, Turkey and Poland. Ukraine, Romania, and Moldova can improve their image and soft power by better real economic performance and wider coverage of positive economic information about these countries.

**Keywords:** economic power; soft power; national image; webometric approach; economic information; economic performance.

### 1. INTRODUCTION

National economic power consists of hard and soft components. Hard economic power is based on objective real economy indicators (size of economy, economic growth etc.). Soft economic power of a country reflects what people inside the country and outside it think about its economic achievements, its economic influence, whether it follows economic inter-

---

\* Department of World Economy and International Economic Relations, Institute of International Relations, Taras Shevchenko National University of Kyiv, Ukraine, alxcv@ukr.net.

est of those people, and whether the people want to follow the country's agenda in economic policy and business practice. Soft power, image, and brand of a country are often treated as synonyms, but in our research we distinguish between them. E.g. even a small country can have a good image, but if there is little information about it and it's not well-known, its soft power is low. Intangibility and ambiguity of national image and soft power resulted in creation of various approaches to their estimation. Sometimes they are not cost efficient, sometimes they pay attention to only specific areas, sometimes they disregard the level of awareness about a country, or the range of the countries under consideration is too narrow. The aim of this paper is to elaborate a webometric approach to measuring specific components of national economic image and national soft economic power. We also use it to evaluate these characteristics of countries inside and nearby Central and Eastern Europe.

## 2. METHODOLOGY

### 2.1. REVIEW OF EXISTING METHODS

#### 2.1.1. OPINION SURVEY METHODS

Anholt-Gfk Roper Nation Brands Index (Growth from Knowledge, n.d.) is based on comprehensive nation brand survey for 50 countries. It considers 6 brand dimensions mostly in economic area:

- exports – consumer preferences based on the country of origin of goods and services;
- governance (political area);
- culture and heritage (including perceptions of audiovisual and other cultural industry products);
- people (including reputation of their competence);
- tourism (interest in visiting a country and tourist resources);
- investment and immigration (attractiveness of the residence, working, and study; quality of life and business climate).

Country Brand Index (FutureBrand, 2015) is measured by interviewing experts and frequently travelling persons for business or recreational purposes. They find out how well-known a country is what qualities it has; how high the respondents esteem a country; whether it is attractive for visiting, investment or buying its products; whether the country is recommended to family members, friends or colleagues. Associations with a country are divided into two groups: status and experience. The status indicators include:

- value system (non-economic indicators);
- quality of life: health and education, standards of living, attractiveness of living and studying there etc.;
- business potential: attractiveness for business, advanced technology, infrastructure development.

Experience indicators are:

- heritage and culture (natural, cultural and historical resources);
- tourism: value for money, range of attractions, resort and lodging options, desire to visit for a vacation, food;
- made in (reputation of country of origin): authenticity of products, high quality of products, product uniqueness, desire to buy products made in a country.

Reputation of a country of origin is also described in the “Made in” report (FutureBrand, n.d.). The FutureBrand company interviews consumers and experts to estimate the value of country’s brand and how it influences the value of products made in the country.

The Pew Research Center’s Global Attitudes Project (2015, August) carries out opinion polls in dozens of countries. The main drawback of their approach is incomplete and variable sample of countries across different years. They ask about current and future situation in a country, whether children would be better off financially than their parents, what is the world leading economic power, opinion on the world leading economic / political powers (the U.S., the EU, China, Russia), whether the leading powers consider the interests of the country of a respondents, attitude to the American style of doing business, American audiovisual industry, and American science and technology.

Eurobarometer surveys (European Commission, n.d.) use opinion polls in the EU Member States and the Candidate countries. Some of their results can help to evaluate the economic image (attitude to the EU, Economic and Monetary Union, economic problems in the EU, integration with other countries, main achievements of the EU, whether children would live a higher-quality life in the future, choice of country to visit). E.g. European Commission’s Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs & TNS Political & Social Network (2015) asked whether the respondents would stay for vocations in their countries and what countries they would choose for travelling abroad. We can say that the answers reflect tourism image of a country: in the first case after adjustment for income of tourists and size of a country, in the second case – for distance.

Whitney & Shambaugh (2009) published an opinion survey about 5 components of soft power in East Asia and the U.S. These subindices include:

- economic soft power (importance of economic relations, probability of buying product, desirability of establishing a free trade agreement, economic influence in Asia, help to countries for their economic development, humanitarian assistance, contribution of companies, competitive economy, economic opportunities for workforce, entrepreneurial spirit, leading multinational corporations, product quality);
- components related to economics: human capital soft power (desire to learn a language, highly educated population, advanced science and technology, quality universities) and cultural soft power (movies, TV, music; tourist destination etc.);
- non-economic dimensions: diplomatic soft power (including humanitarian assistance) and political soft power.

### 2.1.2. OBJECTIVE INDICATORS METHODS

Nye (2004) cited by Höhn (2011, p. 51) uses about 20 proxy variables mostly directly or indirectly related to economics to measure soft power in several areas:

- culture (book publications, export of films and TV programs, music sales, popular sports);
- education (foreign scholars, foreign university students, Nobel prizes, scientific and technical journal articles);
- global outreach (internet hosts, internet sales, multinational corporations with global brand recognition);
- health (life expectancy);

- foreign relations (overseas development assistance, public diplomacy);
- technology (high-tech exports, patents, research and development expenditures);
- travel & migration (air travel, foreign immigration, tourism).

Another project of S. Anholt (n.d.) – Good Country Index shows what countries contribute to the common good of humanity. The overall ranking is calculated considering 7 dimensions:

- science and technology: international students, journal exports, international publications, Nobel prizes, patents;
- culture: creative goods exports, creative services exports, UNESCO dues in arrears (-), freedom of movement (including visa restrictions), freedom of press;
- international peace and security (including dues in arrears to UN peacekeeping budgets (-), arms exports (-) etc.);
- world order (including charity giving);
- planet and climate: biocapacity reserves, hazardous wastes exports and various types of pollutant emissions;
- prosperity and equality: open trading, UN volunteers abroad, fairtrade market size, FDI outflows, development assistance;
- health and wellbeing: food aid, pharmaceutical exports, voluntary excess donations to the WHO, humanitarian aid donations, drug seizures.

Many indicators in the Good Country Index are measured relatively to the size of economy. Therefore the main leaders turned out to be small countries. Therefore it is more useful for measuring image than soft power.

Treverton & Jones (2005) divide softer power into the following categories:

- economic (measured by foreign aid, trade partners, trade volume etc.);
- ideational (university attendance by foreigners, members or adherents, contributions received, hits on websites etc.);
- cultural (where foreigners choose to live or work, content analysis of media etc.).

Cardoso, Guimarães & Zimmermann (2010) analyzed countries and regions of origin of economic research articles (published in 1991-2006) in the Econlit and Social Science Citation Index databases. We can say that the share of countries in economic research publications is an indicator of their soft economic power in terms of spreading one's own economic ideology and concepts across the world. But we must adjust for existence of local economic research publications. Thus their estimates of intellectual influence of leading countries in their research may be overestimated.

Höhn (2011, p. 51) noted that “not all hard power is by necessity material and all soft power by necessity spiritual”, which sometimes results in the use of same indicators in various indices of both hard and soft power.

## **2.2. SUGGESTED WEBOMETRIC METHOD**

In our paper we suggest and test the opportunities of our webometric method for measuring economic image and soft economic power of countries. We suppose that the number of expressions with positive enquiries ( $P$ ) may be compared with the number expressions with negative meaning ( $N$ ) in the sentences or paragraphs about the analyzed countries. The texts are provided by the internet search engine. Thus we use a brief automated content analysis of web information about countries by specifying the necessary expressions in the search query.

After we obtain  $P$  and  $N$  values for each component of national economic image, we calculate two indices for each country. The first one is the share of positive messages in the total number of search results:

$$EI = \frac{P}{P + N} \quad (1)$$

It reflects whether a specific aspect of economic image ( $EI$ ) is relatively positive or negative. If  $EI$  is close to 1, than the country is rather positively perceived. If it's close to 0 than it is rather negatively perceived.

The second index is the abovementioned share  $EI$  adjusted by the number of positive results. We call it soft economic power subindex ( $SEP$ ) as it is calculated for each soft economic power component:

$$SEP = P \cdot \frac{P}{P + N} \quad (2)$$

By this subindex we also consider the availability of information about a country. Considering such indices for particular image / soft power component can be useful for evaluation of national soft economic power and its structure. We suppose that a country have a substantial soft economic power if both its economy is positively perceived and there is a lot of information about its economy. So larger economies would tend to have more soft economic power than smaller ones because usually there is more information about large economies on the Internet.

We measure  $P$  and  $N$  values as the number of non-similar web pages obtained by making the relevant search query on a specified date. Thus both current and previously published information is considered. It is logical because an image is a product of both current and past events – thus e.g. a currently successful country with failures in the past would not have a perfect image. But since each day more and more information is published online, the later information is automatically given more weight than the past information, which is useful for our understanding of national image.

We form a search query in such a way that it usually includes three words:

- a word specifying a component of image (e.g. “inflation”);
- a word denoting positive or negative meaning (e.g. “low” or “high”);
- name of a country (e.g. “Poland”).

E.g. we measure the number of positive search results about inflation in Ukraine by specifying search query in the Google (n.d.) search engine as “low inflation \* \* Ukraine”. Double \* sign guarantee that the expression “low inflation” and word “Ukraine” are closely located (in one sentence or adjacent sentences). In most cases they are separated by two words. Thus the web pages we find usually describe inflation in Ukraine as low. But we must admit that in some cases the search results can be mistakenly classified as positive information – when:

- in reality the information is about the necessity to improve economic situation (e.g. it is necessary to achieve low inflation next year in Ukraine);

- in reality the information compares the situation in another country vis-à-vis the mentioned country (e.g. trade deficit in Turkey with Germany) – therefore we avoided using expressions such as “trade deficit” where this risk is especially high.

Therefore the results should be treated with caution and our method must not be used as the only method to make ultimate conclusions about the image. There are other drawbacks that require caution in interpreting results.

There is a high risk that the search engine artificially decreases the number of found web-pages if it shows that their number exceeds 300. Therefore we try to avoid using expressions in a search query which result in  $P$  or  $N$  more than 300 (e.g. high-tech). But sometimes it is unavoidable for 1 or 2 bigger countries in our sample. Therefore we should remember that  $EI$  and  $SEP$  indices are sometimes measured in a ordinal scale and not in a metric scale. When  $P$  or  $N$  were more than 300 for a larger number of countries, we either excluded the expressions or words from our further analysis (e.g. development) or used queries without \* \* signs (“economic growth in …”, “economic crisis in …”, “economic recession in …”).

We also excluded words which could:

- not be easily classified as positive or negative without knowing the context in details (e.g. wealth, counterfeiting, made in, costs);
- be easily used outside economic area or the necessary area in economics (e.g. company, revaluation, goods);
- provide too little number of search results (e.g. migration, exports).

Another problem is imperfect selection of non-similar web-pages by the search engine. Sometimes we observe similar text in a number of web pages within the list of search results. So the multiple counting sometimes happens. Despite using the option “search for pages in all countries” in the search engine, we also cannot say anything about whether redirecting affected our results or not.

There can also be a distortion effect of expectations. For example, in a low inflation economy (e.g. 2%) even moderate increase in prices (5%) can be interpreted as high inflation – an interesting news worth publishing, while in a traditionally high inflation economy (e.g. 12%) a 6% inflation would be considered as low.

Despite the risks of distortion effects, in many cases we expect to obtain useful results which reflect the true situation about the national economic image. We use a sample of 7 countries. 5 countries (Poland, Ukraine, Russia, Turkey, and Romania) are the most populated countries in Central and Eastern Europe. And we added 2 countries for comparison (Germany as a big advanced economy located nearby and Moldova as a small developing economy in the region).

### **3. RESULTS AND DISCUSSION**

#### **3.1. RESULTS BY ECONOMIC AREAS**

In the table 1 we show our results for a number of economic image components (absolute number of positive messages  $P$ , absolute number of negative messages  $N$ , economic image subindices  $EI$ , and soft economic power subindices  $SEP$ ) using the Google search results data on November 8-9, 2015.

Table 1. Indicators of national economic image and soft economic power components

<b>Key words</b>	<b>Indicator</b>	<b>Poland</b>	<b>Ukraine</b>	<b>Russia</b>	<b>Turkey</b>	<b>Romania</b>	<b>Germany</b>	<b>Moldova</b>
Trade: P = good N = bad (0.025)	P	15	16	121	29	8	62	1
	N	1	2	14	7	0	5	2
	P/(P+N)	0.94	0.89	0.90	0.81	1.00	0.93	0.33
	P.P/ (P+N)	14.1	14.2	108.5	23.4	8.0	57.4	0.3
Inflation: P = low N = high (0.000)	P	29	37	56	35	17	220	3
	N	64	60	189	234	46	167	14
	P/(P+N)	0.31	0.38	0.23	0.13	0.27	0.57	0.18
	P.P/ (P+N)	9.0	14.1	12.8	4.6	4.6	125.1	0.5
Financial: P = good N = bad (0.000)	P	14	20	9	4	2	62	2
	N	8	3	11	1	7	13	4
	P/(P+N)	0.64	0.87	0.45	0.80	0.22	0.83	0.33
	P.P/ (P+N)	8.9	17.4	4.1	3.2	0.4	51.3	0.7
Budget: P = surplus N = deficit (0.000)	P	13	13	55	33	25	130	4
	N	97	121	178	154	137	265	20
	P/(P+N)	0.12	0.10	0.24	0.18	0.15	0.33	0.17
	P.P/ (P+N)	1.5	1.3	13.0	5.8	3.9	42.8	0.7
Quality: P = good N = low (0.000)	P	188	137	196	276	138	294	22
	N	71	84	216	171	48	180	13
	P/(P+N)	0.73	0.62	0.48	0.62	0.74	0.62	0.63
	P.P/ (P+N)	136.5	84.9	93.2	170.4	102.4	182.4	13.8
Competitive: P = highly N = un- (0.001)	P	54	49	122	91	33	227	4
	N	19	40	70	22	12	140	3
	P/(P+N)	0.74	0.55	0.64	0.81	0.73	0.62	0.57
	P.P/ (P+N)	39.9	27.0	77.5	73.3	24.2	140.4	2.3
Investment: P=good N=bad (0.005)	P	32	26	72	109	17	61	9
	N	3	4	16	3	0	5	0
	P/(P+N)	0.91	0.87	0.82	0.97	1.00	0.92	1.00
	P.P/ (P+N)	29.3	22.5	58.9	106.1	17.0	56.4	9.0

Continue table 1

Key words	Indicator	Poland	Ukraine	Russia	Turkey	Romania	Germany	Moldova
Business: P = good N = bad (0.140)	P	53	63	232	88	28	212	10
	N	9	14	76	26	5	41	1
	P/(P+N)	0.85	0.82	0.75	0.77	0.85	0.84	0.91
	P.P/ (P+N)	45.3	51.5	174.8	67.9	23.8	177.6	9.1
Corruption: P = low N = high (0.000)	P	3	6	17	9	4	14	3
	N	15	33	80	27	51	5	17
	P/(P+N)	0.17	0.15	0.18	0.25	0.07	0.74	0.15
	P.P/ (P+N)	0.5	0.9	3.0	2.3	0.3	10.3	0.5
Corporate: P = good N = weak (0.005)	P	24	24	51	27	4	42	2
	N	0	10	5	2	2	4	1
	P/(P+N)	1.00	0.71	0.91	0.93	0.67	0.91	0.67
	P.P/ (P+N)	24.0	16.9	46.4	25.1	2.7	38.3	1.3
Wages: P = high N = low (0.000)	P	8	3	9	8	2	108	1
	N	62	41	64	27	49	122	11
	P/(P+N)	0.11	0.07	0.12	0.23	0.04	0.47	0.08
	P.P/ (P+N)	0.9	0.2	1.1	1.8	0.1	50.7	0.1
Cooperation vs. conflicts: P = economic cooperation N = economic war, trade dispute, econo- mic sanctions (0.000)	P	300	207	351	362	180	334	87
	N	132	461	701	220	28	437	56
	P/(P+N)	0.69	0.31	0.33	0.62	0.87	0.43	0.61
	P.P/ (P+N)	208.3	64.1	117.1	225.2	155.8	144.7	52.9
Development vs. crisis: P = economic growth in N = economic crisis in, reces- sion in (0.000)	P	300	283	324	279	190	329	80
	N	267	437	688	363	286	620	69
	P/(P+N)	0.53	0.39	0.32	0.43	0.40	0.35	0.54
	P.P/ (P+N)	158.7	111.2	103.7	121.2	75.8	114.1	43.0

Note: in parentheses in the left column we include p-level according to  $\chi^2$ -test for difference between the observed and expected values of  $P$  and  $N$  in all the 7 countries. If p-level < 0.05, we conclude that at least in some countries  $EI$  significantly differs from the rest of the sample.

Source: author's calculations based on search results in Google (n.d.).

The key word “trade” often stands for trade relations. Nominally Romania has the best image in this area ( $EI = 1$ ), while Moldova has the worst ( $EI = 0.33$ ). But the  $P$  and  $N$  values in these cases are too small to consider their  $EI$  value to be reliable. As for the rest of the countries the  $EI$  is almost equal and is close to 1. There are too few negative messages for this image component relatively to positive information. But soft trade power of Russia turned out to be the highest ( $SEP = 108.5$ ) with Germany being the second best performer. Turkey took the 3<sup>rd</sup> place, Poland and Ukraine shared the 4<sup>th</sup> and the 5<sup>th</sup> places. It is no surprise that Moldova as a small economy has the smallest soft economic power by trade criterion in the sample.

Technically the results for inflation are much more reliable, considering sufficiently big  $P$  and  $N$  values, which at the same time are smaller than 300 for all the countries in our sample. As for inflation, we observe more negative information (high inflation) than positive one (low inflation). Germany is an exception. It outperformed all the other countries. Still a big number of high inflation messages for Germany (167) is explained by famous hyperinflation after the World War I. Turkey has the worst inflation image with low inflation messages being almost 8 times less frequent than high inflation messages. Logically Germany has the biggest soft economic power by inflation – it's often considered to be a classical example of modern big low inflation economy. Despite hyperinflation in 1990s Ukraine turned out to be the second, but with a large gap.

Germany, Turkey, and – despite the recent financial crisis – Ukraine have the highest ranks by financial criterion. The result for Turkey is not reliable because the search yielded too few web pages. In case of Ukraine the expression “good financial news” is the most frequently used in the set of positive messages. The worst relatively reliable data for financial image component is in case of Russia (too little search results for Moldova). Again Germany has the biggest financial soft power.

Technically information about government budget seems to be reliable considering the number of search results. Germany has the best image by government budget balance, followed by Russia, Turkey, and Moldova. By soft budget power Germany substantially outperforms the 2<sup>nd</sup> ranked Russia and 3<sup>rd</sup> ranked Turkey.

In the search query about the quality we do not use the word “high” (it results in about 300 web-pages found for any country, except Moldova) and “bad” (it provides much less web-pages than “low”). Thus we find using expressions “good quality” and “low quality” to be more efficient. Still the results can be biased because in some cases the text is about advertising or complaining about imported goods in the analyzed country. Romania and Poland show the best quality image results while Russia is the worst performer. The average image of Germany can be underrated because  $P$  approaches 300 in this case. Still Germany has the largest soft quality power, followed by Turkey and Poland.

Turkey, Poland, and Romania have the best image in terms of competitiveness: the ratio of “highly competitive” to “uncompetitive” search results is the highest there. Ukraine and Moldova have the worst image. But in Moldova there is too little search results to consider the ratio to be reliable. But if we consider the overall web presence, it turns out that Germany ranks the 1<sup>st</sup>, followed by Russia and Turkey.

Search results for “investment” seem to be affected by PR activities because  $P$  is much bigger than  $N$  in every country. Romania, Moldova, and Turkey turned out to have the best investment image while Russia and Ukraine have the worst one. But by soft investment power the most influential is Turkey, followed by Russia and Germany.

The word “business” is often used in such expressions as “good business opportunities”, “good business relations” or “bad for business”. The results for this key word also seem to be affected by PR activity. There is no obvious leader image leader in this area (the  $X^2$ -test does not support the idea that any country has a significantly higher or lower  $EI$  value), but Russia and Turkey are slightly behind the other countries. As for the soft business power, Germany and Russia are the most powerful.

In most countries corruption image seem to be rather a liability than an asset. Germany is an obvious exception: positive messages are almost 3 times more frequent than negative messages. Turkey is only slightly better than other countries in the Central and Eastern Europe. Romania turned out to have the lowest rank. Again Germany has much more (anti-) corruption soft power than other countries in the sample. The 2<sup>nd</sup> and the 3<sup>rd</sup> ranked countries (Russia and Turkey) substantially lag behind Germany.

The key word “corporate” is usually mentioned in the expression “corporate governance”. Poland is the leader by this aspect of economic image. The lowest ranks of Romania and Moldova are not reliable. Ukraine has almost the worst image by this criterion. As for the soft corporate (governance) power, Russia and Germany turned out to be the leaders, followed by Turkey and Poland.

“Wages” is the word much more associated with complaints about low wages than boasting of high wages. At least it can be interpreted that way by workers and the general public (but low wages is more an asset than a liability for investors). Germany is an exception – positive and negative information is almost equally associated with Germany. In any case, Germany has the best rank by wages image. Turkey is the 2<sup>nd</sup> but its indicators are closer to the rest of the countries than to Germany. Romania, Ukraine, and Moldova seem to have the worst wages image. Obviously Germany was much more wages soft power than the rest of the countries in our sample.

Within the criterion “Cooperation vs. conflicts” we compare positive information associated with a country’s economic relations (“economic cooperation”) and negative information (“economic war”, “trade war”, “economic sanctions”).  $P$  for “economic cooperation” is close to 300 in many cases, therefore a distortion effect may take place, especially in Poland, Russia, Germany, and Turkey. They may be underrated in terms of cooperation links. But we could not find better expression to denote positive information in this area, and adding results for “trade” does not much change our results. Negative information associations are considered here regardless of whether a country is an initiator of economic war, dispute or sanctions or a target country. Thus we consider whether a country is involved in the disputes, sanctions etc. regardless its role.

Romania has the best image as a country which is not involved in economic conflicts. It is closely followed by Poland, Turkey, and Moldova. Germany is on the 5<sup>th</sup> place because of discussion of sanctions against Russia and historical burden of events before and during the World War II. Russia and Ukraine have the worst image, which is not a surprise, considering hard approach of Russia towards Ukraine and related sanctions. As for soft economic cooperation power, Turkey seems to be the most powerful, closely followed by Poland. Romania and Germany take the 3<sup>rd</sup> and the 4<sup>th</sup> places. Then Russia outperforms Ukraine and Moldova by soft economic cooperation power because its image drawbacks are compensated by wider spread of information about its cooperation links.

The final criterion is about whether a country has a reputation of fast growing economy or a crisis-prone economy. Moldova and Poland have the best image of successfully growing

economies. Turkey and Romania take the 3<sup>rd</sup> and 4<sup>th</sup> place with a significant gap. Ukraine and Germany have the economic growth image below average, while Russia has the worst image indicator. As for the soft economic growth power, Poland is the best performer, followed by other countries with a substantial gap. Thus we can say, that Poland would come to mind first when one is asked to give an example of a fast growing economy in Central and Eastern Europe. It is followed by Turkey, Germany, Ukraine, and Russia. Moldova and Romania drop behind because of lesser web presence of information about their economic development.

### 3.2. COUNTRY PROFILES

As we see, economic image and soft economic power are multidimensional phenomena. A country can be successful by one criterion, and rank low by other one. In table 2 we describe country profiles by economic image components according to the information on the Internet.

Table 2. Strong and weak components of economic image

Country	Major strengths	Minor strengths	Minor weaknesses	Major weaknesses
Poland	quality, economic growth, corporate	trade*, business, competitive, economic cooperation	wages, corruption*	budget
Ukraine	financial	inflation	investment, business, corruption	budget, competitive, corporate, wages, economic conflicts
Russia		budget, corporate,	inflation, financial, competitive, corruption, wages	quality, investment, business, economic conflicts, economic crisis
Turkey	competitive, investment	corruption, corporate, wages, economic cooperation	trade, budget	inflation, business
Romania	trade*, quality, investment*, cooperation	competitive, business	budget	financial*, corruption, wages
Germany	inflation, financial, budget, corruption*, wages	trade, business, corporate	competitive, economic conflicts	economic crisis
Moldova	investment*, business*, economic growth	economic cooperation	budget, corruption	trade, inflation*, competitive*, wages*

Note: \* marks results when  $8 \leq P+N < 20$  (low reliability of data). We do not show the results if  $P+N < 8$  (data is not reliable).

Source: author's evaluation based on search results in Google (n.d.).

If we consider soft economic power estimates, Poland ranks high in economic growth and economic cooperation, and has moderately large power in quality and corporate area. But it has very low soft budget power. Ukraine has only average soft power by inflation, financial area, and economic growth, and has very low power in budget, wages, and economic cooperation area. Despite drawbacks in image, a big economy of Russia has a large soft economic power in trade, business, and corporate area, but has rather low soft financial and quality power. Turkey has a large soft investment and economic cooperation power, moderately large soft power by economic growth and quality. But it has low soft power by inflation and financial area. Romania has only an average economic cooperation and quality power, and low soft power in the rest of the areas. Germany has very large soft power in most of the areas: inflation, financial area, government budget, quality, competitiveness, business, and wages. In the rest of the areas it is either moderately high (corporate, trade) or average (economic growth, investment, economic cooperation). Moldova has very low soft economic power in all areas, which is normal for a small economy. But still it managed to slightly outperform Romania in financial area and wages and closely approach a few other countries by budget, investment, and economic cooperation criteria.

## 4. CONCLUSION

In this study we distinguish between economic image and soft economic power. Most of the previously existing methods of their measurement use either public opinion polls or objective statistical indicators. Instead we suggest a cost efficient and simple method based on webometric approach. The method has a number of drawbacks, which sometimes lead to counterintuitive results, which do not match objective indicators in a country. But subject to caution in interpreting results, it can be efficiently used both for evaluation of national economic image and soft economic power by various criteria. Especially it may be complementary to other methods in the area of powermetrics.

According to our results, Germany and Poland have almost no major weaknesses, while Russia and Ukraine have almost no major strengths among economic image components. Germany is a soft power leader in the majority of areas within our sample, followed by Russia, Turkey and Poland. Therefore we consider that all these four countries are soft economic power centers in the region. Ukraine, Romania, and Moldova still may improve their image especially by better real economic performance while better dissemination of positive economic information about these countries can help to increase their soft economic power.

## REFERENCES

- Anholt S. (n.d.). *The Good Country Index*. Retrieved November 13, 2015, from [http://www.goodcountry.org/index\\_intro](http://www.goodcountry.org/index_intro)
- Cardoso A. R., Guimarães P., & Zimmermann K. F. (2010). Trends in Economic Research: An International Perspective: *IZA Discussion Paper*, 4785. Bonn: Institute for the Study of Labor. Retrieved November 13, 2015, from <http://ftp.iza.org/dp4785.pdf>

- European Commission. (n.d.). *Eurobarometer Surveys*. Retrieved November 05, 2015, from [http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm)
- European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, & TNS Political & Social Network. (2015). Preferences of Europeans towards Tourism: *Flash Eurobarometer Report*, 414. Retrieved August 21, 2015, from <http://dx.doi.org/10.2873/632880>
- FutureBrand. (n.d.). *Made in. The Value of Country of Origin for Future Brands*. Retrieved November 05, 2015, from [http://www.futurebrand.com/images/uploads/studies/cbi/MADE\\_IN\\_Final\\_HR.pdf](http://www.futurebrand.com/images/uploads/studies/cbi/MADE_IN_Final_HR.pdf)
- FutureBrand. (2015). *Country Brand Index 2014-2015*. Retrieved November 05, 2015, from <http://www.mumbrella.asia/content/uploads/2014/11/CountryBrandIndex2014.pdf>
- Google. (n.d.). *Google Ukraine*. Retrieved November 08-09, 2015, from <https://www.google.com.ua>
- Growth from Knowledge. (n.d.). *Place Branding Research*. Retrieved November 13, 2015, from <https://www.gfk.com/Documents/GfK-Place-Branding.pdf>
- Höhn K. H. (2011). *Geopolitics and the Measurement of National Power*: Dissertation zur Erlangung des Doktorgrades an der Fakultät Wirtschafts- und Sozialwissenschaften, Fachbereich Sozialwissenschaften der Universität Hamburg. Hamburg: Universität Hamburg. Retrieved February 06, 2015, from <http://ediss.sub.uni-hamburg.de/volltexte/2014/6550/pdf/Dissertation.pdf>
- Nye J. S. (2004). *Soft Power: The Means to Success in World Politics*. New York: Public Affairs.
- The Pew Research Center's Global Attitudes Project. (2015, August). *Global Indicators Database*. Retrieved November 13, 2015, from <http://www.pewglobal.org/database/>
- Treverton G. F., & Jones S. G. (2005). *Measuring National Power*. Santa Monica, CA; Arlington, VA; Pittsburgh, PA: RAND Corporation. National Security Research Division. Retrieved November 13, 2015, from [http://www.rand.org/pubs/conf\\_proceedings/2005/RAND\\_CF215.pdf](http://www.rand.org/pubs/conf_proceedings/2005/RAND_CF215.pdf)
- Whitney C. B., & Shambaugh D. (2009). *Soft Power in Asia: Results of a 2008 Multinational Survey of Public Opinion*. Chicago: The Chicago Council on Global Affairs.