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COUNTRY'S GREEN BRAND: THE MAIN GAPS IN THE SCIENTIFIC TREATISES

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Abstract
Forming a strong brand is essential for national development. The country's brand gives the direction for its long-term economic growth, contributes to increment in assets value and the competitive advantages, attracts more investments, tourists, etc. In the view of growing concern on climate change, environmental protection issues boost its influence on worldwide decision-making processes. In turn, the scientific community has more decisive in their statement to create a unique and robust country's brand considering the green perspectives. However, the literature review results showed that the scholars investigate the green branding, mainly on the product or corporate level. Therefore, this study aims to assess how well the existing literature on country branding is explored from the perspective of green development. The research questions are as follows: 1) What are the main research directions in the scientific literature concerning the country's green branding? 2) How far has the country's green brand been investigated? 3) What research gap should be covered in the future? This study operated with the scientific documents published in the highly ranked scientific journals indexed in the Scopus database to answer the research questions. The study period covered 2000-2022 (until April 2022). The search for relevant publications was run by the keyword combinations "green brand", "country brand", and "nation brand" in the documents' titles, keywords, and abstracts. The boolean operator' OR' was used to include the papers specified at least with one keyword. The obtained results revealed 545 papers on the investigated topic (225 publications on green branding and 320 publications on country/nation branding). In the frame of investigation, the authors applied Scopus analytical tools to detect the publication dynamic of a designed sample of documents, identify the most engaged authors, and assess the contributions of the affiliations and countries. To build the networks of scientific collaboration worldwide and detect the main research streams in studies on country/nation green brands, the authors used the method of the low-dimensional visualization. This study selected the keywords with the greatest total link strengths based on the calculation of the total link strengths of the co-occurrence's links with other keywords. The counting method was full counting. The findings of bibliometric analysis confirmed that the studies on green branding mainly address the corporate level. The green brand concept is investigated mostly regarding green brand attachment, green brand attitude, green brand image, green brand love, green brand trust, green loyalty, green satisfaction, green perceived risks, value, and environmental sustainability. Therefore, it indicates the necessity to expand research on the national level. The main limitation of this study is operating with publications retrieved only from the Scopus database. However, the findings could be value-added for scholars investigating the country's green brand issues. The authors consider the obtained results to be a starting point for designing the country's green brand model and its assessment in the future.
KEYWORDS: assessment; bibliometric analysis; brand models; green competitiveness; green brand; sustainability.

Introduction

Nowadays, country branding is considered to be an effective marketing tool to increase the competitive advantages and development prospects of a particular country on the global market. It strengthens the country's reputation, protects its national interest, builds a strong international relationship, attracts more investments, tourists, competent labor forces, etc. It is worth mentioning that the country's brand mostly depends on the political, economic, and social pillars. However, the rapid adverse climate changes require society to be aware of environmental protection. This issue is sensitive for many developed and developing countries. The high burden of environmental pressure gains power in today's context worldwide.

Dealing with the mentioned problem requires the governments to take decisive actions to improve the economic effectiveness without additional environmental pressure. The pride of place goes to energy efficiency, environmental friendliness, sustainability, circularity, etc. (Us et al. 2020). Therefore, the above-mentioned provokes the popularity of the green branding concept. It stands to note that each country has its own green branding strategy, which depends on its location, country size, industrial development, economic performance, etc. (Chygryn et al. 2021). Therefore, the scientific literature addresses more the issues of designing the country' green brand and identifying its main determinants.

Theoretical background

The economic crisis and climate changes are on the global agenda. These issues are inseparably associated and impact the life quality of the current and future generations. Indeed, providing economic growth without environmental damage requires new forms of cooperation between government, business, and society (Kubatko et al. 2021; Letunovska et al. 2020). Therefore, the academic communities sound a particular alarm about the necessity to develop the country's green brand from a perspective of sustainable development (Tovmasyan 2022; Huseynov et al. 2021; Veckalne and Tambovceva 2021; Brych et al. 2021; Cabelkova et al. 2021; Lyulyov et al. 2019; Bilan and Pimonenko 2020).

It stands to mention that the systematization of scientific literature showed that country's green brand models are hardly investigated in the studies. Thus, the scholars mostly analyzed the general country brand models while the environmental issues remain hardly uninvolved.

With reference to the literature on country brands, Fetscherin (2010) proposed to assess the country's brand strength based on the analysis of product and service export, tourism attractiveness, immigration, and governmental environment. The scholar noted that proper assessment of the country's brand strength detects the country's position in the international market and increases its competitive advantages. However, Fetscherin's country brand index doesn't include the environmental determinants and the country's progress towards sustainable development.

Further, Buhmann and Ingenhoff (2015) designed the 4D Model to measure the country's image based on the national attitude, identity theories, and reputational management. In this line, it stands to mention the study by Anholt (2005). The scholar developed the Anholt Nation Brands Index, which is built on the people's perception of the nation's competencies regarding government policy, human capital, exports, tourism, culture and heritage, and business attractiveness (investment and immigration). Further, Kalamova and Kai (2010) emphasized the nation's brand has an enormous impact on the investors' decisions. Having applied the methodology by Anholt Nation Brands Index, the scholars confirmed that the countries with higher nation brand index attract higher incoming investment flows.

Salmones et al. (2022) proved that the country's micro image concerning the specific products depends on its macro image formed by the political situation, cultural specifics, technological development, emotional aspects, etc.

In turn, Mariutti and Mariutti (2019) proposed to measure the country brand equity using the classical country brand model (country brand awareness, perceived quality, and loyalty) but including the country brand reputation dimension. In the other study, Mariutti and Giraldi (2020) developed the multidimensional country brand equity framework. The scholars emphasized the importance of developing the country's brand reputation, image, and associations, increasing country brand awareness, loyalty, perceived quality, and promoting channel relationships. Besides, there are more studies that considered the country's brand reputation as one of the country's brand model dimensions (Revilla-Camacho et al. 2022; Vasquez 2021; Cubillo-Pinilla et al. 2017; Foroudi et al. 2016).

On the other hand, there is a large stream of literature devoted to investigating the green brands on the corporate level (Starchenko et al. 2021; Chygryn and Pimonenko 2014). Zameer et al. (2019) proved that the development of green image, green creativity, and green production contribute to the growth of competitive advantages. Noteworthy here, the scholars emphasized that customer pressure is one of the crucial drivers of galvanizing green initiatives among decision-makers. Konuk et al. (2015) applied the structural equation modeling to confirm that consumers' green behavioral intentions help companies achieve green competitive advantages in a global marketplace.

Insch (2011) examined the concept of a green destination brand to detect the possibilities of adopting it at the national level. The findings highlighted the importance of avoiding greenwashing, criticism, and cynicism in designing the marketing strategy of the green nation brand.

Tapia-Ubeda et al. (2021) presented a novel framework for assessing sustainability in industries. The authors identified the critical aspects in economic, social, and environmental spheres which should be improved to green the macro-productive processes.

It is worth mentioning that an international country's ratings influence the country's brand strategy, practices, and standards on a global scale. In this line, it is appropriate to mention the Environmental Performance Index by Yale University (EPI 2022), Sustainability Index by Foundation Eni Enrico Mattei (EVI 2022), Environmental Vulnerability Index by South Pacific Applied Geoscience Commission (FEEM 2022), etc.

The systematization of scientific treatises demonstrates the scholars' interests in green branding, mainly concerning the products or corporates. In turn, it has yet been a little applied to the context of the country brand. Therefore, this paper aims to assess how well the existing literature on country branding is explored from the perspective of green development.

Therefore, based on the study goal, the research questions are as follows:

RQ1: What are the main research directions in the scientific literature concerning the country's green branding?

RQ2: How far has the country's green brand been investigated?

RQ3: What research gap should be covered in the future?

Methodology

This study operates with the scientific documents published in the highly ranked scientific journals. As of April 1, 2022, a literature search was conducted in the largest international scientometric Scopus database. The study period covers 2000-2022 (until April 2022). The search for relevant publications was run by the keyword combinations "green brand", "country brand", and "nation brand" in the documents' titles, keywords, and abstracts. The boolean operator' OR' was used to include the papers specified at least with county brand or nation branding. Therefore, the search results revealed 225 publications on green branding and 320 publications on country/nation branding.

This study used Scopus analytical tools to detect the publication dynamic of a designed sample of documents, identify the most engaged authors, and assess the contributions of the affiliations and countries.

Moreover, the method of visualization of similarities was applied to build the networks indicating the collaborations between scholars worldwide. Besides, it allowed detection of the main research streams in studies on country/nation green brands based on the low-dimensional visualization.

Noteworthy here, the co-authorship analysis by countries was used to build the network of scholars' collaboration worldwide. The counting method is full counting. Besides, this study ignored the publications that are co-authored by many countries. Thus, the maximum number of countries per document was ten. In turn, the

minimum number of documents per country was five. Therefore, 37 out of 77 met the above thresholds.

On the other hand, co-occurrence analysis was applied to design the network map of keywords' co-occurrences. The counting method is full counting. The minimum number of keywords occurrences was five. Then, the total link strengths of the co-occurrences links with other keywords were calculated to select the keywords with the greatest total link strengths. Thus, 104 keywords out of 2393 met the above threshold.

Results

At the first stage of this study, it is appropriate to consider the publication activity on the investigated topic. Fig. 1 compares the number of scientific papers addressing the green brand and country/nation brand in the Scopus database published from 2010 to 2022 (as of April 2022). According to the statistical data, the number of publications on country/nation brands exceeds the one on the green brand by 1.4 times. However, it stands to note that since 2021 scholars have more focused on the green brands. Furthermore, for Q1 2022, the topic of the green brand has been more popular among scientists worldwide.

Therefore, based on the findings above, it could be hypothesized that the main trigger of scientific interest in green branding could be the pandemic crisis (COVID-19). Indeed, some scientists highlight that the post-pandemic economic recovery should rely on the green deal policy (Pimonenko et al. 2021).

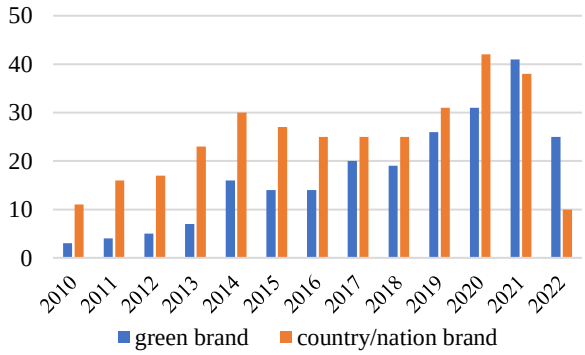

Fig. 1. The dynamic of publication activity

Source: developed by authors based on the Scopus data.

In the next stage, this study unveils the scientific collaboration between scientists worldwide. Figure 2 visualizes four clusters of collaboration between the researchers from different countries. The first cluster (red) consists of 13 countries. The tightest collaboration is noticed among the scientists from the United States, Asian countries (China, Hong Kong, India, Indonesia, Malaysia, Pakistan, Taiwan, Thailand, and South Korea), Canada, Sweden, and Portugal.

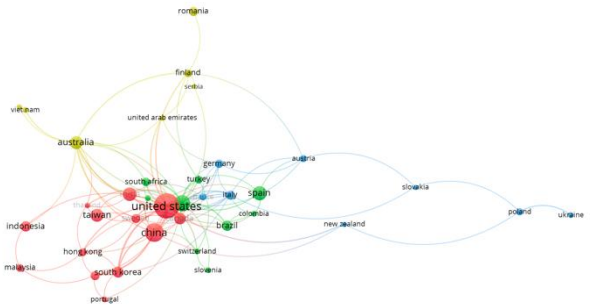

Fig. 2. The network of worldwide scientific collaboration

Source: developed by authors using VOSviewer software tools.

The second cluster (green) links 9 countries such as Brazil, Colombia, Ghana, Slovenia, South Africa, Spain, Switzerland, Turkey, and United Kingdom.

The third cluster (blue) shows the collaboration between the scientists from EU countries (Austria, France, Germany, Italy, Poland, Slovakia), Ukraine, and New Zealand. At last, the fourth (yellow) cluster shows the connection between the scholars from Australia, Finland, Greece, Romania, Serbia, UAE, and Vietnam.

Noteworthy here, the most productive researchers were from the United States. They have published 114 documents. Besides, these works were cited by 2467 times. Therefore, the above suggests that the United States is the pure leader in researching the country's green brand. In turn, the second place is occupied by researchers from China. They published 64 papers that were cited by 484 times. Even though the Chinese researchers published more studies, 47 papers by scientists from the United Kingdom were cited 3.7 times more (1780 citations). Herewith, the Spanish scientists published 37 documents (cited by 686 times), while Indian researchers published 33 documents that were cited by 1323 times.

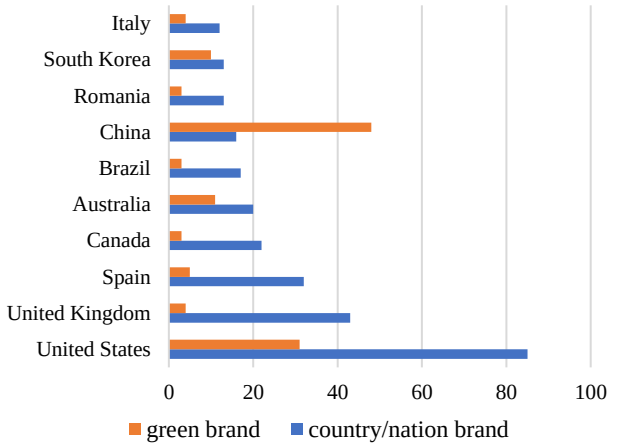

Fig. 3. TOP-10 countries in researching country/nation brand and green brand

Source: developed by authors based on the Scopus data.

Fig. 3 shows that American scholars were most productive in country/nation brand issues (85 documents), while Chinese scholars were in green brands (48

documents). Therefore, according to the above, it could be stated that the Chinese scholars are most interested in green brand investigations. In turn, the United Kingdom scientists published 43 documents on the country/nation brand research and only 4 – on green brand, Spanish scientists – 32 and 5, Canadian – 22 and 3 documents, Australian – 20 and 11 documents, Brazilian – 17 and 3, Romanian – 13 and 3 documents, South Korean – 13 and 10 documents, and Italian – 12 and 4 documents, respectively.

In this case, it is appropriate to specify the researchers who could be considered the most engaged in the green brand investigation. Therefore, the first place in rank is occupied by Yushan Chen (h-index: 32) from the National Taipei University in Taipei (Taiwan) published 7 articles addressing green branding (the total number of publications is 75). In the second place is Ruo Gui (h-index: 5) from the China University of Geosciences in Wuhan (China) devoted 6 articles to the investigated topic (the total number of publications is 21).

To detect the most influential affiliations in developing the investigated topic, this study analyzed the number of documents published by affiliations. Table 1 shows that the country/nation brand was investigated mainly by Universidade de São Paulo scholars in Brazil (15 papers).

Table 1. TOP-10 most engaged affiliations in country/nation brand investigation (2000-2022)

№	Affiliation	Country	No. of publications
1	Universidade de São Paulo	Brazil	15
2	Carleton University	Canada	8
3	Sprott School of Business		7
4	Brunel University London	United Kingdom	6
5	Cape Peninsula University of Technology	South Africa	5
6	Hankuk University of Foreign Studies		5
7	Bournemouth University	United Kingdom	5
8	Univerza v Ljubljani	Slovenia	5
9	Brunel Business School	United Kingdom	5
10	University of California, Irvine	United States	4

Source: developed by authors based on the Scopus data.

On the other hand, Table 2 shows that the most productive researchers in green branding were from the China University of Geosciences (China) and National Taipei University (Taiwan). Each of these affiliations published 6 papers, which is the biggest number of publications among the analyzed affiliations.

Table 2. TOP-10 most engaged affiliations in country/nation brand investigation (2000-2022)

№	Affiliation	Country	No. of publications
1	China University of Geosciences	China	6
2	National Taipei University	Taiwan	6
3	Swinburne University of Technology	Australia	6
4	Chinese University of Hong Kong	China	5
5	Universitas Diponegoro	Indonesia	5
6	Fo Guang University	Taiwan	5
7	Hong Kong Polytechnic University	Hong Kong	4
8	Sumy State University	Ukraine	4
9	Wuhan University of Technology	China	4
10	Shenzhen University		3

Source: developed by authors based on the Scopus data.

To detect the research streams and gaps in the investigated scope of literature, this study conducted a bibliometric analysis applied the approach of visualization of similarities. The findings of bibliometric analysis allowed determining eight clusters of intercrossing research streams (Fig.4).

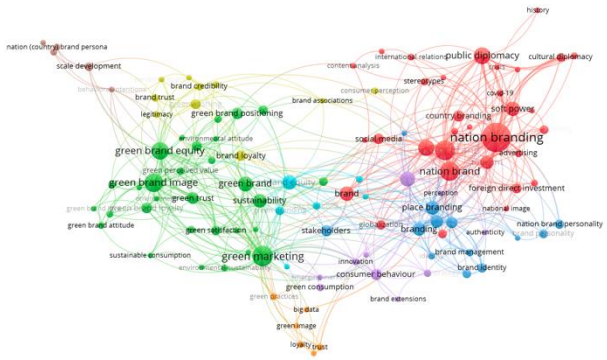

Fig. 4. The network map of keywords' co-occurrences (2000-2022)

Source: developed by authors using VOSviewer software tools.

Thus, the first cluster consists of 23 items (red). This cluster is built under the issues of green marketing (34 links with total link strength of 65). In this line, the scholars addressed mainly studies on the green brand in view of green brand attachment, green brand attitude, green brand image, green brand love, and green brand trust. The particular attention was focused on green loyalty, satisfaction, green perceived risks, and value and environmental sustainability. Besides, the results showed that the first cluster covers the investigations on green branding conducted mainly on the corporate level.

The second cluster is formed with 17 items (green) covering the studies on country branding (24 links with total link strength of 37). Under this research stream, the scholars considered the country's image, national identity, reputation, etc. The particular focus was on consumer perception, ethnocentrism, and behavior. Moreover, it

could be hypothesized that the main drivers of the country's brand are tourism, investments and, particularly, foreign direct investment, brand association, nation stereotypes, etc.

The third cluster consists of 14 items (blue) assessing the green brand equity (25 links with total link strength of 53) in line with brand credibility, scale development, greenwashing, perceived risks and value, positioning, legitimacy, etc.

The fourth cluster is formed with 13 items (yellow). Most studies are developed around the concept of country of origin. In this research direction, the scholars bring up a point of globalization, authenticity, ethnocentrism, innovation, national image, green consumption, etc.

The fifth cluster (purple) underlines the studies on country brand equity concerning the green image, green supply management, green practices, big data, etc. The sixth cluster (turquoise) focused on destination branding. In turn, the seventh cluster (orange) mainly addresses green trust issues (11 links with total link strength of 26). This cluster shows the studies that explored branding in the view of environmental concern, international relationships, politics, etc. The smallest eight cluster (brown) includes the studies on the nation branding in the view of historical aspects, crisis (particularly COVID-19), cultural and public diplomacy, soft power, etc.

Table 3. TOP-10 keywords most occurred in the study sample (2000-2022)

№	Keyword	Occurrences	Total link strength
1	Nation branding	69	102
2	Green marketing	37	85
3	Country brand	33	46
4	Nation brand	31	47
5	Sustainability	28	88
6	Green brand image	28	76
7	Green brand equity	24	57
8	Public diplomacy	23	46
9	Country image	22	47
10	Green brand	19	40

Source: developed by authors based on the Scopus data.

Table 3 shows the calculation results of the total link strengths of the analyzed keywords. Therefore, the greatest total link strengths of the co-occurrences links with other keywords are nation branding, green marketing, country brand, nation brand, sustainability, etc. The concept of green brand closes the list of TOP-10 keywords most occurred in the study sample. Therefore, it indicates that the topic of the green brand is underinvestigated but processive.

Conclusions

This paper presents the results of a bibliometric analysis of the existing scientific literature addressing the country's green brand in the Scopus database. The findings showed while the scholars are more focused on the country's branding, there is a theoretical gap in exploring the country's green brand. However, it stands to mention the rapidly growing tendency of publication activity addressing the green brand issues since Q1 2022.

The obtained results showed that the scholars considered the green brand concept in view of green brand attachment, green brand attitude, green brand image, green brand love, green brand trust, green loyalty, green satisfaction, green perceived risks, value and environmental sustainability. Noteworthy here, the studies on green branding were conducted mainly at the corporate level. That indicates the necessity to expand research on the national level.

TOP-5 countries engaged in the green brand investigation were China, the United States, Australia, South Korea, and Spain; in the country/nation brand topic – the United States, the United Kingdom, Spain, Canada, and Australia. Herewith the approach of visualization of similarities allowed detection of four clusters of collaboration between the researchers worldwide as follows: 1) the United States, Asian countries (China, Hong Kong, India, Indonesia, Malaysia, Pakistan, Taiwan, Thailand, and South Korea) Canada, Sweden, and Portugal; 2) Brazil, Colombia, Ghana, Slovenia, South Africa, Spain, Switzerland, Turkey, and United Kingdom; 3) the EU countries (Austria, France, Germany, Italy, Poland, Slovakia), Ukraine, and New Zealand; 4) Australia, Finland, Greece, Romania, Serbia, UAE, and Vietnam.

On the other hand, the most productive affiliation in exploring country/nation brand was the China University of Geosciences, in the green brand – Universidade de São Paulo in Brazil. However, the United States was the pure leader in researching the country/nation brand issues, while China was in green brands.

This study has a limitation because of operating with publications retrieved only from the Scopus database. Therefore, it is appropriate to consider the papers presented in other international scientific databases (Web of Science, Google Scholar, etc.) in future studies. The results could be value-added for scholars interested in the country's green brand issues. It could be a starting point for boosting the studies on designing the country's green brand model and its assessment.

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References

Anholt, S. (2006). Anholt Nation Brands Index: How Does the World See America? Journal of Advertising Research, 45(03), 296. doi:10.1017/s0021849905050336

Bilan, Y., Pimonenko, T., & Starchenko, L. (2020). Sustainable business models for innovation and success: bibliometric analysis. E3S Web of Conferences, 159, 04037. doi:10.1051/e3sconf/202015904037

Brych, V., Zatonatska, T., Dluhopolskyi, O., Borysiak, O., Vakun, O. (2021). Estimating the Efficiency of the Green Energy Services' Marketing Management Based on Segmentation. Marketing and Management of Innovations, 3, 188-198. http://doi.org/10.21272/mmi.2021.3-16

Buhmann, A., & Ingenhoff, D. (2014). The 4D Model of the country image: An integrative approach from the perspective

of communication management. International Communication Gazette, 77(1), 102–124. doi:10.1177/1748048514556986

Cabelkova, I., Tvaronaviciene, M., & Strielkowski, W. (2021). Innovations in Achieving Sustainable Economic Performance Under Income Inequality. Marketing and Management of Innovations, 2, 146-154. http://doi.org/10.21272/mmi.2021.2-12

Chygryn, O. & Pimonenko, T. (2014). The ways of corporate sector firms financing for sustainability of performance. International Journal of Ecology and Development. 29. 1-13.

Chygryn, O., Rosokhata, A., Rybina, O., Stoyanets, N. (2021). Green competitiveness: the evolution of concept formation. E3S Web of Conferences 234, 00004. doi: 10.1051/e3sconf/202123400004

Cubillo-Pinilla, J. M., Blanco-González, A., Marín-Palacios, C., & Méndez-Suárez, M. (2017). Measuring the country brand image: Implications to manage the smart cities doi:10.1007/978-3-319-40895-8_13

Environmental Performance Index (2022). Retrieved from: https://epi.yale.edu/

Environmental Vulnerability Index (2022). United Nations Economic and Social Commission for Western Asia. Retrieved from: https://archive.unescwa.org/environmental-vulnerability-index

FEEM Sustainability Index - FEEM SI (2022). Fondazione Eni Enrico Mattei. Retrieved from: http://www.feemsi.org/

Fetscherin, M. (2010). The determinants and measurement of a country brand: the country brand strength index. International Marketing Review, 27(4), 466–479. doi:10.1108/02651331011058617

Foroudi, P., Gupta, S., Kitchen, P., Foroudi, M. M., & Nguyen, B. (2016). A framework of place branding, place image, and place reputation: Antecedents and moderators. Qualitative Market Research, 19(2), 241-264. doi:10.1108/QMR-02-2016-0020

Garcia-De los Salmones, M. del M., Herrero, A., & San Martin, H. (2021). The Effects of Macro and Micro Country Image on Consumer Brand Preferences. Journal of International Consumer Marketing, 1–14. doi:10.1080/08961530.2021.1922962

Huseynov, A., Huseynov, E., & Samusevych, Y. (2021). Innovative Development of Oil & Gas Industry: Role of Environmental Taxation. Marketing and Management of Innovations, 4, 79-91. http://doi.org/10.21272/mmi.2021.4-07

Insch, A. (2011). Conceptualization and anatomy of green destination brands. International Journal of Culture, Tourism and Hospitality Research, 5(3), 282–290. doi:10.1108/17506181111156970

Kalamova, M. M., & Konrad, K. A. (2010). Nation Brands and Foreign Direct Investment. Kyklos, 63(3), 400–431. doi:10.1111/j.1467-6435.2010.00480.x

Konuk, F. A., Rahman, S. U., & Salo, J. (2015). Antecedents of green behavioral intentions: a cross-country study of Turkey, Finland and Pakistan. International Journal of Consumer Studies, 39(6), 586–596. doi:10.1111/ijcs.12209

Kubatko, O., Vasylieva, T., Kubatko, V., Paliienko, M., Prasol, L., Lyulyov, O. (2021). Determinants of shadow economy in transition countries: economic and environmental aspects. International Journal of Global Energy Issues. 43. 166. 10.1504/IJGEI.2021.10037735.

Letunovska, N., Lyuolyov, O., Pimonenko, T., Aleksandrov, Vadym. (2020). Environmental management and social marketing: a bibliometric analysis. E3S Web of Conferences 234, 00008. doi: 10.1051/e3sconf/202123400008

Lyulyov, O., Pimonenko, T., Stoyanets, N., & Letunovska, N. (2019). Sustainable Development of Agricultural Sector: Democratic Profile Impact Among Developing Countries. Research in World Economy, 10(4), 97. doi:10.5430/rwe.v10n4p97

Mariutti, F. G., & de Moura Engracia Giraldi, J. (2019). How does a Brand Reputation-Driven Construct Impact on Country Brand Equity? A Cross-National Study of Brazil and China. Journal of International Consumer Marketing, 1–20. doi:10.1080/08961530.2019.1590280

Mariutti, F. G., & Giraldi, J. M. E. (2020). Country brand equity: The role of image and reputation. BAR - Brazilian Administration Review, 17(3), 1-24. doi:10.1590/1807-7692bar2020180128

Pimonenko, T., Lyulyov, L., Us, Y. (2021). Cointegration between Economic, Ecological and Tourism Development. Journal of Tourism and Services, 23(12), 169-180. doi: 10.29036/jots.v12i23.293

Revilla-Camacho, M. -., Rodriguez-Rad, C., Garzon, D., Sánchez del Río-Vázquez, M. -., Prado-Roman, C., & Palacios-Florencio, B. (2022). Analysis of the influence of reputation, identity and image on the country brand. Academia Revista Latinoamericana De Administracion, doi:10.1108/ARLA-07-2021-0132

Starchenko, L., Lyeonov, S., Vasylieva, T., Pimonenko, T., Lyulyov, O. (2021). Environmental management and green brand for sustainable entrepreneurship. E3S Web of Conferences 234, 00015. doi: 10.1051/e3sconf/202123400015

Tapia-Ubeda, F.J.; Isbej, Muga, J.A., Polanco-Lahoz, D.A. (2021). Greening Factor Framework Integrating Sustainability, Green Supply Chain Management, and Circular Economy: The Chilean Case. Sustainability, 13, 13575. https:// doi.org/10.3390/su132413575

Tovmasyan, G. (2022). Promoting Female Entrepreneurship in Tourism for Sustainable Development. Marketing and Management of Innovations, 1, 18-36. http://doi.org/10.21272/mmi.2022.1-02

Us, Ya., Pimonenko, T., Lyulyov, O. (2020). Energy efficiency profiles in developing the free-carbon economy: on the example of Ukraine and the V4 countries, Polityka Energetyczna – Energy Policy Journal, 23(4), 49-66. https://doi.org/10.33223/epj/127397

Vasquez, M. S. (2021). Methodological approaches for the study of the country brand: The case of peru and perception in germany. Paper presented at the Iberian Conference on Information Systems and Technologies, CISTI, doi:10.23919/CISTI52073.2021.9476358

Veckalne, R., & Tambovceva, T. (2021). Innovations in Circular Economy for Sustainable Urban Development. Marketing and Management of Innovations, 4, 196-209. http://doi.org/10.21272/mmi.2021.4-15

Zameer, H., Wang, Y., & Yasmeen, H. (2019). Reinforcing green competitive advantage through green production, creativity and green brand image: Implications for cleaner production in China. Journal of Cleaner Production, 119119. doi:10.1016/j.jclepro.2019.11911

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