

# Creative industries in global trade: An international competitiveness analysis\*

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## Abstract

Creative industries are increasingly recognized as key drivers of sustainable economic development. This study examines the international trade competitiveness of 226 economies in the creative industries, utilizing seven widely utilised indices of trade competitiveness for the most recent year data available, 2023. The analysis explores export, import, and trade balance patterns across various economic groups, regions, and major economies in creative industries. It also identifies the export value of the most traded ten creative industries products worldwide. Findings reveal that approximately 78% of the 226 countries exhibit comparative disadvantages or lack international competitiveness in creative industries. Notably, there is a high concentration of competitiveness in the creative industries around certain major countries, particularly in Asia-Pacific and European regions, including countries such as Türkiye, Italy, India, China, Indonesia, France, Vietnam, Poland, Portugal, Thailand, and Spain. Furthermore, 10 out of 262 creative industry products account for 52.4% of creative industries exports in the world, indicating a high level of product concentration in creative industries. This study also reveals that inter-industry trade, driven by comparative advantage, is the dominant pattern in international creative industries trade, with only around 3% of countries exhibiting intra-industry trade patterns.

**Keywords:** Creative Industries, International Competitiveness, Trade Indices, Export, Import.

**JEL codes:** F14, F01, L69

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## 1. INTRODCUTION

In 2019, the United Nations General Assembly declared 2021 as “the International Year of Creative Economy for Sustainable Development” (United Nations General Assembly, 2019, Simsek and Artemenko, 2021). Creative economy, in particular, creative industries are argued to stimulate economic growth and diversification, innovation, knowledge transfer, job and export creation, and to provide resilience to economic shocks (UNCTAD, 2024, Simsek and Artemenko, 2021). Cultural and creative industries make up 3.1% of GDP and 6.2% all employment in the world (UNESCO, 2022). These industries also accounted for around 2.5% world’s overall merchandise export in 2023 (Trade Map, 2024). As a result, creative industries are argued to be drivers of sustainable economic development (UNCTAD, 2022). Therefore, investigation of international trade competitiveness of economies in these industries is of significance.

Reflecting changes, such as digitalisation, environmental sustainability and decarbonization trends around the world, concept, definition, classification and measurement of creative industries evolve over time. Various institutions, such as the Inter-American Development Bank (IDB), United Kingdom Department of Culture, Media and Sport (DCMS), the World Intellectual Property Organization (WIPO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and UN Trade and Development (UNCTAD) have different definitions of creative industries (UNCTAD, 2008, UNCTAD, 2022). These institutions stress varying aspects of creative industries based on their respective institutional structures. On the other hand, products in creative industries tend to have craft, design, art, cultural and intellectual elements. These products among others are jewellery, various cases, publishing, paintings, furniture and floorings (Simsek and Artemenko, 2021).

There is a wide literature on creative industries, whether it is conceptual, policy oriented or measurement of creative industries’ economic significance and contribution. There are also special datasets created by various institutions,

such as the International Trade Centre (ITC), UNCTAD and Eurostat. Therefore, there is a well-established empirical and conceptual literature on creative industries. There are several relevant studies that can be referred to here. Correia and Costa (2014) review twelve creativity indices and propose an alternative creativity index encompassing nine aspects of creativity, namely talent, openness, culture, environment and tourism, technology and innovation, industry, regulation and incentives, entrepreneurship, accessibility and liveability. They calculate the creativity index they developed for the European Union member states. The authors find Sweden, Denmark, Netherlands and Finland top the creativity index respectively, while Bulgaria and Romania are at the bottom of the index. As acknowledged by the authors, this index requires extensive data, and such findings are subject to dimensions considered and level of aggregations of metrics.

Shaban and Vermeulen (2015) compare international trade of India in creative industries with that of China, Brazil, the UK. The authors find that despite having higher export performance from 2003 to 2012 amongst the economies analysed in the study, India’s export value of creative industries is lower than that of China’s. The authors suggest active government policies for creative industries to stimulate economic growth in India.

Chala (2015) examines international trade specialization of Georgia, Moldova and Ukraine in addition to that of the European Union member states in creative industries. The author considers both comparative advantage and intra-industry trade by calculating the Balassa’s RCA index and the Grubel-Lloyd’s intra-industry index, Brühlhart’s marginal intra-trading index (Index A) and Krugman’s specialization parameter (Krugman Specialisation Index (KSI)). The author suggests support for the comparative advantage in creative industries for particular European Union member states.

Cao and Niu (2017) analyse creative products and services export and import data of Beijing and investigate international competitiveness of Beijing in cultural creative products and

cultural creative services, and compare it with that of China, Japan, the United States and the United Kingdom's. The authors discover that Beijing has weaker comparative advantage in creative industries, but it has a growing trend in competitiveness over the years. They underline the potential Beijing entails in creative industries.

Kontrimienė and Melnikas (2017) provide a conceptual understanding of creative industries. They also analyse creative goods export in the world by developed, developing and transition economies according to creative product groups in 2002 and 2011. In addition to this, the authors also examine significance of creative goods export in total exports by developed, developing and transition economies from 2005 to 2014. The authors establish the growing dominance of developing economies in creative goods export.

Gouvea and Vora (2018) investigate variations in economies' export performance in creative industries products in response to changes in creative industries products export in the world. They obtain a sample of 57 economies representing more than 90% of creative industries products export over the years of 2003 and 2011. The authors establish substantial variations in export performance of examined economies in creative industries and attribute these variations in export performance of economies to these economies' creative industries export product mix. Therefore, the authors suggest investment in innovation and R&D in creative industries to improve creative industries export product mix and make the export product mix higher value-added enabling economies having higher export performances.

Krisiukėnienė and Pilinkienė (2020) investigate the export competitiveness of the European Union member states in creative industries by employing Balassa's Revealed Comparative Advantage (RCA) index and this index's dynamic version. The authors find that the United Kingdom, Poland, Italy and France have the highest values of RCA index and conclude that these economies specialise in creative industries. In addition to this, France, Poland, Slovakia, Slovenia, Spain and the United Kingdom appear to have the highest growth rates in creative

industries export, when dynamic version of RCA index is considered.

Studies reviewed above underline the potential that creative industries carry for economic development, hence significance of developing international trade competitiveness in creative industries. Therefore, carrying out more thorough investigation into creative industries' trade patterns can provide a better understanding of current structure of creative industries across economies. In this respect, this study is to examine international trade competitiveness of economies in creative industries, enabling assessment of international economic performance of economies in these industries. In short, this study identifies international trade characteristics of major economies in creative industries, and it also assesses international trade competitiveness of all economies in creative industries with available data by computing and analysing international trade competitiveness indices of Balassa (1965), Vollrath (1991) and Lafay (1992). This study contributes to the international trade literature by considering not just one economy or a group of economies but economic groups, regions and all economies for the most recent year data available, 2023 (Simsek and Artemenko, 2021). In addition to this, different from the literature, this study does not just consider widely used specialisation index of Balassa (1965) argued to measure comparative advantage, but this study also computes and analyses indices of Vollrath (1991) and Lafay (1992) enabling consideration of intra-industry trade.

This study proceeds as follows: first section briefly explains the theory of comparative advantage, it then presents indices of specialisation in international trade. Second section analyses export, import and trade balance characteristics of economic groups, regions and major economies in creative industries and export value of widely traded products of creative industries in the world in 2023. Third section reports results of indices of international trade competitiveness of economic groups, regions and major economies in creative industries and classifications of international specialisation

patterns of 226 countries in creative industries along with visual map representations of international competitiveness of all economies in creative industries with data available in 2023. Last section concludes this study.

## 2. COMPARATIVE ADVANTAGE AND INTERNATIONAL SPECIALISATION IN TRADE

What determines which products and services a country exports and imports? The theory of comparative advantage is widely regarded in the literature on international trade as the key explanation for this significant question concerning patterns of international specialisation. This theory is generally attributed to Ricardo (1817) that he puts forward in his study of “on the Principles of Political Economy and Taxation”. According to the most widespread interpretation of this theory, a country specialises in production, hence export of goods and services for which it has a lower opportunity cost relative to other goods and services, compared to other countries. On the other hand, the country imports goods and services it bears relatively higher costs. As a result, this pattern of international division of labour and specialisation increases economic welfare of all countries participating in free exchange of goods and services as claimed in the theory of comparative advantage (Findlay, 1991).

As all countries are argued to gain from increasing international specialisations in goods and services in which they have comparative advantages, there is an issue of how to measure comparative advantages of countries. To address this issue, Balassa (1965) develops an approach to measure comparative advantages that is widely adopted in the literature. What is known as the “Revealed” Comparative Advantage (RCA). According to the RCA approach, without policy interventions and restrictions on trade flows amongst countries, post-trade observations can reflect countries’ comparative advantages in goods and services on which they specialise in production, hence export. Therefore, inference from export and import transactions is practical and flexible in identifying comparative advantages of countries. The RCA approach

can also efficiently guide trade policy making through identifying trade specialisation patterns. Nevertheless, the RCA approach is not without criticism. This approach assumes no government interventions but in fact there are extensive government interventions that distort true comparative advantage structures of countries. In addition to this, RCA approach is static, meaning it is not able to explain dynamics of comparative advantages and may not capture long run shifts in trade specialisation patterns. Furthermore, the RCA approach cannot provide the underlying reasons for countries’ international specialisation patterns or comparative advantages. Despite these criticisms, the easily available data driven RCA approach and its variants have been widely employed to measure international specialisation patterns of countries to have an understanding of comparative advantages (Cai et al., 2009).

Balassa (1965)’s Revealed Comparative Advantage (RCA) index is reported in equation (1). This equation shows that, to what extent, a particular economy dominates the world export market in creative industries proportional to creative industries’ relative market size in the world (Simsek and Artemenko, 2021). If the economy penetrates the world market in creative industries more than creative industries share in the world export market. Then, the economy is argued to have a comparative advantage in creative industries. The following equation reveals this exposition.

$$RCA_{e,c} = \frac{X_{e,c}/X_e}{X_{w,c}/X_w} \quad (1)$$

where RCA is revealed comparative advantage of economy  $e$  in creative industries  $c$ .  $X$  stands for export value and  $w$  is for the world. RCA ranges from 0 onwards, a value of 1 or more (less than 1) indicates revealed comparative advantage (disadvantage) in creative industries for an economy (Simsek and Artemenko, 2021). Therefore, unity is the cut-off point for comparative advantage. On the other hand, Balassa’s RCA index double counts creative industries export and total export of the economy under consideration because total export of the economy ( $X_e$ ) contains its creative industries

export ( $X_{e,c}$ ). Creative industries export in the world ( $X_{w,c}$ ) also includes creative industries export of the economy ( $X_{e,c}$ ). In addition to this, total export in the world ( $X_w$ ) embodies total export of the economy ( $X_e$ ). Vollrath (1991) corrects for these double counting issue that is crucial to control for large trading economies and industries (Frohberg and Hartmann, 1997). In addition to this correction, Vollrath (1991) also considers import data and develops the following five indices of international specialisation in trade.

The first index that Vollrath (1991) develops is the Relative Export Advantage (RXA) index shown in equation (2). As indicated above, Balassa's RCA index counts economy and industries twice, but Vollrath's RXA index takes care this issue. This index measures relative export strength of a specific economy in the world creative industries market. The equation below indicates Vollrath's RXA index.

$$RXA_{e,c} = \frac{X_{e,c} / (X_e - X_{e,c})}{(X_{w,c} - X_{e,c}) / (X_w - X_e)} \quad (2)$$

RXA index value of more than 1 indicates that creative industries' dominance in the economy's export is larger than the share of creative industries in the world export market. Therefore, the economy has a higher export performance in creative industries relative to other economies, meaning that it has a comparative advantage in creative industries. Nevertheless, RXA index value of less than 1 means, the economy has comparative disadvantage in creative industries. RXA index value of 1 corresponds to the case of balance in creative industries.

The second index is Vollrath's Relative Import Advantage (RMA) index indicated in equation (3). Different from equation (2), equation (3) is on import. This equation measures reliance of the economy on import in creative industries or penetration of creative industries import in the internal market. In fact, this index measures to what extent the local creative industries satisfy the internal demand and thereby assessing competitiveness of local creative industries of the economy in the internal market. The following equation reports Vollrath's RMA index.

$$RMA_{e,c} = \frac{M_{e,c} / (M_e - M_{e,c})}{(M_{w,c} - M_{e,c}) / (M_w - M_e)} \quad (3)$$

where  $M$  corresponds to import value in addition to the notation indicated above. Now, interpretation of equation (2) is reversed in equation (3). RMA index value of less than 1 means comparative advantage, while RMA index value of more than 1 indicates comparative disadvantage (Frohberg and Hartmann, 1997).

The third index is Vollrath's Relative Trade Advantage (RTA) index reported in equation (4). This index equals the difference between RXA and RMA indices. Therefore, this index simultaneously considers export and import, and measures net trade effects of creative industries. Since considering both export and import in creative industries, this index can also measure intra-industry trade (Frohberg and Hartmann, 1997). The equation below indicates Vollrath's RTA index.

$$RTA_{e,c} = RXA_{e,c} - RMA_{e,c} \quad (4)$$

Positive index values of RTA correspond to comparative advantage, whilst negative index values of RTA means comparative disadvantage. The greater the index value is, the stronger the advantage of an economy in creative industries would be. The smaller the index value is, the greater the disadvantage of an economy in creative industries would be.

The fourth index that Vollrath (1991) creates is the Log of Relative Export Advantage (lnRXA) index shown in equation (5). This index enables cross country comparisons of comparative advantages. It measures how well export performance of an economy in creative industries is compared to the world average in creative industries. The following equation reports Vollrath's lnRXA index.

$$\ln(RXA_{e,c}) = \ln\left(\frac{X_{e,c} / (X_e - X_{e,c})}{(X_{w,c} - X_{e,c}) / (X_w - X_e)}\right) \quad (5)$$

Index values of lnRXA upward of 0.5 indicate

high comparative advantage, while index values of lnRXA in the interval of 0.5 and -0.5 mean marginal comparative advantage. If index values of lnRXA are smaller than -0.5, then there exists low comparative advantage (Akyüz et al., 2020).

The fifth and last index that Vollrath (1991) develops is the Revealed Competitiveness (RC) index shown in equation (6). This index is the difference between lnRXA and lnRMA. This index is more favourable than indices of RTA and lnRXA because the RC index reflects supply and demand balance of creative industries (Akyüz et al., 2020). The equation below indicates Vollrath's RC index.

$$RC_{e,c} = \ln(RXA_{e,c}) - \ln(RMA_{e,c}) \quad (6)$$

Index values of RC larger than 0 corresponds to comparative advantage, whilst index values of RC smaller than 0 means comparative disadvantage. Therefore, 0 is the cutoff point for this specialisation index.

Balassa's RCA index appears not to consider intra-industry trade widely observed in the international trade data. Lafay (1992)'s Index of International Specialisation (LFI) considers intra-industry trade meaning that this index accounts for international specialisation patterns in both import and export of creative industries (Simsek and Artemenko, 2021). Even if an economy is specialised in creative industries export (RCA index of more than 1), the economy can still have a trade deficit in creative industries. This is due to the fact that the degree of speciation of the economy in creative industries is not sufficient to make the economy competitive in the creative industries world market (negative LFI values).

$$LFI_{e,c} = \frac{1000}{(X_e + M_e)} \left[ (X_{e,c} - M_{e,c}) - (X_e - M_e) \frac{X_{e,c} + M_{e,c}}{X_e + M_e} \right] \quad (7)$$

LFI can take all positive and negative values, a positive (negative) value corresponds to a comparative advantage (disadvantage) of an economy in creative industries. Negative values of LFI also means trade deficit, while positive values of LFI indicates trade surplus in creative industries of an economy. Higher the LFI, greater the specialisation of an economy in creative

industries is (Simsek and Artemenko, 2021).

### 3. ANALYSIS OF INTERNATIONAL TRADE CHARACTERISTICS OF CREATIVE INDUSTRIES

Along with identifying 6-digit Harmonized System (HS) codes of creative industries, the International Trade Centre (ITC) provides comprehensive international trade data on creative industries that can be accessed via the website of the ITC Trade Map. The ITC compiles and calculates this export and import data from the UN Comtrade and ITC statistics. There are 262 6-digit HS codes of creative industries in this dataset including products appearing to have craft, design, art, cultural and intellectual elements. Such products among others are jewellery, various cases, publishing, paintings, furniture and floorings as indicated above (Simsek and Artemenko, 2021).

The following tables provide data on creative industries export and total export, creative industries import and total import, and creative industries trade balance and total trade balance across the World Bank economic groups (Fantom and Serajuddin, 2016), regions and major economies in creative industries in current million US dollars in 2023. The thirty-five major countries reported in the following tables all account for more than 85% of any international trade data presented, and each country makes up more than 0.4% of the world trade in creative industries in 2023. There is also another table that reports the most exported ten creative industries products in the world in current million US dollars in 2023 making up 52.4% of all creative industries products export in the world.

Table 1 reveals that in 2023 export value of creative industries amounted to more than \$572 billion constituting around 2.5% of world total export. High-income countries were the largest origin of creative industries export in 2023 making up around 51.3% of creative industries export in the world. Nevertheless, creative industries export share in total export of upper middle-income countries was about 3.6% and it was approximately 1.9% for high-income countries and about 3.5% for lower

middle-income countries. Therefore, creative industries export constituted a larger proportion of upper and lower middle-income countries in comparison with high-income countries (Simsek and Artemenko, 2021).

Table 1 also presents that in 2023 Asia-Pacific made up almost half of creative industries export in the world followed by Europe constituting almost 40% of world creative industries export. Creative industries export share in total export of Asia-Pacific was about 3.2% and it was around 2.6% for Europe. Therefore, Asia-Pacific and Europe appear to be two key origins of creative industries export in the world.

Furthermore, Table 1 shows that China was the largest source of creative industries export in the world making up around 30.4% of creative industries export in the world in 2023 by a great margin. China was followed by Italy that constituted about 8.1% of creative industries export in the world. France, the USA, Germany and India made up 6.6%, 5.1%, 4.3% and 4.2% of creative industries export in the world, respectively. These six countries all constituted around 58.7% of creative industries export in the world in 2023. Country with the largest creative industries export share relative to total export amongst reported countries was Italy with around 6.8% in 2023. Italy was followed by Türkiye. Creative industries export share in total export of Türkiye was about 6.5% in 2023. Creative industries export shares in total exports of France, India, China, Indonesia, Switzerland, Vietnam, Poland and Portugal were 5.9%, 5.5%, 5.1%, 3.9%, 3.9%, 3.7%, 3.6% and 3.6% in 2023, respectively.

Table 2 reports that in 2023 import value of creative industries totalled more than \$522 billion making up 2.2% of world total import. High-income countries were the greatest destination of creative industries import constituting about 82.4% of creative industries import in the world in 2023. Compared with creative industries export, high-income countries made up even a much larger share of creative industries import market. Creative industries import share in total import of high-income countries was about 2.7% occupying a larger share compared to other

income groups. Creative industries import share in total import of low-income countries was about 2.1% and it was around 1.3% for lower middle-income countries and around 1.2% for upper middle-income countries (Simsek and Artemenko, 2021).

Table 2 also reveals that about 36.4% of world creative industries import was destined for Europe in 2023. Americas received around 27.7% of world creative industries import in 2023. Asia-Pacific was in the third spot in creative industries import market with about 26.5%. Creative industries import share in total import of the Middle East and North Africa (MENA) was approximately 4.5% and it was about 2.8% for Americas.

Furthermore, Table 2 enables examination of individual countries. The USA was the greatest destination of creative industries import in the world constituting around 21.4% of creative industries import in world in 2023. Hong Kong, China was the second greatest destination of creative industries import with 6%. In 2023, Germany, France, China, the UAE, the UK, Switzerland and Japan constituted 4.9%, 4.8%, 4.2%, 4%, 3.7%, 3.3% and 3.2% of creative industries import in the world in 2023, respectively. These nine countries all made up around 55.5% of creative industries import in the world in 2023. The UAE had the largest creative industries import share in relation to total import between reported countries. Creative industries import share in total import of the UAE was about 7.9% in 2023. Hong Kong, China followed the UAE with 4.8%. Creative industries import shares in total imports of Switzerland, the USA, France, Saudi Arabia, Australia, Singapore, Austria and the UK 4.6%, 3.5%, 3.2%, 3.2%, 3.1%, 2.7%, 2.5% and 2.5% in 2023, respectively.

Table 3 reveals that in 2023 high-income countries had a trade deficit of around \$137.5 billion with export import coverage ratio of 68.1%, while upper middle-income countries had a trade surplus of more than \$160.2 billion with export import coverage ratio of 345.5% in creative industries in 2023. Creative industries constituted 20.1% of total trade deficit of high-income countries, while they made up 18.9%

**Table 1.** Creative Industries (CIs) Export and Total Export across Regions and Major Countries in 2023 (current million US Dollars)

	Creative Industries		Total		
	Export Value	Country Share in the World	Export Value	Country Share in the World	CIs' Share in Total Export
Low income	518	0.1	71 996	0.3	0.7
Lower middle income	52 793	9.2	1 495 429	6.4	3.5
Upper middle income	225 517	39.4	6 326 425	27.2	3.6
High income	293 250	51.3	15 397 224	66.1	1.9
Africa	1 981	0.3	411 213	1.8	0.5
Americas	47 284	8.3	3 985 827	17.1	1.2
Brazil	2 058	0.4	339 696	1.5	0.6
Canada	7 153	1.3	568 413	2.4	1.3
Mexico	4 809	0.8	592 997	2.5	0.8
Remaining	3 965	0.7	465 561	2.0	0.9
USA	29 299	5.1	2 019 160	8.7	1.5
Asia-Pacific	284 489	49.7	8 803 610	37.8	3.2
Australia	1 460	0.3	370 870	1.6	0.4
China	173 726	30.4	3 388 716	14.5	5.1
Hong Kong, China	19 088	3.3	576 144	2.5	3.3
India	23 790	4.2	431 419	1.9	5.5
Indonesia	10 090	1.8	258 797	1.1	3.9
Japan	4 242	0.7	719 844	3.1	0.6
Korea	2 729	0.5	632 226	2.7	0.4
Malaysia	4 687	0.8	312 965	1.3	1.5
Remaining	9 806	1.7	470 420	2.0	2.1
Singapore	8 468	1.5	475 473	2.0	1.8
Taiwan	2 178	0.4	432 956	1.9	0.5
Thailand	7 499	1.3	280 088	1.2	2.7
Vietnam	16 728	2.9	453 694	1.9	3.7
Europe	227 940	39.8	8 909 450	38.3	2.6
EU (27)	179 887	31.4	6 958 584	29.9	2.6
Austria	2 962	0.5	222 185	1.0	1.3
Belgium	7 271	1.3	568 505	2.4	1.3
Czechia	4 628	0.8	253 328	1.1	1.8
Denmark	3 120	0.5	136 074	0.6	2.3
France	37 695	6.6	634 525	2.7	5.9
Germany	24 324	4.3	1 702 363	7.3	1.4
Ireland	1 715	0.3	212 870	0.9	0.8
Italy	46 329	8.1	677 095	2.9	6.8
Netherlands	11 206	2.0	741 804	3.2	1.5
Poland	12 643	2.2	354 668	1.5	3.6
Portugal	3 035	0.5	83 909	0.4	3.6
Remaining	11 155	1.9	753 293	3.2	1.5
Spain	11 201	2.0	420 170	1.8	2.7
Sweden	2 602	0.5	197 797	0.8	1.3
Other Europe	48 053	8.4	1 950 866	8.4	2.5
Remaining	3 187	0.6	347 260	1.5	0.9
Russia	1 110	0.2	407 853	1.8	0.3
Switzerland	16 264	2.8	420 657	1.8	3.9
Türkiye	16 489	2.9	255 412	1.1	6.5
UK	11 003	1.9	519 684	2.2	2.1
MENA	10 356	1.8	1 176 041	5.0	0.9
Remaining	4 515	0.8	591 624	2.5	0.8
Saudi Arabia	223	0.0	304 500	1.3	0.1
UAE	5 618	1.0	279 917	1.2	2.0
Areas NES	28	0.0	4 931	0.0	0.6
World	572 078		23 291 072		2.5

**Source:** Data is accessed from the website of the ITC Trade Map that is from the ITC calculations based on the UN Comtrade and ITC statistics.



**Table 2.** Creative Industries (CIs) Import and Total Import across Regions and Major Countries in 2023 (current million US Dollars)

	Creative Industries		Total		
	Import Value	Country Share in the World	Import Value	Country Share in the World	CIs' Share in Total Import
Low income	2 800	0.5	131 077	0.6	2.1
Lower middle income	23 668	4.5	1 864 032	7.9	1.3
Upper middle income	65 274	12.5	5 477 722	23.3	1.2
High income	430 790	82.4	16 080 708	68.3	2.7
Africa	8 252	1.6	448 855	1.9	1.8
Americas	144 917	27.7	5 141 428	21.8	2.8
Brazil	1 848	0.4	240 793	1.0	0.8
Canada	13 133	2.5	559 232	2.4	2.3
Mexico	5 758	1.1	598 475	2.5	1.0
Remaining	12 241	2.3	570 396	2.4	2.1
USA	111 937	21.4	3 172 533	13.5	3.5
Asia-Pacific	138 709	26.5	8 098 781	34.4	1.7
Australia	8 622	1.6	276 028	1.2	3.1
China	21 698	4.2	2 559 320	10.9	0.8
Hong Kong, China	31 170	6.0	655 540	2.8	4.8
India	5 846	1.1	671 997	2.9	0.9
Indonesia	1 886	0.4	221 740	0.9	0.9
Japan	16 747	3.2	786 365	3.3	2.1
Korea	9 560	1.8	642 571	2.7	1.5
Malaysia	3 627	0.7	265 973	1.1	1.4
Remaining	14 506	2.8	610 860	2.6	2.4
Singapore	11 494	2.2	422 530	1.8	2.7
Taiwan	3 875	0.7	358 676	1.5	1.1
Thailand	4 546	0.9	292 053	1.2	1.6
Vietnam	5 133	1.0	335 129	1.4	1.5
Europe	190 029	36.4	8 914 985	37.8	2.1
EU (27)	135 940	26.0	6 815 778	28.9	2.0
Austria	5 528	1.1	223 336	0.9	2.5
Belgium	6 831	1.3	550 855	2.3	1.2
Czechia	4 176	0.8	228 913	1.0	1.8
Denmark	2 915	0.6	126 397	0.5	2.3
France	25 003	4.8	775 129	3.3	3.2
Germany	25 780	4.9	1 469 735	6.2	1.8
Ireland	3 042	0.6	150 611	0.6	2.0
Italy	14 557	2.8	639 929	2.7	2.3
Netherlands	12 896	2.5	664 131	2.8	1.9
Poland	6 565	1.3	341 407	1.4	1.9
Portugal	2 477	0.5	113 486	0.5	2.2
Remaining	13 739	2.6	869 761	3.7	1.6
Spain	9 291	1.8	469 043	2.0	2.0
Sweden	3 140	0.6	193 044	0.8	1.6
Other Europe	54 089	10.4	2 099 207	8.9	2.6
Remaining	7 650	1.5	370 934	1.6	2.1
Russia	4 961	0.9	208 387	0.9	2.4
Switzerland	16 985	3.3	366 266	1.6	4.6
Türkiye	4 948	0.9	361 764	1.5	1.4
UK	19 544	3.7	791 855	3.4	2.5
MENA	40 543	7.8	894 622	3.8	4.5
Remaining	14 382	2.8	469 879	2.0	3.1
Saudi Arabia	5 072	1.0	157 382	0.7	3.2
UAE	21 088	4.0	267 361	1.1	7.9
Areas NES	82	0.0	54 869	0.2	0.2
World	522 532		23 553 539		2.2

Source: Please see the source of Table 1.

of total trade surplus of upper middle-income countries. Lower middle-income countries had a trade surplus of \$29.1 billion in creative industries, while having a trade deficit of around \$368.6 billion in total trade.

Table 3 also shows that in 2023 Asia-Pacific's trade surplus was about \$145.8 billion with export import coverage ratio of 205.1%, whilst Americas' trade deficit was around \$97.6 billion with export import coverage ratio of 32.6% in creative industries. On the other hand, Europe's trade surplus was almost \$38 billion with export import coverage ratio of 120%, whilst MENA's trade deficit was almost \$30.2 billion with export import coverage ratio of 25.5% in creative industries. Creative industries constituted 20.7% of total trade surplus of Asia-Pacific, while they made up 8.4% of total trade deficit of Americas.

Furthermore, Table 3 reports that in 2023 China had a trade surplus of \$152 billion with export import coverage ratio of 800.7%. In addition to this, creative industries had a contribution rate of 18.3% to total trade surplus of China. Italy was the second largest trade surplus country after China. Italy had a trade surplus of about \$31.8 billion in creative industries with export import coverage ratio of 318.3% in 2023. Creative industries also made up 85.5% to total trade surplus of Italy. India, France, Vietnam, Türkiye, Indonesia and Poland had trade surpluses of around \$17.9 billion, \$12.7 billion, \$11.6 billion, \$11.5 billion, \$8.2 billion and \$6 billion in creative industries in 2023, respectively. On the hand, in 2023 the USA had a trade deficit of \$82.6 billion in creative industries with export import coverage ratio of 26.6%. Creative industries also made up 7.2% of total trade deficit of the USA. The UAE, Japan, Hong Kong, China, the UK, Australia, Korea and Canada had trade deficits of approximately \$15.5 billion, \$12.5 billion, \$12 billion, \$8.5 billion, \$7.2 billion, \$6.8 billion and \$6 billion in creative industries in 2023, respectively.

Table 4 presents value of the most exported ten creative industries products in the world in current million US dollars in 2023. As indicated above, these ten creative industries products constituted 52.4% of all creative industries products export in the world in 2023. It appears

that there is concentration in creative industries export around particular products. On the other hand, export value of the remaining 252 creative industries products was \$272 billion making up 47.6% of all creative industries products export in the world in 2023. Jewellery and parts thereof had an export value of around \$118 billion constituting 20.6% of all creative industries products export in the world in 2023. This product accounted for more than one fifth of all creative industries products export in the world in 2023. Therefore, this product differentiated itself from other creative industries products by a great margin. On the other hand, export value of wooden furniture was around \$31 billion constituting 5.4% of all creative industries products export in the world in 2023. The remaining creative industries products export shares in all creative industries product exports in 2023 ranged from 2.2% to 4.8% as reported in Table 4.

#### **4. ANALYSIS OF INDICES OF INTERNATIONAL TRADE COMPETITIVENESS IN CREATIVE INDUSTRIES**

Table 5 reveals that in 2023 upper middle-income countries appeared to develop specialisations in creative industries persistent across the measures of all seven comparative advantages. Lower middle-income countries also specialised in creative industries. Nevertheless, upper middle-income countries' specialisations in creative industries were more prominent than lower middle-income countries. On the other hand, high income countries seemed to have comparative disadvantages in creative industries according to all seven indices of comparative advantages in 2023 as shown in Table 5. As result, upper and lower middle-income countries happened to develop international trade competitiveness in creative industries, while high-income countries had comparative disadvantages in creative industries in 2023.

Table 5 also reports that in 2023 Asia-Pacific appeared to have specialisations in creative industries according to the seven indices of comparative advantages. In addition to Asia-Pacific, Europe specialised in creative industries

**Table 3.** Creative Industries (CIs) Trade Balance and Total Trade Balance across Regions and Major Countries in 2023 (current million US Dollars)

	Creative Industries		Total		
	Trade Balance	Export Import Coverage Ratio	Trade Balance	Export Import Coverage Ratio	CIs' Share in Total Balance
Low income	-2 282	18.5	-59 081	54.9	3.9
Lower middle income	29 125	223.1	-368 604	80.2	-7.9
Upper middle income	160 243	345.5	848 702	115.5	18.9
High income	-137 540	68.1	-683 485	95.7	20.1
Africa	-6 271	24.0	-37 642	91.6	16.7
Americas	-97 634	32.6	-1 155 602	77.5	8.4
Brazil	210	111.4	98 903	141.1	0.2
Canada	-5 981	54.5	9 182	101.6	-65.1
Mexico	-949	83.5	-5 478	99.1	17.3
Remaining	-8 276	32.4	-104 835	81.6	7.9
USA	-82 638	26.2	-1 153 373	63.6	7.2
Asia-Pacific	145 780	205.1	704 829	108.7	20.7
Australia	-7 162	16.9	94 842	134.4	-7.6
China	152 027	800.7	829 396	132.4	18.3
Hong Kong, China	-12 082	61.2	-79 395	87.9	15.2
India	17 945	407.0	-240 579	64.2	-7.5
Indonesia	8 204	535.1	37 058	116.7	22.1
Japan	-12 505	25.3	-66 521	91.5	18.8
Korea	-6 831	28.5	-10 345	98.4	66.0
Malaysia	1 060	129.2	46 992	117.7	2.3
Remaining	-4 700	67.6	-140 440	77.0	3.3
Singapore	-3 026	73.7	52 943	112.5	-5.7
Taiwan	-1 697	56.2	74 280	120.7	-2.3
Thailand	2 953	165.0	-11 966	95.9	-24.7
Vietnam	11 594	325.9	118 564	135.4	9.8
Europe	37 911	120.0	-5 535	99.9	-685.0
EU (27)	43 947	132.3	142 806	102.1	30.8
Austria	-2 566	53.6	-1 151	99.5	222.8
Belgium	440	106.4	17 651	103.2	2.5
Czechia	452	110.8	24 414	110.7	1.9
Denmark	205	107.0	9 677	107.7	2.1
France	12 691	150.8	-140 604	81.9	-9.0
Germany	-1 455	94.4	232 627	115.8	-0.6
Ireland	-1 327	56.4	62 258	141.3	-2.1
Italy	31 772	318.3	37 166	105.8	85.5
Netherlands	-1 690	86.9	77 673	111.7	-2.2
Poland	6 078	192.6	13 260	103.9	45.8
Portugal	558	122.5	-29 577	73.9	-1.9
Remaining	-2 584	81.2	-116 468	86.6	2.2
Spain	1 910	120.6	-48 874	89.6	-3.9
Sweden	-538	82.9	4 753	102.5	-11.3
Other Europe	-6 035	88.8	-148 341	92.9	4.1
Remaining	-4 463	41.7	-23 674	93.6	18.9
Russia	-3 851	22.4	199 466	195.7	-1.9
Switzerland	-721	95.8	54 390	114.8	-1.3
Türkiye	11 541	333.2	-106 352	70.6	-10.9
UK	-8 541	56.3	-272 171	65.6	3.1
MENA	-30 186	25.5	281 420	131.5	-10.7
Remaining	-9 867	31.4	121 745	125.9	-8.1
Saudi Arabia	-4 849	4.4	147 118	193.5	-3.3
UAE	-15 470	26.6	12 557	104.7	-123.2
Areas NES	-55	33.5	-49 937	9.0	0.1

**Source:** Please see the source of Table 1.

in 2023. Nonetheless, Asia-Pacific was more competitive in creative industries. On the other hand, Americas and MENA had comparative disadvantages in creative industries in 2023 by the seven indices of comparative advantages. Comparative disadvantages of MENA in creative industries were more pronounced than Americas.

Furthermore, a thorough examination of indices of international specialisation in creative industries computed for 226 countries with data available in 2023 revealed six patterns of international trade in creative industries. First, seventy-seven particular countries (around 34% of 226 countries), for example, Australia, Austria, Canada, Denmark, Russia, Saudi Arabia, Singapore, the UAE, the UK and the USA appeared to have comparative disadvantages or did not specialisation in creative industries, and could not meet internal demand, hence these countries had trade deficits in creative industries. Second, seventy-eight specific countries (more than one third of 226 countries), for instance, Brazil, Germany, Ireland, Japan, Korea, Mexico,

the Netherlands, Sweden and Taiwan emerged to have comparative disadvantages or not to specialise in creative industries. Nevertheless, these countries could satisfy internal market but still they had trade deficits in creative industries. Third, twenty-two particular countries (less than one tenth of 226 countries), such as, Belgium, Czechia and Malaysia seemed to have comparative disadvantages or did not specialisation in creative industries, but they could meet internal demand and had trade surplus in creative industries. Fourth, seven specific countries (around 3% of 226 countries), for example, Hong Kong, China and Switzerland appeared to have comparative advantages or specialise in creative industries. Nonetheless, they could not satisfy internal market and had trade deficits in creative industries. This pattern happened to correspond to intra-industry trade pattern. Fifth, twenty-three particular countries (more than 10% of 226 countries), such as France, Italy and Portugal seemed to have comparative advantages or specialisation in creative industries. Nevertheless, they could not meet internal demand, but they still had trade

**Table 4.** Creative Industries (CIs) Product Level Export in the World in 2023 (current million US Dollars)

HS 6-Digit Code	HS 6-Digit Code Description	Export Value	CIs Product Share in CIs' Total Export
711319	Articles of jewellery and parts thereof, ...	118	20.6
940360	Wooden furniture (excl. for offices, kitchens and bedrooms, and seats)	31	5.4
330300	Perfumes and toilet waters (excl. aftershave lotions, personal deodorants and hair lotions)	27	4.8
940320	Metal furniture (excl. for offices, seats and medical, surgical, dental or veterinary furniture)	23	4.0
420292	Travelling-bags, insulated food or beverage bags, toilet bags, rucksacks, shopping-bags, map-cases, tool bags,...	21	3.7
420221	Handbags, whether or not with shoulder straps, ...	20	3.5
420212	Trunks, suitcases, vanity cases, executive-cases, briefcases, school satchels and similar containers, ...	18	3.2
420222	Handbags, whether or not with shoulder straps, incl. ...	18	3.1
940350	Wooden furniture for bedrooms (excl. seats)	13	2.2
490199	Printed books, brochures and similar printed matter ...	12	2.2
	Remaining Creative Industries Products	272	47.6
	All Creative Industries Products	572	

**Source:** Please see the source of Table 1.

surplus in creative industries. Sixth and last, nineteen specific countries (around 8% of 226 countries), for instance, China, India, Indonesia, Poland, Spain, Thailand, Türkiye and Vietnam emerged to develop comparative advantages or specialisation in creative industries. These countries could satisfy internal creative industries market and had trade surplus in creative industries. As a result, countries with the sixth pattern of trade in creative industries had international competitiveness in creative industries in 2023.

Analysing the six patterns of trade in creative industries developed above enables providing insights into intra-industry trade vs. inter-industry trade discussions in the literature of international trade. As indicated above, the fourth pattern corresponded to the case of intra-industry trade because countries displaying this pattern had specialised in creative industries (Balassa's RCA index values of more than 1), but they could not meet internal demand and had trade deficits in creative industries (Vollrath's RC index values of less than 0 and Lafay's LFI values of less than 0). These observations meant that countries, for example, Hong Kong, China and Switzerland displayed intra-industry trade patterns in creative industries. There were, in total, 7 such countries out of 226 countries, around 3% of all countries had these characteristics of the fourth pattern. On the other hand, apart from countries with comparative advantages, there were 155 countries out of 226 countries, about 68.6% of all countries simultaneously having Balassa's RCA index values of less than 1, Vollrath's RC index values of less than 0 and Lafay's LFI values of less than 0 resulting in comparative disadvantages in creative industries. As a result, this finding did not provide support for intra-industry trade instead provided support for inter-industry trade pattern.

The following figures provide visual map representations of Balassa (1965)'s Revealed Comparative Advantage (RCA) index, Vollrath (1991)'s Revealed Competitiveness (RC) index and Lafay (1992)'s Index of International Specialisation (LFI) for all economies with data available in 2023. In the following figures, white

and light grey colours indicate comparative disadvantages, whilst grey and dark grey colours correspond to comparative advantages, hence international competitiveness in creative industries. Nonetheless, it should be noted that figures are in different scales, when making comparisons amongst figures (Simsek and Artemenko, 2021).

Figure 1 delineates Balassa (1965)'s RCA index across countries with data available in 2023. This figure shows that there is a high clustering of international trade competitiveness in creative industries around major Asia-Pacific and European countries, such as Italy, Türkiye, France, India, China, Indonesia, Switzerland, Vietnam, Portugal, Poland, Thailand and Spain (countries ordered from highest to lowest index values of Balassa's RCA) as indicated in Table 5. On the other hand, countries in Africa, Central Asia, Latin America and MENA appeared not to have international competitiveness in creative industries. It seems that these countries could not capitalize on the economic potential that creative industries hold for them. In fact, when creative industries products are closely examined, these countries' economic structures happen to be appropriate for having comparative advantages and specialisation in creative industries. Nonetheless, major economies in Asia-Pacific and Europe as indicated above emerged to specialise in creative industries as reported in Table 5 (Simsek and Artemenko, 2021).

Figure 2 depicts Vollrath (1991)'s RC index across countries with data available in 2023. This figure clearly portrays a high concentration of international trade specialisation in creative industries scattered around specific major Asia-Pacific and European countries, for instance, China, India, Türkiye, Indonesia, Italy, Vietnam, France, Poland, Thailand, Portugal and Spain (countries ordered from highest to lowest index values of Vollrath's RC, please note the change in index order of countries compared with Balassa's RCA index in Figure 1, please also note that Switzerland is not included here because it could not satisfy its internal market and had trade deficit in creative industries in 2023) as revealed in Table 5. These findings are also closely in line

**Table 5.** International Trade Competitiveness Indices in Creative Industries (CIs) across Regions and Major Countries in 2023

	RCA	RXA	RMA	RTA	lnRXA	RC	LFI
Low income	0.29	0.29	<b>0.98</b>	-0.69	-1.22	-1.21	-6.48
Lower middle income	<b>1.44</b>	<b>1.54</b>	<b>0.56</b>	<b>0.98</b>	0.43	<b>1.01</b>	<b>11.17</b>
Upper middle income	<b>1.45</b>	<b>1.81</b>	<b>0.48</b>	<b>1.33</b>	<b>0.59</b>	<b>1.33</b>	<b>11.80</b>
High income	0.78	0.55	2.24	-1.69	-0.60	-1.41	-3.87
Africa	0.20	0.19	<b>0.84</b>	-0.65	-1.64	-1.47	-6.77
Americas	0.48	0.44	1.41	-0.97	-0.82	-1.16	-8.03
Brazil	0.25	0.25	<b>0.35</b>	-0.10	-1.40	-0.34	-0.79
Canada	0.51	0.51	1.09	-0.57	-0.67	-0.75	-5.45
Mexico	0.33	0.33	<b>0.43</b>	-0.10	-1.12	-0.28	-0.76
Remaining	0.35	0.35	<b>0.99</b>	-0.64	-1.06	-1.05	-6.41
USA	0.59	0.58	1.82	-1.24	-0.55	-1.15	-9.87
Asia-Pacific	<b>1.32</b>	<b>1.68</b>	<b>0.70</b>	<b>0.98</b>	<b>0.52</b>	<b>0.87</b>	<b>7.58</b>
Australia	0.16	0.16	1.46	-1.30	-1.84	-2.22	-13.36
China	<b>2.09</b>	<b>2.70</b>	<b>0.36</b>	<b>2.34</b>	<b>0.99</b>	<b>2.02</b>	<b>20.98</b>
Hong Kong, China	<b>1.35</b>	<b>1.41</b>	2.33	-0.92	0.34	-0.50	-7.18
India	<b>2.25</b>	<b>2.43</b>	<b>0.39</b>	<b>2.04</b>	<b>0.89</b>	<b>1.83</b>	<b>22.12</b>
Indonesia	<b>1.59</b>	<b>1.66</b>	<b>0.38</b>	<b>1.28</b>	<b>0.51</b>	<b>1.46</b>	<b>15.15</b>
Japan	0.24	0.24	<b>0.98</b>	-0.74	-1.45	-1.42	-7.69
Korea	0.18	0.17	<b>0.67</b>	-0.50	-1.76	-1.36	-5.28
Malaysia	0.61	0.62	<b>0.62</b>	0.00	-0.49	-0.01	<b>0.66</b>
Remaining	0.85	0.86	1.10	-0.23	-0.15	-0.24	-1.43
Singapore	0.73	0.73	1.27	-0.53	-0.31	-0.54	-4.68
Taiwan	0.20	0.20	<b>0.49</b>	-0.29	-1.60	-0.88	-2.86
Thailand	<b>1.09</b>	<b>1.12</b>	<b>0.71</b>	<b>0.41</b>	0.11	<b>0.46</b>	<b>5.60</b>
Vietnam	<b>1.50</b>	<b>1.57</b>	<b>0.70</b>	<b>0.88</b>	0.45	<b>0.81</b>	<b>10.53</b>
Europe	<b>1.04</b>	<b>1.10</b>	<b>0.96</b>	<b>0.14</b>	0.09	<b>0.13</b>	<b>2.13</b>
EU (27)	<b>1.05</b>	<b>1.11</b>	<b>0.88</b>	<b>0.22</b>	0.10	<b>0.23</b>	<b>2.95</b>
Austria	0.54	0.55	1.15	-0.60	-0.60	-0.74	-5.71
Belgium	0.52	0.52	<b>0.56</b>	-0.04	-0.65	-0.07	<b>0.19</b>
Czechia	0.74	0.76	<b>0.84</b>	-0.08	-0.28	-0.10	<b>0.01</b>
France	<b>2.42</b>	<b>2.68</b>	1.53	<b>1.15</b>	<b>0.98</b>	<b>0.56</b>	<b>13.44</b>
Germany	0.58	0.57	<b>0.79</b>	-0.22	-0.56	-0.33	-1.62
Ireland	0.33	0.33	<b>0.93</b>	-0.60	-1.11	-1.04	-5.89
Italy	<b>2.79</b>	<b>3.16</b>	1.05	<b>2.11</b>	<b>1.15</b>	<b>1.10</b>	<b>22.82</b>
Netherlands	0.62	0.62	<b>0.89</b>	-0.27	-0.48	-0.37	-2.15
Poland	<b>1.45</b>	<b>1.52</b>	<b>0.88</b>	<b>0.63</b>	0.42	<b>0.54</b>	<b>8.21</b>
Portugal	<b>1.47</b>	<b>1.53</b>	1.01	<b>0.52</b>	0.43	<b>0.42</b>	<b>7.01</b>
Remaining	0.60	0.60	<b>0.72</b>	-0.11	-0.50	-0.17	-0.49
Spain	<b>1.09</b>	<b>1.12</b>	<b>0.91</b>	<b>0.21</b>	0.11	<b>0.21</b>	<b>3.41</b>
Sweden	0.54	0.54	<b>0.74</b>	-0.20	-0.62	-0.32	-1.55
Other Europe	<b>1.00</b>	<b>1.03</b>	1.21	-0.18	0.03	-0.16	-0.57
Remaining	0.37	0.37	<b>0.95</b>	-0.57	-0.98	-0.93	-5.72
Russia	0.11	0.11	1.10	-0.99	-2.21	-2.31	-9.44
Switzerland	<b>1.57</b>	<b>1.65</b>	2.23	-0.58	<b>0.50</b>	-0.30	-3.84
Türkiye	<b>2.63</b>	<b>2.86</b>	<b>0.62</b>	<b>2.24</b>	<b>1.05</b>	<b>1.53</b>	<b>24.68</b>
UK	0.86	0.88	1.15	-0.27	-0.13	-0.27	-1.68
MENA	0.36	0.35	2.23	-1.88	-1.05	-1.85	-17.92
Remaining	0.31	0.31	1.43	-1.13	-1.18	-1.54	-11.34
Saudi Arabia	0.03	0.03	1.51	-1.48	-3.52	-3.93	-14.15
UAE	0.82	0.83	3.98	-3.14	-0.18	-1.56	-29.39
Areas NES	0.23	0.23	<b>0.07</b>	<b>0.16</b>	-1.47	<b>1.22</b>	<b>0.62</b>

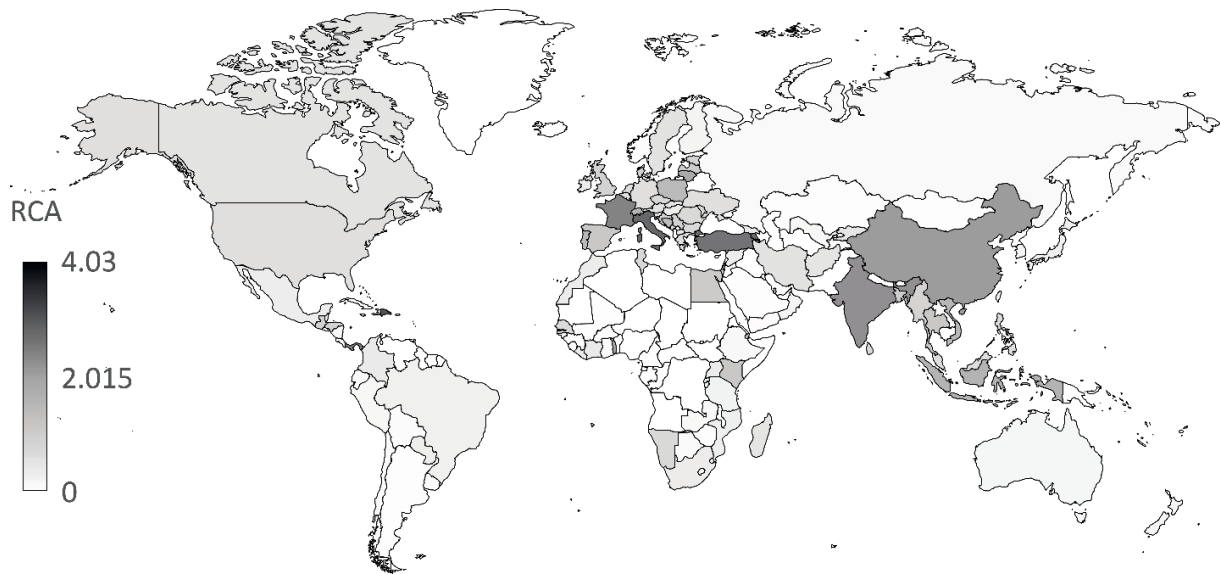
**Note:** Data in bold corresponds to competitiveness in international trade of creative industries.

**Source:** Please see the source of Table 1.

with what is presented in Figure 1 (Simsek and Artemenko, 2021).

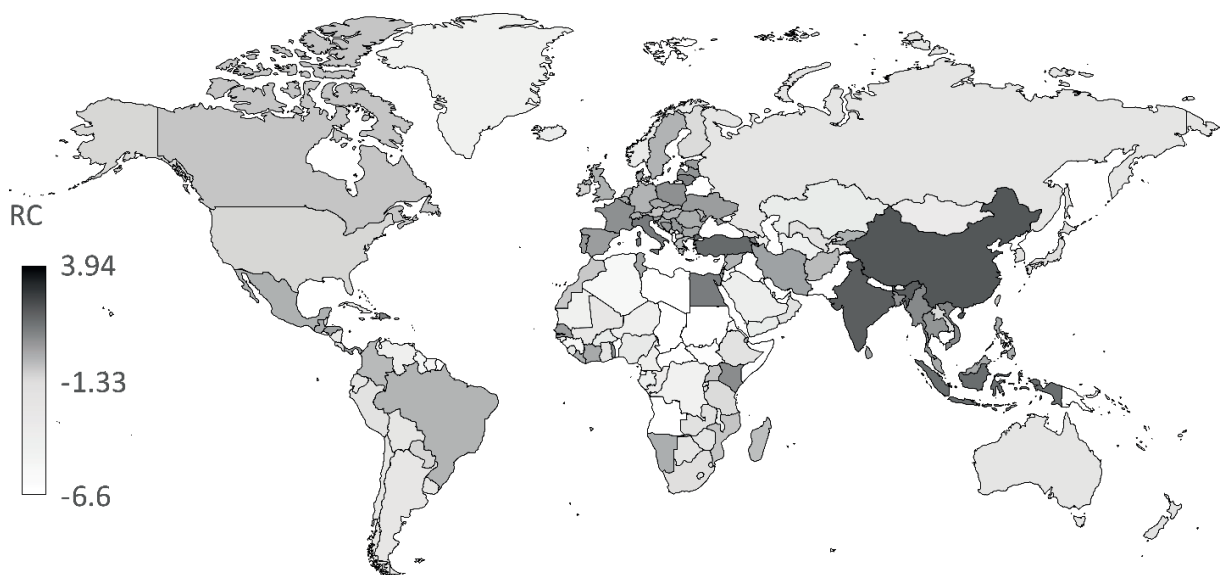
Figure 3 displays Lafay (1992)'s LFI across countries with data available in 2023. Compared with Figures 1 and 2, Figure 3 provides a much more contrasted representation of international trade competitiveness in creative industries across countries (please note that figures' scales are highly distinct from one another). Hence, Figure 3 clearly delineates the existence of the high

clustering of international trade competitiveness in creative industries around particular major Asia-Pacific and European countries, for example, Türkiye, Italy, India, China, Indonesia, France, Vietnam, Poland, Portugal, Thailand and Spain (countries ordered from highest to lowest index values of Lafay's LFI, please note the change in index order of countries in comparison with Balassa's RCA index in Figure 1 and Vollrath's RC index in Figure 2, please also note that Switzerland is dropped here since it could



**Figure 1.** Balassa's Revealed Comparative Advantage (RCA) Index across Countries in 2023

Source: Please see the source of Table 1.



**Figure 2.** Vollrath's Revealed Competitiveness (RC) Index across Countries in 2023

Source: Please see the source of Table 1.

not meet its internal demand and had trade deficit in creative industries in 2023 as indicated above) as reported in Table 5. These findings are also mostly confirmed in Figures 1 and 2 (Simsek and Mikhailo, 2021).

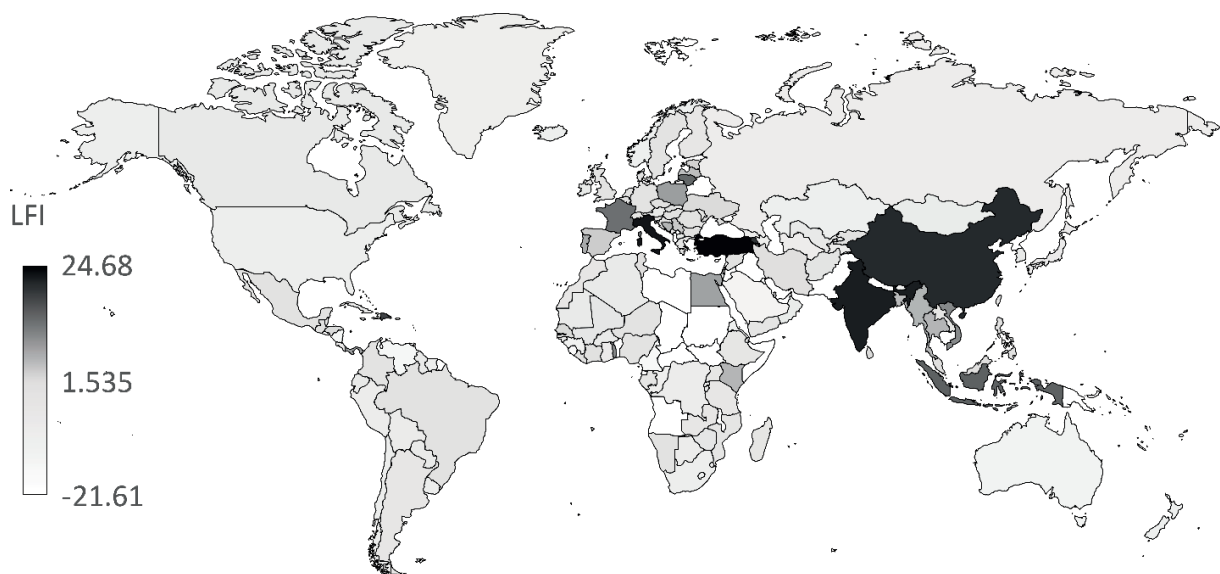
## 5. CONCLUSION

This study investigated international trade competitiveness of countries in creative industries widely argued to be key drivers of sustainable economic development in the literature. This study found out that 177 countries out of 226 countries translating into around 78% of all countries with data available in 2023 did not specialise, thus did not develop international competitiveness in creative industries based on seven extensively used indices of comparative advantages. Conversely, 19 countries out of 226 countries, around 8% of all assessed countries strongly developed comparative advantages or had international competitiveness in creative industries. International trade of creative industries also concentrated in economic groups, regions and major economies. There emerged clustering of international competitiveness in creative industries around particular major countries in Asia-Pacific and Europe, for instance, Türkiye, Italy, India, China, Indonesia, France, Vietnam, Poland, Portugal, Thailand and Spain (ordered from highest to lowest index values of Lafay's LFI). Therefore, it appears that

especially low-income countries cannot seize the opportunities of creative industries fitting well into comparative advantages structures of these countries. On the hand, more studies are required to reveal underlying causes of specialisation or having international competitiveness in creative industries that can guide effective policy making.

In addition, this study did not provide support for intra-industry trade as only 7 specific countries out of 226 countries translating into around 3% of all countries, such as, Hong Kong, China and Switzerland emerged to have comparative advantages or specialise in creative industries (1.35 index value of Balassa's RCA and 1.57 index values of Balassa's RCA, respectively). Nevertheless, these countries could not satisfy internal market and had trade deficits in creative industries (-7.18 index value of Lafay's LFI and -3.84 index value of Lafay's LFI, respectively). On the other hand, aside from countries with comparative advantages, there existed 155 countries out of 226 countries, about 68.6% of all countries simultaneously having Balassa's RCA index values of less than 1, Vollrath's RC index values of less than 0 and Lafay's LFI values of less than 0 leading to comparative disadvantages in creative industries. As result, this study provided support for inter-industry trade.

Furthermore, this study revealed that when export of creative industries products in the world



**Figure 3.** Lafay's Index of International Specialisation (LFI) across Countries in 2023

**Source:** Please see the source of Table 1.



examined, 10 creative industries products out of 262 products appeared to account for 52.4% of all creative industries export in the world in 2023 pointing out to the existence of high product concentration in creative industries. Therefore, to have more and accurate insights into dynamics and structures of international competitiveness of countries in creative industries, there is a need to examine countries at creative industries product level rather than just investigating countries at creative industries level. It is also of significance to consider technological content of each creative industries products to gauge economic value that the particular creative industries product adds to countries.

Due to accurate data limitations, this study could not consider creative industries international trade in services that is reported to be more significant than creative industries international trade in products. In addition to this, investigating interactions and establishing the link between creative industries and other closely related industries, such as, the tourism industry could be another direction in the research. Furthermore, this study, because of space limitations, focused on the latest year international trade data available in creative industries, 2023. Nevertheless, a dynamic approach could have been taken to consider changes in creative industries over the years to have a more accurate insight into trade structures and international specialisation patterns of countries and explain underlying reasons for variations in international competitiveness of countries in creative industries over the years that can better inform policy making.

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