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The Inclusive and Sustainable Competitive Industrial Performance Index (ISCIP)

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The inclusive and sustainable competitive industrial performance index (ISCIP)

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Abstract

The targets of the Sustainable Development Goals (SDGs) induce countries to adopt appropriate diagnostics and monitoring and evaluation tools to design strategic policies for development. SDG-9 “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation” calls on developing countries to boost industrialization by increasing their competitiveness. The Competitiveness Industrial Performance Index (CIP) is a flagship index designed by the United Nations Industrial Development Organization (UNIDO) to measure the performance of countries’ industrial competitiveness. The challenge to achieve the SDG objectives, including the social and environmental targets, stimulates countries to develop new diagnostics and monitoring tools to assess their performance in different dimensions of sustainability. The Inclusive and Sustainable Competitive Industrial Performance Index (ISCIP) is a first attempt to expand the CIP index approach by including industrial competitiveness, social and environmental indicators. Our results indicate that compared to the traditional CIP index, countries’ ISCIP rankings change, but that high income countries tend to remain at the top of the list. Using different methods of aggregation, the results are surprisingly consistent.

Introduction

Many countries around the world have not yet industrialized. This undermines their path towards development. As corroborated in the structural change literature (Kaldor 1960, Fagerberg and Verspagen 1999, Cantore et al. 2017), manufacturing is an engine of growth. The development of the manufacturing sector triggers innovation, the formation of backward and forward linkages with other sectors of the economy and economies of scale. The preoccupation of non-industrialized countries with the agricultural sector often translates into vulnerability to production and exports of a few commodities with fluctuating prices.

The pivotal role the manufacturing sector plays in development is reflected in SDG-9 of the 2030 Agenda. SDG-9 promotes the "Building of resilient infrastructure, inclusive and sustainable industrialization and of innovation". In other words, the international community acknowledges the significance of industrialization if countries are to climb the ladder of development.

UNIDO's Competitive Industrial Performance Index (CIP index, UNIDO, 2018) ranks the capacity of countries to develop their industry by leveraging on improving their competitiveness. The CIP is an output oriented composite index based on the underlying notion that by promoting competitiveness, countries maximize economic efficiency in the allocation of scarce resources and are thus able to industrialize more effectively. The CIP index aggregates the performance of eight sub-indicators representing a country's level of industrial performance into a synthetic value, which is indirectly derived from their competitiveness performance. From this perspective, the CIP index fundamentally differs from indices such as the World Bank Ease of Doing Business (World Bank, 2020), which is an input-driven composite index that represents the performance of countries in terms of their competitiveness drivers. The CIP index is used to extrapolate evidence-based industrial strategies by analysing CIP sub-components and the synthesis CIP aggregated value. The current version of the CIP index does not include both an environmental and a social dimension. Only the 2018 issue of the CIP report included a CO_2 adjusted CIP index, correcting CIP index values by incorporating CO_2 emissions, which is one of the most relevant indicators for monitoring countries' contribution to global warming.

There is an abundance of literature on composite indices that encompass economic, social and environmental indicators and different techniques used to assess these. The Human Development Index is one of the most renowned composite indices which includes economic and social indicators such as GDP, life expectancy and education, but it does not cover environmental indicators (UNDP, 2020). The Environmental Performance Index provides a data-driven summary of the level of sustainability of 180 countries based on 32 indicators encompassing

economic, social and environmental aspects (Wendling et al., 2020). Bosetti and Buchner (2009) use a Data Envelopment Analysis (DEA) approach to aggregate economic, social and environmental indicators to create a synthetic value. Munda (2005) develops a Sustainability Index using a multicriteria analysis approach (Munda, 2020).

Despite a wide range of examples of indices encompassing economic, social and environmental indicators, the literature on composite indices reflecting industrial performance is still in its infancy, even though it has recently flourished. A New performance indices with a specific focus on SDG-9 and industrial indicators have been proposed. Kynclova et al. (2020), for example, propose a new composite index to assess the performance countries in terms of achieving the SDG-9 targets. Borrowing from a methodology developed by Herrero et al. (2020), Saieed et al. (2021) develop an index that reflects the progress countries have made towards achieving the SDG-9 indicators. Yuan et al. (2020) use a Data Envelopment Analysis (DEA) approach to rank the performance of China's provinces in creating manufacturing value added (MVA) by minimizing negative social and environmental impacts. Cheng and Cantore (2020) conduct a similar exercise to explore the performance of countries. Halkos et al. (2020) develop a new index to assess the relevance of green industrial sectors in countries' economies.

The present study represents an original contribution to the current literature. To the best of our knowledge, none of the existing studies has developed an index of countries' industrial competitiveness encompassing both inclusiveness and sustainability indicators. Moreover, none of the existing studies compares equal weights vs data envelopment analysis aggregation approaches in their investigation of countries' performances.

The remainder of the study is structured as follows: Section 2 presents the methodology, Section 3 discusses the results, and Section 4 concludes.

2. Methodology

2.1 CIP index

The CIP index is a composite index that is composed of eight sub-indicators representing four dimensions (Table 1). The eight sub-indicators encompass domestic production as well as exports. The CIP index captures the capacity of countries to produce and export manufactured goods, their size (impact) at the global scale and their level of structural transformation. As substantiated in the structural change literature, countries climbing the ladder of development tend to be characterized by a higher share of manufacturing production and exports in GDP and higher

production in and exports from technology-intensive sectors (Haraguchi et al., 2017)[1]. The sub-indicators of the CIP index only partially overlap with the universally approved SDG-9 indicators which do not fully capture the competitiveness dimension, as they exclude trade indicators and the impact indicators of the CIP index. The CIP index, in turn, does not include the SDG-9 environmental performance indicator of carbon emissions intensity (emissions/manufacturing value added ratio).

Sub-indicators were initially aggregated through an equal weights approach. A revised CIP methodology now includes a geometric means approach to avoid biases deriving from the different variance of the sub-indicators.

Table 1 Indicators of the CIP index

Country's manufacturing value added per capita	Capacity
Country's manufacturing exports per capita	
Share of country's manufacturing value added in world manufacturing value added	Impact
Share of country's manufacturing exports in world manufacturing exports	
Share of country's manufacturing value added in country's GDP	Structural change
Share of country's manufacturing exports in total country exports	
Share of country's medium- and high-tech industrial sectors in country's manufacturing value added	
Share of country's medium- and high – tech industrial sectors in country's manufacturing exports	

2.2. ISCIP index

The present study expands the CIP framework by including social and environmental indicators using two approaches. Through the "manufacturing-specific approach", the CIP index is enhanced by including a social and an environmental manufacturing-related indicator. These two indicators are the SDG-9-related carbon emissions productivity (manufacturing value added/carbon emissions ratio representing the inverse of the SDG-9's carbon intensity) and the employment

[1] The definition of medium- and high-tech sectors is borrowed from the OECD's classification (Galindo – Rueda and Verger 2016).

intensity (manufacturing employment/population ratio) indicators. The underlying idea of this approach is to develop an index that represents the level of countries' industrial competitiveness obtained by creating synergies with manufacturing-specific environmental and social impacts, such as the capacity to produce manufacturing value added from each single tonne of manufacturing CO_2 emissions and the capacity to generate manufacturing employment.

This "whole economy approach" enriches the CIP index by including both a social and an environmental indicator which represents a country's entire economy. The two selected environmental and social indicators, respectively, are the overall economy's carbon productivity and the percentage of population above the poverty line. The underlying idea of this approach is to develop an index that represents the level of countries' industrial competitiveness which is achieved by generating positive spillovers in terms of poverty eradication and an increase in carbon productivity. The "whole economy approach" is more aligned to Kaldor's concept of manufacturing as an engine of economic growth. If manufacturing competitiveness triggers overall economic growth, a synthetic index should be able to detect the level of countries' industrial competitiveness which simultaneously generates positive spillovers in terms of poverty eradication and efficiency in progressively reducing CO_2 negative externalities.

2.3 Normalization and aggregation

Each sub-indicator is normalized according to the 1 – 100 scale aligned to similar practices in the literature (Halkos et al., 2000). To aggregate the values of the CIP index and of environmental and social indicators, we use an equal weights approach (e.g. Human Development Index), a geometric means approach (e.g. Kynclova et al., 2020) and data envelopment analysis. The equal weights approach is justified on a subjective basis that may be subject to perfect substitutability bias (Munda, 2012). It assumes that the competitiveness, social and environmental indicators carry the same relevance in explaining countries' performance. This assumption may be debatable, especially for developing countries. Practitioners and policymakers may have reservations about attributing the same degree of relevance to all dimensions of sustainability at every stage of development and may question the discretionary choice in the selection of weights. The geometric means approach may face a similar bias, even though it mitigates biases generated by certain sub-indicators characterized by very polarized distributions that can affect the index's final synthesis value. The DEA approach (Charnes, Cooper and Rhodes, 1978) may overcome the arbitrary equal weights assignment argument by assigning weights on the basis of an optimization algorithm. Rankings are produced that represent the capacity of producing a certain "*good*" by minimizing "*bads*". One interesting feature of this approach is that it is possible to plot countries that lie at the efficiency frontier and to rank countries by estimating their capacity to minimize

"*bads*" by assuming the same level of "*good*". In our exercise, the "*good*" is industrial competitiveness represented by the CIP index and the "*bads*" are manufacturing carbon emissions intensity, the population to manufacturing jobs ratio in the "manufacturing-specific approach", and the poverty rate and total carbon emissions intensity in the "whole economy approach". The analytical framework is explained in Table 2.

Table 2 Synthesis of the ISCIP index

Manufacturing-specific approach			
	Equal weights approach	Geometric means approach	DEA approach
Economic	CIP	CIP	CIP ("good")
Social	Manufacturing employment intensity (manufacturing employment/population ratio)	Employment intensity (manufacturing employment/population ratio)	Population to manufacturing jobs ratio ("bad")
Environmental	Manufacturing carbon productivity (manufacturing value added/manufacturing carbon emissions ratio)	Manufacturing carbon productivity (manufacturing value added/manufacturing carbon emissions ratio)	Manufacturing carbon intensity (manufacturing CO_2 emissions/manufacturing value added ratio) ("bad")
Whole economy approach			
Economic	CIP	CIP	CIP ("good")
Social	% of population falling above the poverty line (USD 5.50)	% of population falling above the poverty line (USD 5.50)	% of population below the poverty line (USD 5.50) ("bad")
Environmental	Carbon productivity (GDP/total carbon emissions ratio)	Carbon productivity (GDP/total carbon emissions ratio)	Carbon intensity (total CO_2 emissions/GDP ratio) ("bad")

The data are drawn from internationally recognized sources. Manufacturing-related indicators are taken from the UNIDO CIP database[2] and the UNIDO SDGs monitoring database[3]. Data on poverty, total emissions and population are derived from the World Development Indicators[4]. Country coverage is higher for the manufacturing-specific approach vs the whole economy approach (124 vs 62 countries) as poverty data have more missing variables. Employment data is

[2] https://stat.unido.org/cip/
[3] https://stat.unido.org/SDG
[4] https://databank.worldbank.org/source/world-development-indicators

taken from the International Labour Organization's (ILO) modelled estimates database[5]. The time coverage is from 2013 to 2016, which guarantees highest comparability across the two approaches.

3 Results

The results for 2016 reveal that only high income countries and a few upper middle income countries (e.g. China in the manufacturing-specific equal weights approach and Malaysia and Mexico in the DEA whole economy approach) are included in the top 10 according to different approaches and methodologies.

As illustrated in Figure 1, over the period 2013–2016, countries with a higher level of income per capita were those with the highest levels of inclusive and sustainable industrial performance. The numbers in Table 1 and Figure 1 suggest that countries, on average, need to industrialize to climb the ladder of development, as higher levels of income are also associated with higher levels of industrial competitiveness. The slightly surprising result is that industrialization has many positive impacts on social and environmental aspects. From a manufacturing-specific approach perspective, industrial competitiveness has positive social spillovers, such as manufacturing employment, and minimizes negative externalities, such as CO_2 emissions intensity. At higher income levels, countries, on average, tend to produce more value added with the same level of emissions (even though total emissions in absolute terms may increase) and generate more employment through the manufacturing sector. The whole economy approach further suggests that these positive effects within the manufacturing sector have a positive spillover effect on the whole economy by eradicating poverty through job creation in the manufacturing and in other sectors, and by increasing the economic system's overall environmental efficiency through technological change.

[5] https://ilostat.ilo.org/topics/employment/

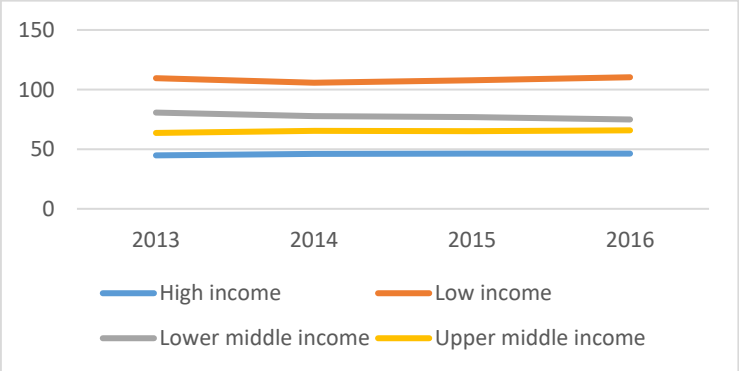
Table 3 Ranking of the top-10 countries according to different approaches and methodologies (2016)

	ISCIP Manufacturing-specific Equal weights	ISCIP Manufacturing-specific Geometric means	ISCIP Manufacturing-specific DEA	ISCIP Total economy Equal weights	ISCIP Total economy Geometric means	ISCIP Total economy DEA
1	Germany	Switzerland	Switzerland*	Switzerland	Switzerland	Switzerland**
2	China, Taiwan Province	Ireland	Ireland*	Germany	Ireland	Germany**
3	Switzerland	Germany	Germany*	Ireland	Sweden	Finland
4	Ireland	Italy	China, Taiwan Province*	Sweden	Germany	Malaysia
5	China	Republic of Korea	Czechia	United States of America	Denmark	Ireland
6	Czechia	China, Taiwan Province	Republic of Korea	Denmark	United Kingdom of Great Britain and Northern Ireland	Hungary
7	Republic of Korea	Japan	Japan	United Kingdom of Great Britain and Northern Ireland	Austria	China
8	Japan	Czechia	Italy	Belgium	United States of America	United States of America
9	Italy	Sweden	China	Austria	Belgium	Denmark
10	Slovenia	Denmark	United States of America	Netherlands	Netherlands	Mexico

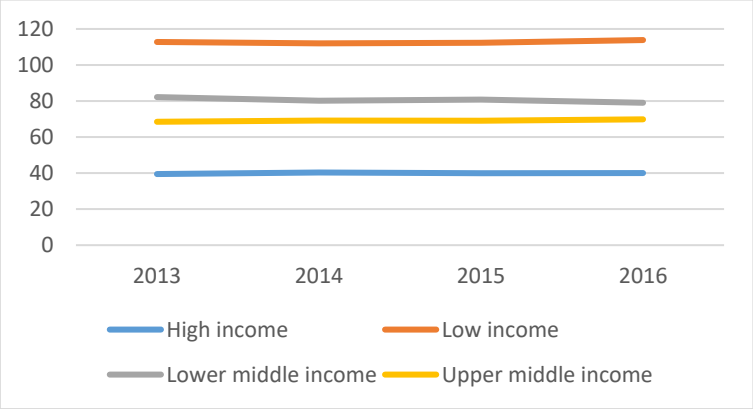
*Switzerland, Ireland, Germany and China, Taiwan Province are ranked first and lie on the efficiency frontier
**Switzerland, Ireland, Germany and China, Taiwan Province are ranked first and lie on the efficiency frontier

Figure 1 **Average ISCIP score by income group across different approaches and methodologies. Countries are grouped into four income classifications based on the World Bank Atlas Method (2019)**

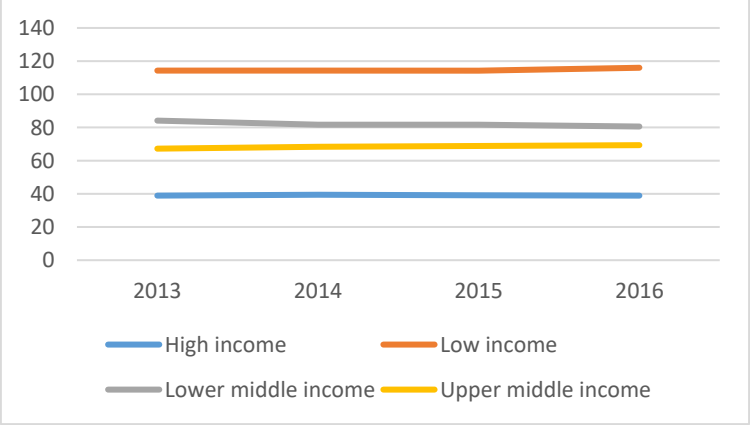
a) Average ranking. Within manufacturing approach. Equal weights



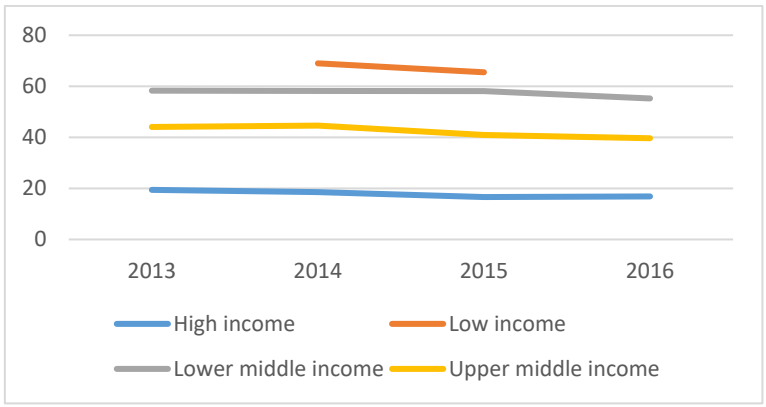
b) Average ranking. Within manufacturing approach. Geometric mean



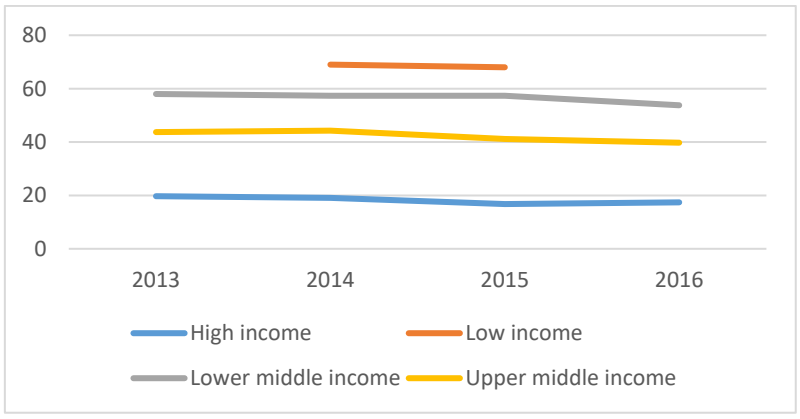
c) Average ranking. Within manufacturing approach. DEA



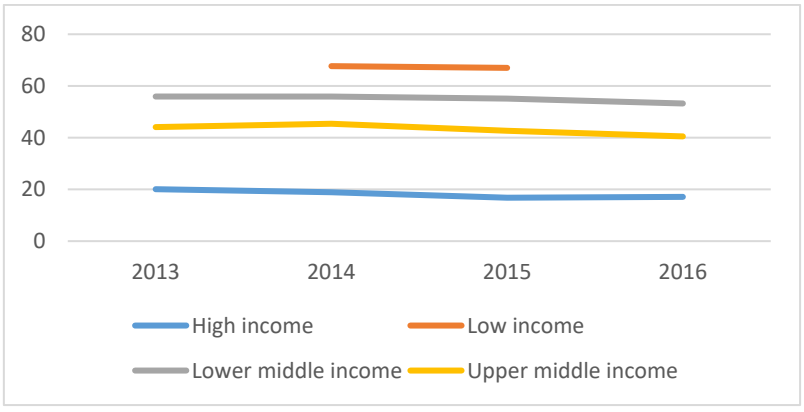
d) Average ranking. Whole economy approach. Equal weights



e) Average ranking. Whole economy approach. Geometric mean



f) Average ranking. Whole economy approach. DEA

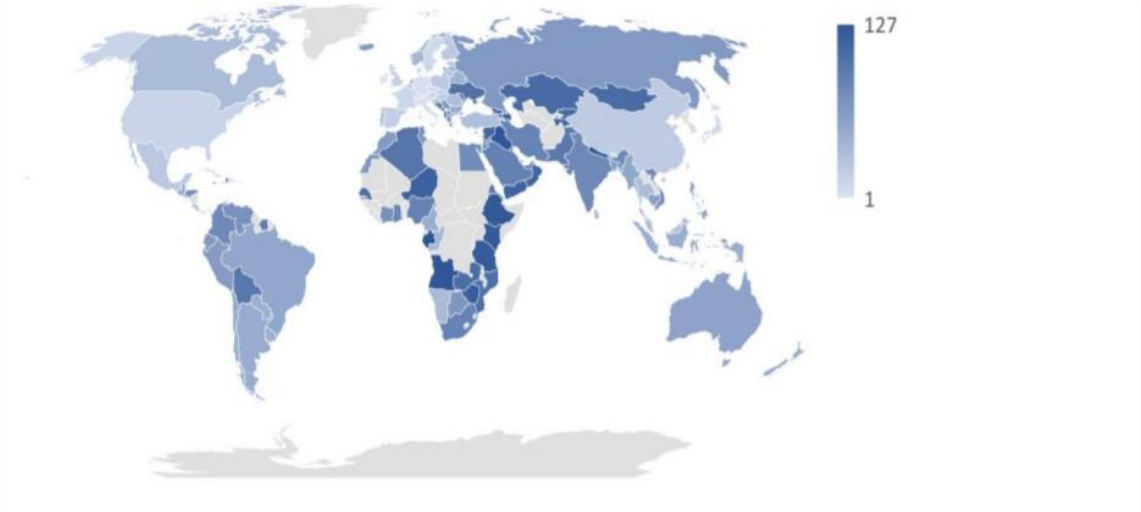


The maps below illustrate that industrialization in some regions in Africa, Latin America and Asia is lacking and that those regions are falling behind in the ISCIP index ranking according to all approaches and methodologies. This suggests that these countries have generally missed opportunities related to job creation, poverty eradication and environmental efficiency.

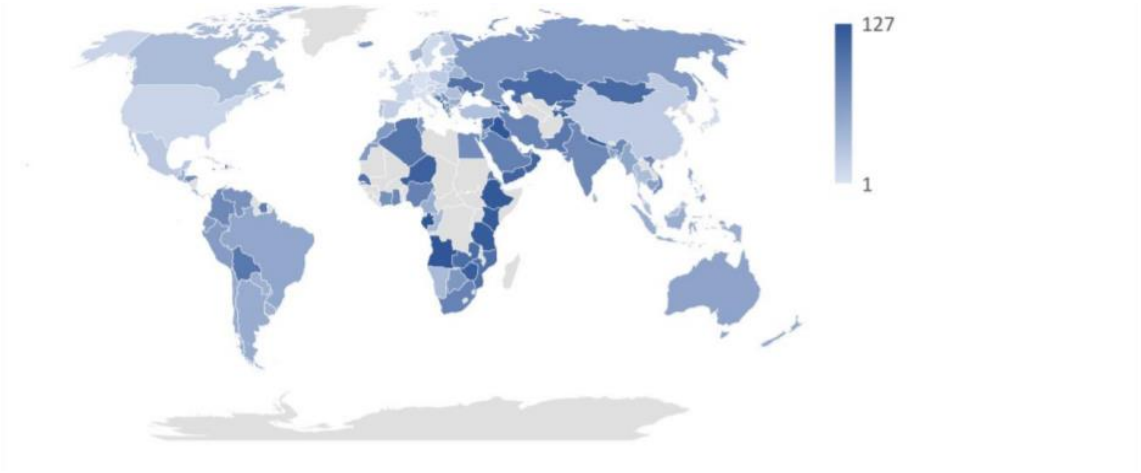
Figure 2 World maps of ISCIP indices with different methodologies and approaches (2016)

a) World ranking. Within manufacturing approach. Equal weights

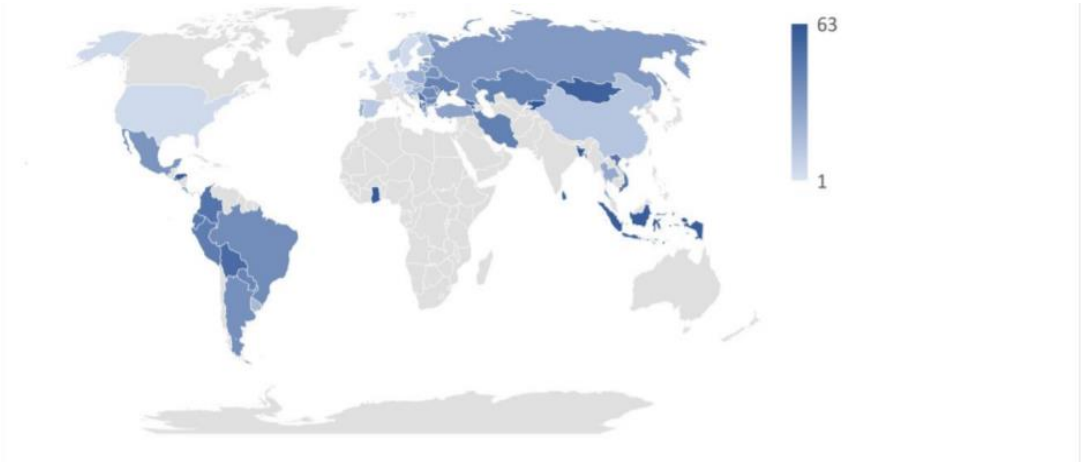
b) World ranking. Within manufacturing approach. Geometric mean



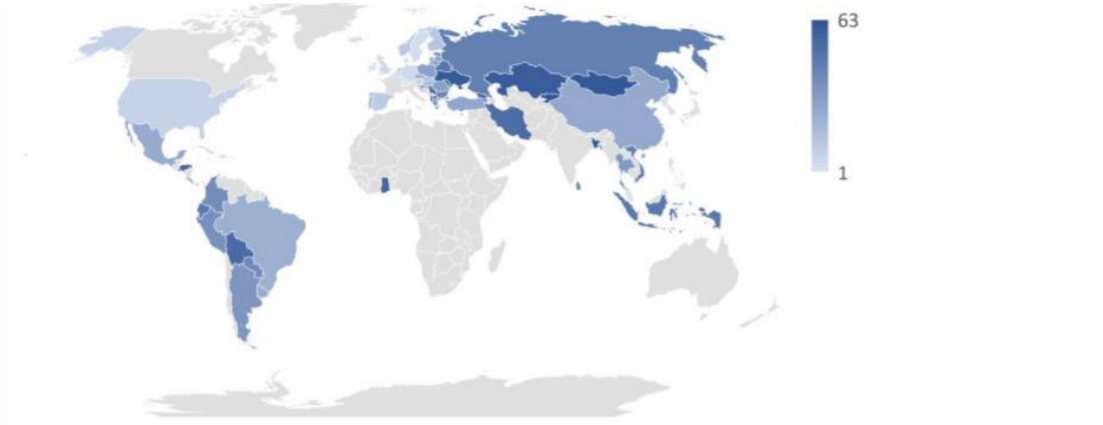
c) World ranking. Within manufacturing approach. DEA



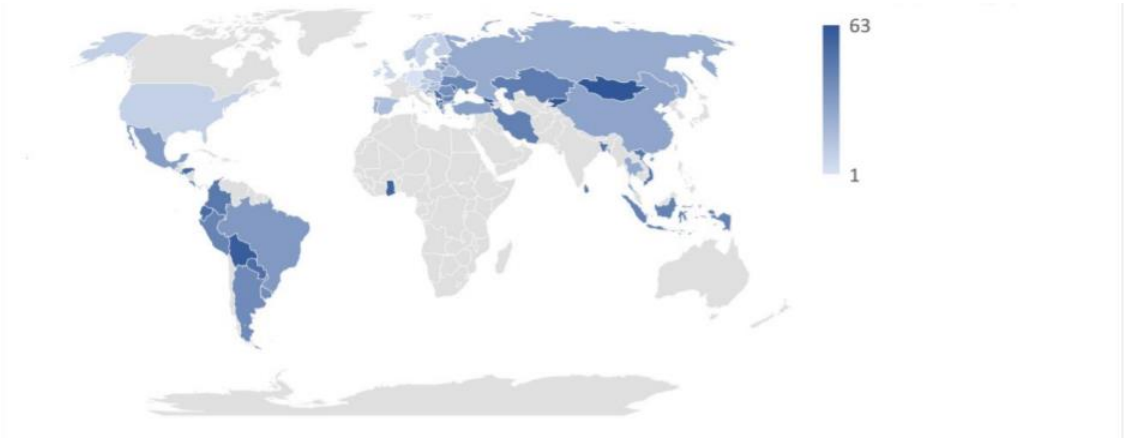
d) World ranking. Whole economy approoach. Equal weights



e) World ranking. Whole economy approoach. Geometric mean



f) World ranking. Whole economy approoach. DEA



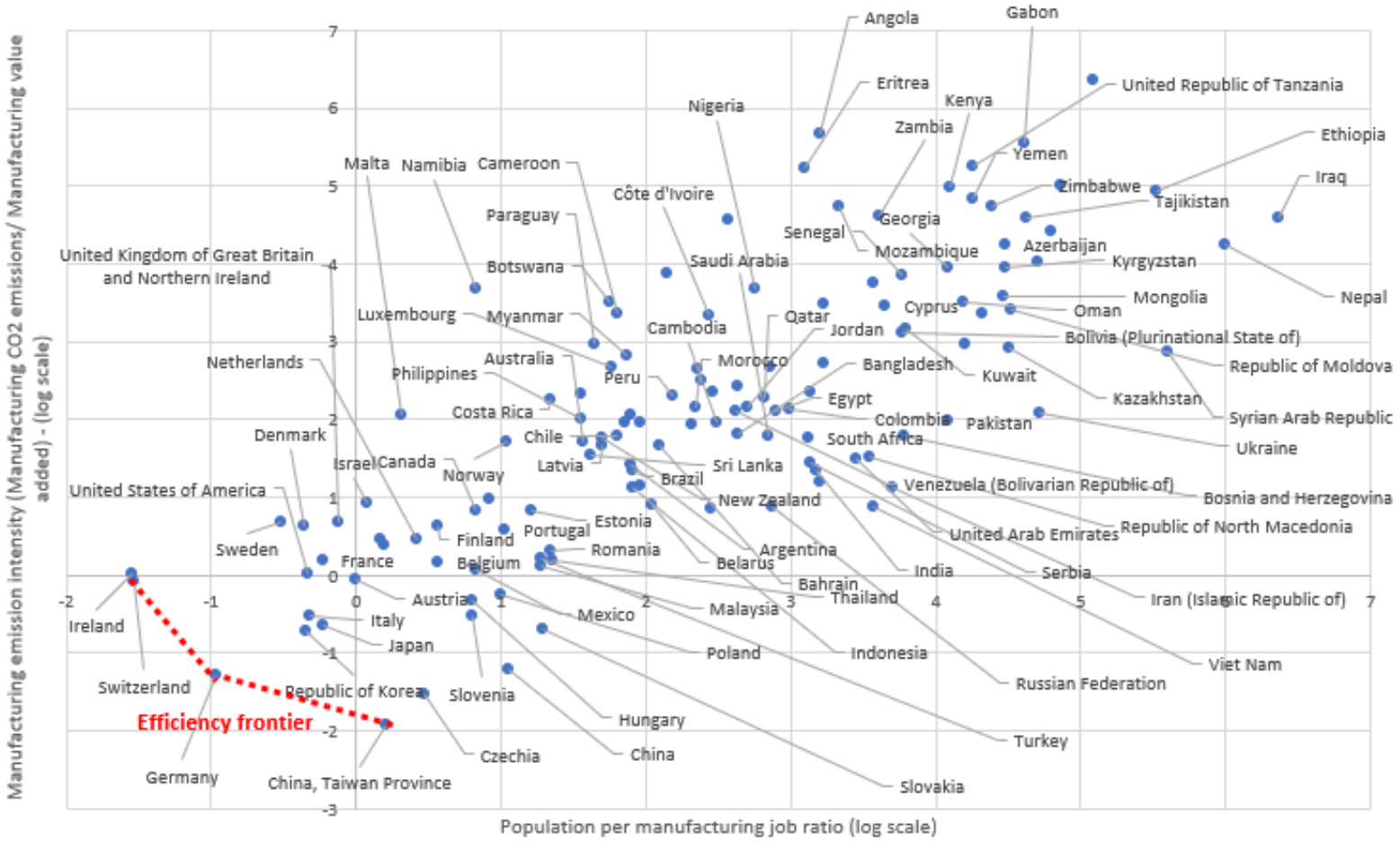
The Spearman correlation analysis shows a high correlation between the ISCIP index calculated with different approaches and methodologies and the CIP index. The similarity of the results when using the equal weights, geometric weight and the DEA approach suggests that when countries' industrial competitiveness improves and their level of income increases, they are able to generate positive effects for social and environmental aspects.

The similarity of the results of equal weight and of the geometric mean of the DEA approach indicates that countries that industrialize also acquire the necessary capabilities to become more efficient in reducing emissions from additional generated value added and more effective in creating jobs in the manufacturing sector by diversifying the economy through forward and backward linkage effects. Figure 3 presents the efficiency frontier maps of the ISCIP index using the manufacturing-specific approach. Germany, China, Taiwan Province, Ireland and Switzerland lie at the frontier. These countries have the ability to reach similar levels of industrial competitiveness by reducing manufacturing emissions intensity and population per manufacturing job ratio, which represents the inability to fight poverty through industrial employment. Countries that lie outside the frontier should redirect their strategic policies towards further reductions of manufacturing carbon intensity or the population/manufacturing job ratio.

Table 4 Spearman index illustrating the correlation between the CIP and the ISCIP indices using different approaches

CIP	**Equal weight**		**Geometric weight**		**DEA**	
Spearman correlation	Manufacturing-specific approach	Whole economy approach	Manufacturing-specific approach	Whole economy approach	Manufacturing-specific approach	Whole economy approach
2013	0.7996	0.8176	0.8433	0.8411	0.9102	0.8725
2014	0.7601	0.8127	0.8298	0.8466	0.9081	0.8508
2015	0.7838	0.8293	0.8323	0.8452	0.9061	0.8976
2016	0.7824	0.8276	0.8316	0.8304	0.9123	0.8858

Figure 3 **Efficiency frontier map. Manufacturing-specific approach (2016)**



Conclusions

The results of the present study have implications for industrial policy. Some policymakers and practitioners may question the manufacturing sector's capacity to serve as an engine of growth and to create jobs, especially in developing countries. They emphasize the role of services for development and the need to design strategies of growth based on the revealed comparative advantage in primary products. However, the current development debate is also concerned about the impact of industrialization on the environment and climate change. Currently developing countries could replicate the past "brown" growth path of development of high income countries through energy intensive and polluting industries.

Our study contributes to this debate, finding that industrial competitiveness also generates positive social effects in terms of job creation, poverty eradication and environmental efficiency. These results do not exclude that industrial competitiveness may have negative impacts in terms of absolute emissions, other environmental aspects or other social indicators, such as inequality. However, the present study contributes to the proposition that industrial competitiveness can provide synergies with important environmental and social aspects. If countries are to pursue development through industrialization, policymakers need to effectively promote these synergies. The role of industrial policy will be pivotal in minimizing trade-offs across different dimensions of sustainability and to fully develop the potential of the inclusive and sustainable industrial development agenda.

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Appendix 1 Complete rankings for 2016

Manufacturing specific approach (Equal weight)	Ranking	Whole economy approach (Equal weight)	Ranking	Manufacturing specific approach (Geometric weight)	Ranking	Whole economy approach (Geometric weight)	Ranking	Manufacturing specific approach (DEA)	Ranking	Whole economy approach (DEA)	Ranking
1	Germany	1	Switzerland	1	Switzerland	1	Switzerland	1	Switzerland	1	Switzerland
2	China, Taiwan Province	2	Germany	2	Ireland	2	Ireland	1	Ireland	1	Germany
3	Switzerland	3	Ireland	3	Germany	3	Sweden	1	Germany	3	Belgium
4	Ireland	4	Sweden	4	Italy	4	Germany	1	China, Taiwan Province	4	Netherlands
5	China	5	United States of America	5	Republic of Korea	5	Denmark	5	Czechia	5	Ireland
6	Czechia	6	Denmark	6	China, Taiwan Province	6	United Kingdom of Great Britain and Northern Ireland	6	Republic of Korea	6	United Kingdom of Great Britain and Northern Ireland
7	Republic of Korea	7	United Kingdom of Great Britain and Northern Ireland	7	Japan	7	Austria	7	Japan	7	Sweden
8	Japan	8	Belgium	8	Czechia	8	United States of America	8	Italy	8	Denmark
9	Italy	9	Austria	9	Sweden	9	Belgium	9	China	9	United States of America

10	Slovenia	10	Netherlands	10	Denmark	10	Netherlands	10	United States of America	10	Finland
11	Namibia	11	Norway	11	Austria	11	Spain	11	Sweden	11	Czechia
12	Slovakia	12	Spain	12	France	12	Norway	12	France	12	Slovenia
13	United States of America	13	Finland	13	United States of America	13	Finland	13	Denmark	13	Austria
14	Malta	14	China	14	Slovenia	14	Israel	14	Austria	14	Norway
15	Hungary	15	Malta	15	Malta	15	Luxembourg	15	Slovenia	15	Luxembourg
16	Austria	16	Israel	16	Israel	16	Portugal	16	United Kingdom of Great Britain and Northern Ireland	16	Poland
17	Poland	17	Czechia	17	United Kingdom of Great Britain and Northern Ireland	17	Hungary	17	Hungary	17	Spain
18	France	18	Luxembourg	18	Spain	18	Slovenia	18	Slovakia	18	Hungary
19	Sweden	19	Uruguay	19	Hungary	19	Slovakia	19	Poland	19	Israel
20	Denmark	20	Hungary	20	Singapore	20	Malta	20	Spain	20	Belarus
21	Belgium	21	Slovenia	21	China	21	Czechia	21	Singapore	21	Slovakia
22	Mexico	22	Slovakia	22	Poland	22	Costa Rica	22	Israel	22	Malta
23	Singapore	23	Portugal	23	Finland	23	Brazil	23	Mexico	23	Portugal
24	Malaysia	24	Poland	24	Mexico	24	Uruguay	24	Netherlands	24	Estonia

25	Turkey	25	Costa Rica	25	Slovakia	25	Mexico	25	Belgium	25	Russian Federation
26	Romania	26	Thailand	26	Belgium	26	China	26	Finland	26	Thailand
27	Spain	27	Lithuania	27	Netherlands	27	Turkey	27	Malaysia	27	Cyprus
28	Thailand	28	Latvia	28	Lithuania	28	Lithuania	28	Turkey	28	China
29	Netherlands	29	Turkey	29	Portugal	29	Poland	29	Thailand	29	Lithuania
30	Estonia	30	Greece	30	Estonia	30	Romania	30	Romania	30	Turkey
31	United Kingdom of Great Britain and Northern Ireland	31	Croatia	31	Turkey	31	Latvia	31	Canada	31	Mexico
32	Portugal	32	Cyprus	32	Romania	32	Greece	32	Malta	32	Croatia
33	Sri Lanka	33	Russian Federation	33	Malaysia	33	Thailand	33	Portugal	33	Brazil
34	Finland	34	Estonia	34	Thailand	34	Argentina	34	Lithuania	34	Latvia
35	Israel	35	Mexico	35	Canada	35	Croatia	35	Estonia	35	Greece
36	Congo	36	Belarus	36	Namibia	36	Peru	36	Norway	36	Costa Rica
37	Bulgaria	37	Argentina	37	Sri Lanka	37	Estonia	37	Belarus	37	Romania
38	Lithuania	38	Brazil	38	Norway	38	Colombia	38	Namibia	38	Uruguay
39	Belarus	39	Romania	39	Congo	39	Paraguay	39	Indonesia	39	Argentina
40	Tunisia	40	Bulgaria	40	Costa Rica	40	El Salvador	40	Bulgaria	40	Ukraine
41	Cameroon	41	Paraguay	41	Latvia	41	Cyprus	41	Croatia	41	Bulgaria
42	Croatia	42	Ukraine	42	Croatia	42	Sri Lanka	42	Australia	42	Peru
43	Canada	43	Kazakhstan	43	Belarus	43	Bulgaria	43	Sri Lanka	43	Indonesia

44	Republic of North Macedonia	44	Iran (Islamic Republic of)	44	Uruguay	44	Russian Federation	44	Costa Rica	44	Iran (Islamic Republic of)
45	Viet Nam	45	Peru	45	Paraguay	45	Viet Nam	45	Brazil	45	Kazakhstan
46	Paraguay	46	Republic of Moldova	46	Guatemala	46	Ecuador	46	Philippines	46	Sri Lanka
47	Cambodia	47	Ecuador	47	Indonesia	47	Indonesia	47	Latvia	47	Colombia
48	Iran (Islamic Republic of)	48	Republic of North Macedonia	48	Cameroon	48	Belarus	48	Argentina	48	Viet Nam
49	Russian Federation	49	Colombia	49	Argentina	49	Republic of North Macedonia	49	Russian Federation	49	El Salvador
50	Serbia	50	Viet Nam	50	Chile	50	Albania	50	New Zealand	50	Bangladesh
51	Indonesia	51	Serbia	51	Bulgaria	51	Serbia	51	Viet Nam	51	Paraguay
52	Bosnia and Herzegovina	52	El Salvador	52	New Zealand	52	Iran (Islamic Republic of)	52	Uruguay	52	Serbia
53	Latvia	53	Bolivia (Plurinational State of)	53	Brazil	53	Bolivia (Plurinational State of)	53	Chile	53	Ecuador
54	El Salvador	54	Albania	54	Myanmar	54	Armenia	54	Guatemala	54	Republic of North Macedonia
55	Guatemala	55	Sri Lanka	55	Philippines	55	Ghana	55	Bahrain	55	Honduras
56	Argentina	56	Armenia	56	El Salvador	56	Honduras	56	Congo	56	Ghana
57	Uruguay	57	Mongolia	57	Australia	57	Republic of Moldova	57	Greece	57	Albania
58	Bangladesh	58	Georgia	58	Bahrain	58	Georgia	58	Tunisia	58	Armenia

59	Honduras	59	Indonesia	59	Cambodia	59	Kazakhstan	59	Iran (Islamic Republic of)	59	Bolivia (Plurinational State of)
60	Mauritius	60	Ghana	60	Greece	60	Ukraine	60	Luxembourg	60	Georgia
61	Brazil	61	Honduras	61	Mauritius	61	Mongolia	61	India	61	Republic of Moldova
62	Costa Rica	62	Kyrgyzstan	62	Bangladesh	62	Kyrgyzstan	62	Paraguay	62	Mongolia
63	Pakistan	63	Bangladesh	63	Peru	63	Bangladesh	63	Serbia	63	Kyrgyzstan
64	Ghana			64	Ecuador			64	Myanmar		
65	Myanmar			65	Morocco			65	Bangladesh		
66	India			66	Russian Federation			66	El Salvador		
67	Bahrain			67	Botswana			67	Saudi Arabia		
68	Chile			68	Iceland			68	Peru		
69	Norway			69	Jordan			69	Cambodia		
70	Jordan			70	Tunisia			70	Botswana		
71	United Arab Emirates			71	Serbia			71	United Arab Emirates		
72	New Zealand			72	Venezuela (Bolivarian Republic of)			72			
73	Syrian Arab Republic			73	Côte d'Ivoire			73	Morocco		
74	Lebanon			74	Luxembourg			74	Cameroon		
75	Australia			75	Lebanon			75			
76	Ecuador			76	Honduras			76			
77	Colombia			77	Egypt			77	Iceland		
78	South Africa			78	Viet Nam			78	Ecuador		
79	Egypt			79	Colombia			79	Mauritius		

80	Ukraine	80	India	80	Jordan
81	Greece	81	Republic of North Macedonia	81	
82	Morocco	82	Ghana	82	Colombia
83	Philippines	83	Trinidad and Tobago	83	Qatar
84	Venezuela (Bolivarian Republic of)	84	Iran (Islamic Republic of)	84	
85	Iceland	85	South Africa	85	
86	Peru	86	Nigeria	86	Brunei Darussalam
87	Côte d'Ivoire	87	Saudi Arabia	87	Honduras
88	Saudi Arabia	88	Bosnia and Herzegovina	88	
89	Eritrea	89	United Arab Emirates	89	Lebanon
90	Suriname	90	Qatar	90	Pakistan
91	Nigeria	91	Suriname	91	Ukraine
92	Algeria	92	Brunei Darussalam	92	Ghana
93	Botswana	93	Armenia	93	Nigeria
94	Bolivia (Plurinational State of)	94	Pakistan	94	Suriname
95	Trinidad and Tobago	95	Bolivia (Plurinational State of)	95	
96	Qatar	96	Eritrea	96	
97	Republic of Moldova	97	Cyprus	97	Algeria
98	Albania	98	Algeria	98	Kuwait
99	Armenia	99	Jamaica	99	Kazakhstan
100	Luxembourg	100	Ukraine	100	Jamaica
101	Cyprus	101	Albania	101	Cyprus
102	Kyrgyzstan	102	Senegal	102	Eritrea

103	Mongolia	103	Mozambique	103	Angola
104	Kazakhstan	104	Republic of Moldova	104	Albania
105	Jamaica	105	Zambia	105	Syrian Arab Republic
106	Iraq	106	Mongolia	106	Senegal
107	Brunei Darussalam	107	Kazakhstan	107	Mozambique
108	Nepal	108	Kuwait	108	Oman
109	Senegal	109	Kyrgyzstan	109	Republic of Moldova
110	Niger	110	Georgia	110	Zambia
111	Mozambique	111	Syrian Arab Republic	111	Mongolia
112	Kuwait	112	Oman	112	Georgia
113	Georgia	113	Yemen	113	Kyrgyzstan
114	Montenegro	114	Azerbaijan	114	
115	Yemen	115	Tajikistan	115	Kenya
116	Zambia	116	Niger	116	Yemen
117	Tajikistan	117	Montenegro	117	Azerbaijan
118	Oman	118	Zimbabwe	118	Zimbabwe
119	Azerbaijan	119	China, Hong Kong Special Administrative Region	119	
120	Ethiopia	120	United Republic of Tanzania	120	
121	China, Hong Kong Special Administrative Region	121	Kenya	121	Montenegro
122	Zimbabwe	122	Nepal	122	Gabon
123	United Republic of Tanzania	123	Ethiopia	123	Niger

124	Angola	124	Iraq	124	Nepal
125	Kenya	125	Angola	125	Ethiopia
126	Gabon	126	Gabon	126	Iraq
127	Haiti	127	Haiti	127	Haiti

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