IND / World Competitiveness Center

Sustainable Trade Index 2023



Sustainable Trade Index

The Hinrich-IMD Sustainable Trade Index measures 30 economies' readiness and capacity to participate in the global trading system in a manner that supports the long-term goals of economic growth, environmental protection, and societal development.

Overall and pillars

Rank	Overall	Score
out of 30		(0-100)
07		82.1
Rank	Pillars	Score
09	Economic	72.3
01	Societal	100.0
19	Environmental	63.1

Background information

Population, millions	38.85 (2022)	Medium
Income, GDP per Capita US\$	55,085 (2022)	High
Membership	APEC, CPTPP	

Economic pillar

The Economic pillar measures an economy's ability to ensure and promote economic growth through international trade. In this category, economies receive scores for indicators that demonstrate a link between the trading system and economic growth.

Some indicators capture the quality of trade infrastructure, while others measure the ease of conducting international trade. We measure export diversification by evaluating an economy's bilateral trade destinations and how heavily its exports are concentrated by sector. Furthermore, we consider the technological infrastructure and innovation capabilities of an economy by assessing its emphasis on research and development investments and digital technologies.

Indicators

		Rank	Value	Year	Score	
.01	Consumer price inflation	19	6.80	2021	70.0	
.02	Real GDP Growth per capita, % GDP	19	1.69	2021	66.7	
.03	Growth in labor force, %	21	0.82	2021	44.5	
1.04	Foreign direct investment, net inflows, % GDP	09	3.26	2020	8.9	
1.05	Gross fixed capital formation, % GDP	15	23.86	2020	37.8	
1.06	Tariff & non-tariff barriers	22	-	-	60.1	
1.06.01	Tariff barriers	16	-	-	83.0	
1.06.01.a	Tariff barriers in force	12	106	2021	97.9	
1.06.01.b	New tariff barriers 2022	21	2.00	2021	84.3	
1.06.01.c	Percentage of trade affected by tariff barrier (up to 2018)	11	10.82	2018	79.2	
1.06.02	Non-tariff barriers	25	-	-	40.7	
1.06.02.a	Non-tariff barriers in force	24	20,545	2021	88.5	
1.06.02.b	New non-tariff barriers 2022	22	1,581	2021	32.2	
1.06.02.c	Percentage of trade affected by non-tariff barrier (up to 2018)	22	68.85	2018	17.2	
1.07	Trade liberalization	07	-	-	75.2	
1.07.01	Regional Trade Agreements, number in force	12	15.00	2022	32.3	
1.07.02	Capital account liberalization, Index	01	2.31	2019	100.0	
1.07.03	Investment Freedom, Index	03	80.00	2022	92.3	
1.08	Exchange rate stability, parity change from national currency to SDR, 2022/2020	23	0.07	2021	85.0	
1.09	Domestic credit to private sector, % of GDP	-	-	-	-	
1.10	Foreign trade and payments risk	08	-	-	62.0	
1.10.01	Country credit rating	03	59.00	2022	86.6	
1.10.02	Gross debt, % GDP	25	106.60	2021	59.7	
1.11	Trade costs	04	-	-	87.5	
1.11.01	Logistics performance, index	02	4.00	2018	84.2	
1.11.02	Corruption perceptions, index	05	74.00	2021	79.7	
1.11.03	Rule of law, index	04	92.31	2020	93.3	
1.12	Monetary policy intervention	18	-	-	47.6	
1.12.01	Current account balance, % GDP	17	-0.40	2021	56.5	
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	19	-0.33	2021	5.0	
1.13	Export concentration	16	-	-	45.4	
1.13.01	Export market concentration, Top 5 as % total	29	86.12	2021	6.7	
1.13.02	Export product concentration, Top 5 as % total	05	40.61	2021	91.0	
1.14	Exports of goods and services	08	-	-	74.1	
1.14.01	Merchandise exports, US\$	06	597,480	2021	67.1	
1.14.02	Commercial services exports, US\$	08	122,124	2021	74.3	
1.15	Technological innovation	10	-	-	46.9	
1.15.01	R&D expenditure, % GDP	09	1.70	2020	33.6	
1.15.02	Researchers in R&D, per capita	09	4.52	2018	51.7	
1.15.03	Patent applications, per million inhabitants	08	694.28	2020	13.4	
1.15.04	High-technology exports, % of manufactured exports	16	14.97	2020	20.0	
1.15.05	Scientific articles, per million people	05	1,732.37	2020	73.0	
1.16	Technological infrastructure	06	-	-	82.5	
1.16.01	Fixed internet speed, Mbps	06	137.91	2021	70.9	
1.16.02	Internet users, % population	08	92.83	2020	93.2	
1.16.03	Fixed broadband subscriptions (per 100 people)	02	42.07	2021	95.0	
1.16.04	Mobile subscriptions (per 100 people)	26	88.09	2020	25.6	

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Societal pillar

Social factors matter in an economy's capacity to trade internationally over the long term. Economies are measured on the environment that encourages and supports the development of human capital, such as the extent of education and labor standards.

This pillar also captures factors that influence public support for trade expansion. These include income inequality, political stability, goods produced by forced and child labor, and the government response to human trafficking.

Indicators

		Rank	Value	Year	Score
2.01	Inequality (Gini coefficient)	-	-	2017	-
2.02	Educational attainment	04	-	-	69.91
2.02.01	Mean years of schooling	01	13.83	2019	100.00
2.02.02	University education Index	05	30.60	2021	25.35
2.02.03	Tertiary enrollment	10	79.52	2020	66.00
2.03	Labor standards	01	-	-	100.00
2.03.01	Gender non-discrimination in hiring	01	100.00	2022	100.00
2.03.02	Freedom of association and assembly	01	0.84	2021	100.00
2.04	Political stability and absence of violence	05	80.19	2020	81.22
2.05	Goods produced by forced labor or child labor	06	-	-	96.49
2.05.01	Goods produced by forced labor	06	-	-	96.49
2.05.01.a	Goods produced by forced labor, number of goods categories	01	0.00	2021	100.00
2.05.01.b	% population in forced labor	06	1.83	2018	94.23
2.05.02	Goods produced by child labor, number of goods categories	01	0.00	2021	100.00
2.06	Government response to human trafficking	05	-	-	93.12
2.06.01	Government response to human trafficking, Criminalization	04	6.00	2021	80.00
2.06.02	Government response to human trafficking, Strategy	04	60.26	2018	82.35
2.06.03	Government response to human trafficking, Action	01	1.00	2021	100.00
2.07	Trade in goods at risk of modern slavery	15	-	-	55.88
2.07.01	Imports of goods at risk of modern slavery, US\$ millions	24	22,214	2020	17.37
2.07.02	Exports of goods at risk of modern slavery, US\$ millions	01	0	2020	100.00
2.08	Social mobility, Index	01	76.10	2020	100.00
2.09	Life expectancy at birth	06	82.66	2021	86.00
2.10	Uneven Economic Development	01	2.50	2023	100.00

Environmental pillar

The Environmental pillar measures the extent to which an economy's trade supports sustainable resources. The factors include measurements of nonrenewable natural resources in trade and the management of externalities that arise from economic growth and participation in the global trading system.

While an economy's capacity to participate in the global trading system is dependent on economic development, achieving sustainable trade requires prudent stewardship of natural resources and limiting externalities in an economy's economic calculus to promote its overall environmental capital. The indicators chosen in this section measure an economy's environmental capital and include indicators for air and water pollution. In terms of future impact, we measure national environmental standards, carbon emissions, and share of natural resources in exports.

Indicators

		Rank	Value	Year	Score	
3.01	Air pollution, PM2.5 micrograms per cubic metre	02	6.56	2019	99.83	
3.02	Deforestation, Index	17	0.00	2020	21.11	
3.03	% of wastewater treated	11	68.89	2020	68.38	
3.04	Energy intensity, energy consumed for each 1'000 US\$ of GDP in MTOE	17	118.00	2019	71.90	
3.05	Ecological footprint	27	8.07	2018	0.78	
3.06	Renewable energy, %	15	16.10	2019	21.30	
3.07	Environmental standards in trade, count	01	-	-	100.00	
3.07.01	Convention: Hazardous Wastes	01	2	2021	100.00	
3.07.02	Convention: Prevention of Marine Pollution	01	2	2021	100.00	
3.07.03	Convention: Protection of the Ozone Layer (Vienna)	01	2	2021	100.00	
3.07.04	Convention on Climate Change (Kyoto)	01	2	2021	100.00	
3.07.05	The International Timber Agreement	01	2	2021	100.00	
3.07.06	Convention: International Trade in Endangered Species	01	2	2021	100.00	
3.07.07	Convention: Prior Informed Consent - Hazardous Chemicals (Rotterdam)	01	2	2021	100.00	
3.08	Transfer emissions, million tonnes carbon	23	12.06	2019	17.65	
3.09	Share of natural resources in trade, %	23	40.54	2020	52.94	
3.10	Carbon	11	-	-	56.75	
3.10.1	Carbon pricing	01	2	2022	100.00	
3.10.2	CO2 emissions per capita	29	14.86	2019	7.73	

About us

Global trade has helped lift hundreds of millions of people around the world out of poverty, but the benefits of trade do not come without their risks. If an economy is unprepared for the consequences of trade growth, it may result in labor disruption, environmental degradation, and worsening inequality. Proactive and responsible government policy and farsighted corporate decision-making can harness the benefits of trade and mitigate its excesses.

The Hinrich Foundation and the IMD World Competitiveness Center have combined their expertise to build the Hinrich-IMD Sustainable Trade Index, a framework for policy makers, business executives, and civil society leaders to understand and advance sustainable global trade.

hinrich foundation

advancing sustainable global trade

The Hinrich Foundation is an Asia based philanthropic organization that works to advance mutually beneficial and sustainable global trade.

We believe sustainable global trade strengthens relationships between nations and improves people's lives. We support original research and education programs that build understanding and leadership in global trade. Our approach is independent, fact-based and objective. We are an authoritative source of knowledge, sharp analysis and fresh thinking for policymakers, business, media and scholars engaged in global trade.

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World Competitiveness Center

IMD is an independent academic institution with Swiss roots and global reach, founded over 75 years ago by business leaders for business leaders. Since its creation, IMD has been a pioneering force in developing leaders who transform organizations and contribute to society.

The IMD World Competitiveness Center is dedicated to the advancement of knowledge on world competitiveness and offers benchmarking services for countries and companies using the latest and most relevant data on the subject. The Center has pioneered research on how nations and enterprises compete to lay the foundations for future prosperity.

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