

Hinrich Foundation Sustainable Trade Index

South Korea Highlights

Introduction

The Hinrich Foundation commissioned the Economist Intelligence Unit to build the Sustainable Trade Index using 24 indicators to measure 19 economies in Asia and the U.S. across the three recognized pillars of sustainability: **economic growth, social capital and environmental protection.**

The Index measures the readiness of each economy to participate in global trade in a way that creates sustainable growth, encourages foreign direct investment, and support from multilateral development agencies.

The Index was created for the purpose of stimulating meaningful discussion of the full range of considerations for policy makers, business and civil society when engaging in international trade.



The Hinrich Foundation launched the inaugural Sustainable Trade Index in 2016. Visit www.hinrichfoundation.com to download the 2018 and 2016 Index.

South Korea Overview		
GDP per capita US \$27,538	Population 51.2 million	Exports % of GDP 42.2% of GDP
GDP growth 3.48% growth <small>(average since 2010)</small>	Labour Force 27.9 million	FDI net inflow US\$12.1 billion

SOURCE: World Bank, 2016 and Hinrich Foundation Sustainable Trade Index 2018

Overall performance

South Korea placed second overall in the 2018 Index — maintaining the same ranking as the 2016 Index. It also outperformed on an income-weighted basis. However, Asia’s richer economies, including South Korea, all experienced score declines in the 2018 Index. South Korea and Japan— key competitors in many sectors of merchandise trade— perform poorly on similar metrics: exchange rate volatility, export market concentration, inequality and labour standards.

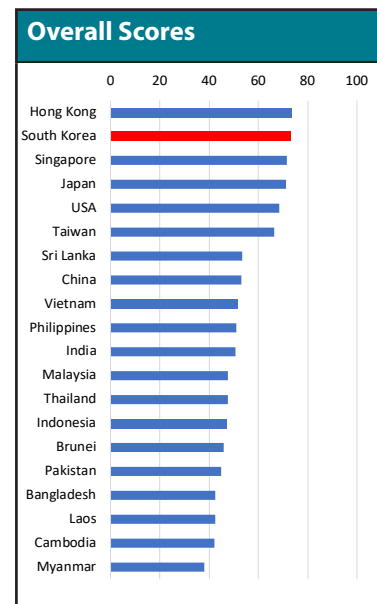
- **Economic:** When comparing South Korea’s performance on the 2018 Index relative to its GDP ranking among other countries, the country outperforms its income ranking by three places.
- **Social:** South Korea lost the top spot in the social pillar to Taiwan in the 2018 Index, but the country still topped the social pillar in terms of educational attainment.
- **Environmental:** South Korea improved its environmental ranking with low levels of water pollution and deforestation in the 2018 Index. However, it also performed near the bottom of the Index with high levels of air pollution.

Overall Index Performance			
Pillar	2018 Rank	2016 Rank	Change
Economic	3	3	=
Social	2	1	-1
Environmental	3	4	+1
Overall	2	2	=

South Korea’s score on each pillar compared with 2016 Sustainable Trade Index results.

2018 Index Performance Relative to GDP				
TOP PERFORMERS				
	Country	2018 Rank	GDP Rank	Rank relative to GDP
▲	Vietnam	9	15	+6
▲	India	11	16	+5
▲	Sri Lanka	7	11	+4
▲	Philippines	10	13	+3
▲	South Korea	2	5	+3
BOTTOM PERFORMERS				
▼	Thailand	13	10	-3
▼	Laos	18	15	-3
▼	USA	5	1	-4
▼	Malaysia	12	8	-4
▼	Brunei	15	6	-9

SOURCE: Hinrich Foundation Sustainable Trade Index 2018



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Areas of top performance and improvement

- **Top performance:** Technological innovation. South Korea's best performance in the 2018 Index was in the technological innovation indicator, which captures an economy's ability to innovate and create sophisticated goods. South Korea secured the number one ranking for this indicator with a perfect 100 score.
- **Worst performance:** Foreign direct investment (FDI). South Korea tied for last place with Taiwan for this indicator, which measures inward FDI as a share of GDP. FDI is considered an important source of investment that supports an economy's trade and economic growth. South Korea's total FDI represented less than one percent of the economy's total GDP.
- **Most improved:** Current account liberalization. This indicator aims to capture the ease with which a country trades goods across its border. South Korea recorded a perfect 100 score in this indicator in 2018, tying with 12 other countries for the top spot. This was a big improvement for South Korea as it advanced 12 spots from 13th place in 2016 to first place in 2018.

Top & Bottom Indicators		
Indicator	Index Avg.	2018 Score
Technological innovation	26.2	100
Technological infrastructure	62.5	100
Educational attainment	38.4	100
Current account liberalization	90.7	100
Growth in per capita GDP	66.7	52
Air pollution	67.2	59
Exchange rate volatility	66.7	42
Foreign direct investment	13.0	0.6

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Economic pillar

South Korea maintained its third-place ranking on the economic pillar for the 2018 Index—the same score as the 2016 Index. South Korea topped the economic pillar in three indicators: current account liberalization, technological innovation and technological infrastructure.

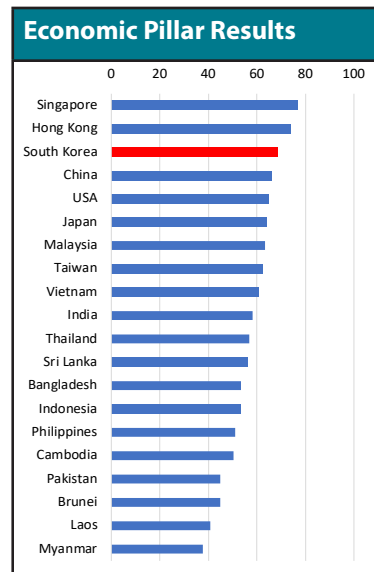
KEY TAKEAWAYS:

- South Korea placed third in the economic pillar — the same score from the 2016 Index.
- South Korea topped the Index in both technology indicators, which can have a dramatic multiplier effect on overall economic growth and trade.
- South Korea’s lowest score was in foreign direct investment (FDI), where it tied for last place with Taiwan. South Korea’s total FDI represented less than one percent of the economy’s total GDP.

South Korea tops the economic pillar in both technological indicators. South Korea was number one in the technological innovation indicator for the 2018 Index, which captures a country’s ability to innovate and create sophisticated goods. It also tied for first place in the technological infrastructure indicator— which measures a country’s IT infrastructure— with Hong Kong, Japan, Singapore, Taiwan and the United States. South Korea continues to be a technological powerhouse in the region and serves as an example for other countries trying to move up the value chain to produce higher value goods.

Despite its technological prowess, South Korea did record higher trade costs than most upper-income countries in the Index. The trade costs indicator is a composite of four important factors: infrastructure, logistics, corruption and legal system. Of these four indicators, South Korea performed the best in legal system (=4) and worst in corruption (=7). Together, these indicators capture the extra burden to trade created by inefficiencies in the trading system.

South Korea’s lowest scoring economic indicator was foreign direct investment (FDI), where the country tied for last place with Taiwan. This indicator measures inward FDI as a share of GDP. South Korea’s inward FDI represented less than one percent of the economy’s total GDP, reflecting its low score in this indicator. Conversely, South Korean companies are well known for their foreign direct investment into other Asian economies.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Indicator	Index Avg.	2018 Score
Current account liberalization	90.7	100
Technological innovation	26.2	100
Technological infrastructure	62.5	100
Tariffs & non- tariff barrier to trade	59.4	75
Foreign trade and payments risk	65.3	79
Gross fixed capital formation	42.2	55
Trade costs	51.2	68
Financial sector depth	43.5	68
Growth in labour force	64.0	66
Export market concentration	68.3	69
Growth in per capita GDP	66.7	52
Export product concentration	84.6	84
Exchange rate volatility	66.7	42
Foreign direct investment	13.0	0.6

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

CASE STUDY: EAST ASIAN TIGER ECONOMIES SHOWING THE WAY ON FDI

The East Asian Tiger economies—Hong Kong, Singapore, South Korea, Taiwan, traditionally, but arguably today China’s eastern seaboard too—have over the past few decades pioneered a model of rapid industrialisation based on huge inflows of foreign direct investment (FDI). There are some common characteristics in all these economies—from special economic zones and tax holidays to a bountiful labour supply—that have made them attractive to FDI as their economies have evolved from low-skilled to higher-value-add manufacturing and services. All that has occurred in tandem with dramatic improvements in standards of living. It is a model that many other emerging markets are trying to emulate.¹

Social pillar

In the 2018 Index, there was an overall stagnation across all economies in the social pillar. Inequality and political instability are on the rise across the region, a trend that transcends wealth and development status. South Korea fell one spot from first place on the social pillar in 2016 to second place in 2018, forfeiting its top ranking to Taiwan.

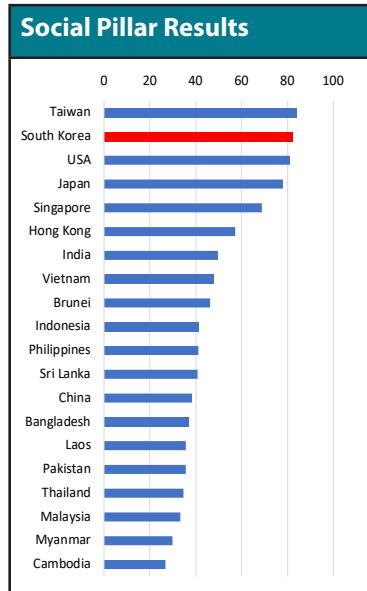
KEY TAKEAWAYS:

- South Korea scored second the social pillar, behind Taiwan.
- South Korea topped the Index in terms of education attainment and also managed to avoid high levels of inequality— an issue that tends to plague other upper-income economies in the region.
- South Korea’s lowest social score was in political stability.

South Korea topped the 2018 Index in terms of educational attainment, which is measured by total enrollment within a country for tertiary education as a share of the percentage of the population of the corresponding age group. Educational attainment and skill acquisition are key indicators for trade and economic competitiveness. With the top score in this indicator, South Korea boasts one of the most educated labour forces in the region.

South Korea also performed near the top of the Index for the inequality indicator. While high levels of inequality have proven to be an issue for other upper-income economies in the region— such as Hong Kong and Singapore— South Korea has managed to record one of the lowest levels of inequality in the region. South Korea’s fourth place score in this indicator, which uses the Gini coefficient to capture the inequality level in a country between the upper and lower income brackets, demonstrates the country’s continued ability to balance economic success with low levels of inequality.

South Korea’s worst performance on the social pillar was in the political stability indicator. In general, political stability is a considered a necessary condition for trade, investment and economic growth. South Korea dropped two spots on this indicator from eighth place in 2016 to 10th place in the 2018.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Indicator	Index Avg.	2018 Score
Educational attainment	38.4	100
Inequality (Gini coefficient)	62.3	85
Labour standards	39.7	85
Political stability	57.6	58

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

¹ Hinrich Foundation Sustainable Trade Index 2018

CASE STUDY: SOUTH KOREA AN EXAMPLE FOR EMERGING ECONOMIES

Asia finds itself in the unique position of helping lead and sustain the global economy’s commitment to free and fair trade. It is in this context that the need for sustainability in trade is ever more crucial. Emerging Asian economies would do well to emulate Japan, South Korea and Taiwan, suggests Jayant Menon, lead economist at the Asian Development Bank (ADB). These are the places he believes have best managed trade-dependent growth. “They have had dramatic improvements in their economic conditions without the huge disparities that we see in other countries.” He points to three common factors in the countries: a system of land distribution and land reform that worked well; a broad focus on education, from primary to tertiary levels, encompassing even technical education; and luck—the fact that they were industrialising at a time when the global economy was growing.²

Environmental pillar

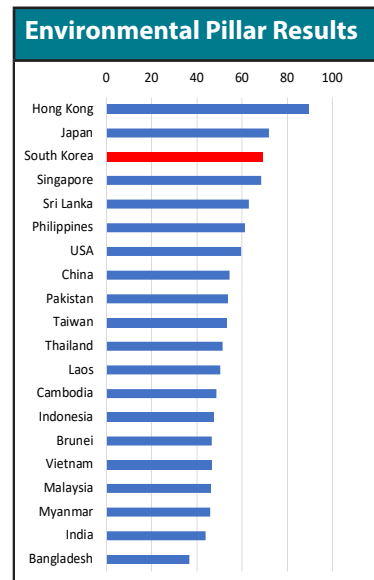
South Korea advanced one position on the 2018 Index’s environmental pillar, moving up from fourth place in 2016 to third place in 2018.

KEY TAKEAWAYS:

- South Korea placed third overall in the environmental pillar, an improvement of one spot from the 2016 Index.
- South Korea recorded low levels of water pollution, high environmental standards in trade, and low levels of deforestation. However, it placed among the bottom five countries for highest levels of air pollution.

One of South Korea’s best performances on the environmental pillar was in the water pollution indicator, where the country’s low levels of water pollution helped it place in the top three economies alongside Singapore and Hong Kong. South Korea also placed in the top three economies for environmental standards in trade, which measures membership in or ratification of international environmental compacts. South Korea is a signatory to six of the seven international environmental agreements used to measure this indicator, tying with Indonesia, Japan, Malaysia and the Philippines for third place. The environmental standards in trade indicator demonstrates a commitment to environmental sustainability at the national level.

South Korea’s worst performance on the environmental pillar was in the air pollution indicator, which measures levels of particulate matter 2.5 (PM 2.5) in a country. South Korea recorded high levels of pollution and thus scored in the bottom five economies with Pakistan, China, India and Bangladesh. It was the worst performing upper-income country in this indicator, which highlights the important link between economic growth, trade and pollution.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Indicator	Index Avg.	2018 Score
Water pollution	24.3	85
Environmental standards in trade	66.7	83
Deforestation	66.8	86
Transfer emissions	22.6	11
Share of natural resources in trade	85.3	92
Air pollution	67.2	59

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

² Hinrich Foundation Sustainable Trade Index 2018

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Additional resources

The Hinrich Foundation commissioned The Economist Intelligence Unit (EIU) to build the Sustainable Trade Index. The Index uses 24 indicators to measure the trade impacts of 19 economies in Asia and the U.S. across the three recognized pillars of sustainability: economic growth, social capital, and environmental protection.

Visit our website at: www.hinrichfoundation.com/trade-research/sustainable-trade-index to download additional Sustainable Trade Index resources including:

- **2018 Sustainable Trade Index white paper**- Prepared by the EIU, it presents and analyzes the 2018 Index findings for all 20 economies.
- **Index interactive data set and KPIs**- The comprehensive Index database allows users to directly interact with the Sustainable Trade Index data. For each economy, compare indicators, adjust score weights and visualize data in custom charts and graphs. It's a useful tool for regional comparisons or reviewing the performance of a particular economy.
- **Additional highlight reports for other economies**- Looking for information on other economies in the Sustainable Trade Index? Visit our website to download special reports on all 20 economies featured in the 2018 Index.
- **Index infographics, fact sheets and more!**

About the Hinrich Foundation

The Hinrich Foundation is a nonprofit organization that undertakes trade-related policy research and development work in Asia. It focuses on creating opportunities, choice and engagement through sustainable and mutually beneficial global trade. The Sustainable Trade Index aims to stimulate positive thinking about global trade and promote behaviors that will lead to better developmental outcomes, engagement and stability.

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Economic Pillar		Social Pillar		Environmental Pillar	
Australia	82.4	A.1: Gender	82.4	A.1: Energy	82.4
Canada	82.4	A.2: Diversity	82.4	A.2: Pollution	82.4
China	82.4	A.3: Innovation	82.4	A.3: Climate Change	82.4
France	82.4	A.4: Education	82.4	A.4: Air Quality	82.4
Germany	82.4	A.5: Employment	82.4	A.5: Water Quality	82.4
India	82.4	A.6: Health	82.4	A.6: Deforestation	82.4
Japan	82.4	A.7: Income	82.4	A.7: Biodiversity	82.4
South Korea	82.4	A.8: Infrastructure	82.4	A.8: Land Use	82.4
U.S.	82.4	A.9: Labor	82.4	A.9: Carbon Footprint	82.4
U.K.	82.4	A.10: Migration	82.4	A.10: Greenhouse Gas Emissions	82.4
South Africa	82.4	A.11: Trade	82.4	A.11: Environmental Policy	82.4
Indonesia	82.4	A.12: Investment	82.4	A.12: Environmental Impact	82.4
Brazil	82.4	A.13: Innovation	82.4	A.13: Environmental Policy	82.4
India	82.4	A.14: Innovation	82.4	A.14: Environmental Policy	82.4
China	82.4	A.15: Innovation	82.4	A.15: Environmental Policy	82.4
U.S.	82.4	A.16: Innovation	82.4	A.16: Environmental Policy	82.4
U.K.	82.4	A.17: Innovation	82.4	A.17: Environmental Policy	82.4
South Africa	82.4	A.18: Innovation	82.4	A.18: Environmental Policy	82.4
Indonesia	82.4	A.19: Innovation	82.4	A.19: Environmental Policy	82.4
Brazil	82.4	A.20: Innovation	82.4	A.20: Environmental Policy	82.4
India	82.4	A.21: Innovation	82.4	A.21: Environmental Policy	82.4
China	82.4	A.22: Innovation	82.4	A.22: Environmental Policy	82.4
U.S.	82.4	A.23: Innovation	82.4	A.23: Environmental Policy	82.4
U.K.	82.4	A.24: Innovation	82.4	A.24: Environmental Policy	82.4
South Africa	82.4	A.25: Innovation	82.4	A.25: Environmental Policy	82.4
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U.K.	82.4	A.31: Innovation	82.4	A.31: Environmental Policy	82.4
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South Africa	82.4	A.53: Innovation	82.4	A.53: Environmental Policy	82.4
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China	82.4	A.57: Innovation	82.4	A.57: Environmental Policy	82.4
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U.K.	82.4	A.59: Innovation	82.4	A.59: Environmental Policy	82.4
South Africa	82.4	A.60: Innovation	82.4	A.60: Environmental Policy	82.4
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South Africa	82.4	A.74: Innovation	82.4	A.74: Environmental Policy	82.4
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India	82.4	A.77: Innovation	82.4	A.77: Environmental Policy	82.4
China	82.4	A.78: Innovation	82.4	A.78: Environmental Policy	82.4
U.S.	82.4	A.79: Innovation	82.4	A.79: Environmental Policy	82.4
U.K.	82.4	A.80: Innovation	82.4	A.80: Environmental Policy	82.4
South Africa	82.4	A.81: Innovation	82.4	A.81: Environmental Policy	82.4
Indonesia	82.4	A.82: Innovation	82.4	A.82: Environmental Policy	82.4
Brazil	82.4	A.83: Innovation	82.4	A.83: Environmental Policy	82.4
India	82.4	A.84: Innovation	82.4	A.84: Environmental Policy	82.4
China	82.4	A.85: Innovation	82.4	A.85: Environmental Policy	82.4
U.S.	82.4	A.86: Innovation	82.4	A.86: Environmental Policy	82.4
U.K.	82.4	A.87: Innovation	82.4	A.87: Environmental Policy	82.4
South Africa	82.4	A.88: Innovation	82.4	A.88: Environmental Policy	82.4
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India	82.4	A.91: Innovation	82.4	A.91: Environmental Policy	82.4
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South Africa	82.4	A.95: Innovation	82.4	A.95: Environmental Policy	82.4
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India	82.4	A.98: Innovation	82.4	A.98: Environmental Policy	82.4
China	82.4	A.99: Innovation	82.4	A.99: Environmental Policy	82.4
U.S.	82.4	A.100: Innovation	82.4	A.100: Environmental Policy	82.4

