

# Hinrich Foundation Sustainable Trade Index

## Singapore 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 attracts funding 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](http://www.hinrichfoundation.com) to download the 2018 and 2016 Index.





Singapore Overview		
<b>GDP per capita</b>  <b>US \$52,962</b>	<b>Population</b>  <b>5.6 million</b>	<b>Exports % of GDP</b>  <b>172% of GDP</b>
<b>GDP growth</b>  <b>5.4% growth</b> <small>(average since 2010)</small>	<b>Labour Force</b>  <b>3.3 million</b>	<b>FDI net inflow</b>  <b>US\$61.6 billion</b>

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

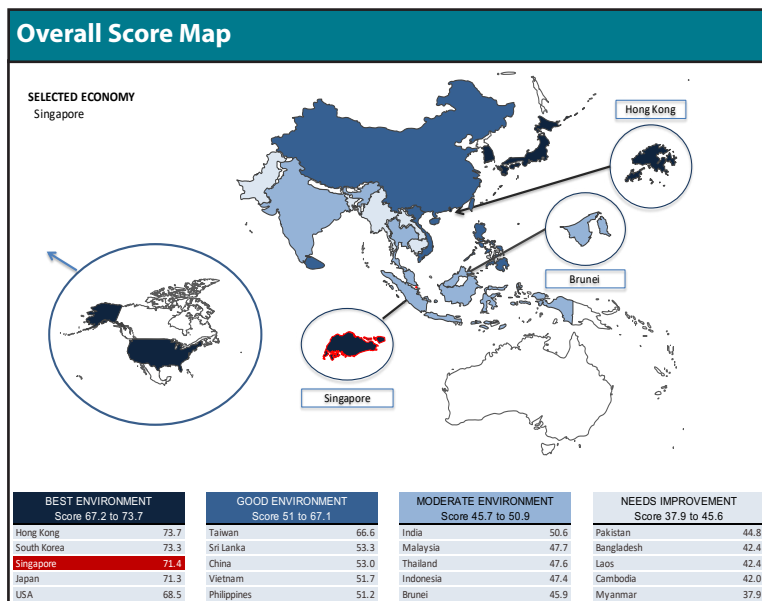
### Overall performance

Singapore continued to perform well in the Index, ranking first in the economic pillar in 2018. However, Singapore lost two places in the overall rankings compared to 2016, mainly as a result of lower scores on the environmental pillar.

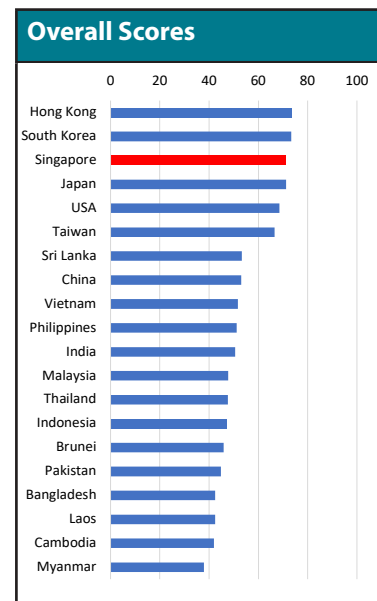
- **Economic:** Singapore tops the economic pillar with strong performances in a number of economic indicators including: current account liberalization, tariffs & non-tariff barriers to trade, foreign trade and payments risk, trade costs and technological infrastructure.
- **Social:** Singapore performed well both on the political stability and educational attainment indicators, but higher levels of inequality compared with other countries continued to affect its social pillar ranking.
- **Environmental:** Singapore had top rankings for low levels of water pollution and transfer emissions. These were, however, tempered by poorer scores in other environmental indicators, like air pollution.

Overall Index Performance			
Pillar	2018 Rank	2016 Rank	Change
Economic	1	1	= 
Social	5	5	= 
Environmental	4	2	-2 
Overall	3	1	-2 

Singapore's score on each pillar compared with 2016 Sustainable Trade Index results.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

## Areas of top performance and improvement

- **Top performance:** Water pollution. Singapore topped the Index in a number of indicators, but its singular best performance was in the water pollution indicator, where it recorded the lowest level in the region.
- **Worst performance:** Inequality. Singapore scored 17 out of 20 economies on this indicator, reflecting the country's high levels of inequality, as measured by the Gini coefficient. Since 2007, the Gini coefficient has declined and Singapore has taken measures to increase upward mobility.<sup>1</sup> However, income inequalities remain high. Countries should be wary that trade can impact inequality, and similarly, high levels of inequality can result in societal tensions that can become an obstacle to further trade growth.
- **Most improved:** Export product concentration. Singapore climbed four spots to fifth place for this indicator in 2018. Its improved performance on this indicator shows progress in making its export base more diversified and therefore less vulnerable to changes in trade partner demand.

### Top & Bottom Indicators

Indicator	Index Avg.	2018 Score
Water pollution	24.3	100
Tariffs & non-tariff barrier to trade	59.4	100
Technological infrastructure	62.5	100
Current account liberalization	90.7	100
Air pollution	67.2	61
Environmental standards in trade	66.7	50
Gross fixed capital formation	42.2	31
Inequality (Gini coefficient)	62.3	34

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

<sup>1</sup> Ministry of Finance, "Income growth, inequality and mobility trends in Singapore", August 2015- <https://www.mof.gov.sg/Portals/0/Feature%20Articles/Income%20Growth,%20Distribution%20and%20Mobility%20Trends%20in%20Singapore.pdf>

## Economic pillar

Singapore is among the most economically sustainable trading economies in the region and has the lowest trade costs of all economies. It ranked first on the economic pillar in the 2018 Index, maintaining its top position from the 2016 Index.

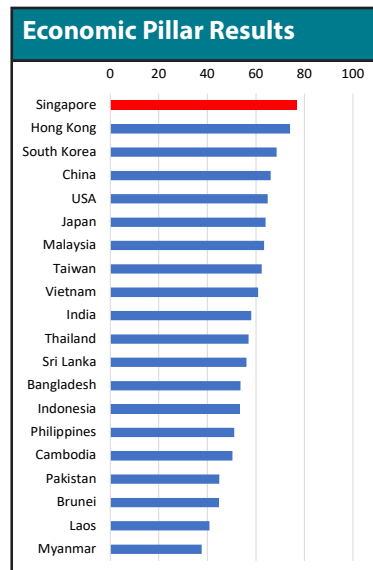
### KEY TAKEAWAYS:

- Singapore ranked first in the economic pillar, maintaining its top score from the 2016 Index.
- Singapore ranked first in five economic indicators in the 2018 Index including: current account liberalization, tariffs & non-tariff barriers to trade, foreign trade and payments risk, trade costs and technological infrastructure.
- Its lowest score was in gross fixed capital formation. However, it still outperformed other upper-income economies including the U.S., Taiwan and Hong Kong in this indicator.
- Singapore's trade costs are the lowest of all economies in the Index.

This excellent economic sustainability performance related to trade is not surprising given trade has been central to Singapore's development and continues to play an important role today. Elements that contribute to this result include:

- Singapore is home to large international ports and state-of-the-art infrastructure and logistics.
- It has a world-class legal system, low corruption and a deep, stable financial sector.
- Singapore and Hong Kong were the only two economies to record a perfect score in tariff & non-tariff barriers to trade, which measures barriers such as trade quotas, licensing and import inspection.
- Singapore has the lowest trade costs of all economies in the Index, followed closely by the United States and Hong Kong. The trade costs indicator is a composite of four factors: infrastructure, logistics, corruption and legal system. Of these four indicators, Singapore topped the list for both logistics performance and little or no corruption.

Singapore's lowest ranking economic indicator was gross fixed capital formation, which measures gross fixed investment in the national economy. Like foreign direct investment (FDI), a country's gross investment encourages trade and economic growth. While Singapore was in the bottom five economies for this indicator, Singapore still outperformed other upper-income economies including the United States, Taiwan and Hong Kong. The country also predictably scored in the bottom half of economies for growth in per capita GDP, but still outperformed all other upper-income countries in that indicator as well.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Indicator	Index Avg.	2018 Score
Current account liberalization	90.7	100
Tariffs & non-tariff barrier to trade	59.4	100
Foreign trade and payments risk	65.3	96
Trade costs	51.2	81
Technological infrastructure	62.5	100
Foreign direct investment	13.0	59
Export product concentration	84.6	92
Technological innovation	26.2	52
Growth in labour force	64.0	79
Export market concentration	68.3	88
Exchange rate volatility	66.7	76
Financial sector depth	43.5	62
Growth in per capita GDP	66.7	60
Gross fixed capital formation	42.2	31

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

## Social pillar

Inequality and political instability are on the rise across the region, a trend that transcends wealth and development status. Singapore remained in fifth position for the social pillar— keeping its score from the 2016 Index.

### KEY TAKEAWAYS:

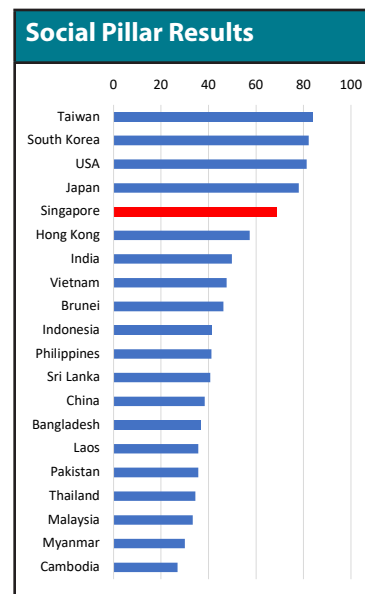
- There was overall stagnation in the social pillar for most economies in the 2018 Index, including Singapore. The country ranked fifth overall on the social pillar, the same score as in 2016.
- Singapore was one of the top two countries in the political stability indicator, trailing only Japan. In general, political stability is a considered a necessary condition for trade, investment and economic growth.
- Singapore was also one of the top two countries in educational attainment, directly behind South Korea. Educational attainment and skill acquisition are key indicators for trade and economic competitiveness.
- High levels of inequality continue to be an issue in Singapore, lowering its score on the social pillar.

Levels of inequality in Singapore continue to remain high, in spite of improvements since 2007.<sup>2</sup> Singapore has one of the highest levels of inequality in the Index, placing in the bottom five economies based on the Gini coefficient, alongside Thailand, Malaysia, China and Hong Kong. This indicator captures the inequality level in a country between the upper and lower income brackets. Countries should be wary that trade can impact inequality, and similarly, high levels of inequality can result in societal tensions that can become an obstacle to further trade growth.

## Environmental pillar

In the 2018 Index, richer economies generally performed better on the environmental pillar, but were also the ones with deteriorating environmental sustainability. Across the region, air pollution, deforestation and transfer emissions worsened on the 2018 Index, with three Southeast Asian neighbours—Malaysia, Singapore and Thailand—experiencing some of the worst score declines.

In spite of continued policy efforts to improve environmental sustainability, Singapore’s score in the environmental pillar dropped from second place in 2016 to fourth place in the 2018 Index.



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Indicator	Index Avg.	2018 Score
Educational attainment	38.4	99
Political stability	57.6	79
Labour standards	39.7	63
Inequality (Gini coefficient)	62.3	34

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

<sup>2</sup> Ministry of Finance, “Income growth, inequality and mobility trends in Singapore”, August 2015- <https://www.mof.gov.sg/Portals/0/Feature%20Articles/Income%20Growth,%20Distribution%20and%20Mobility%20Trends%20in%20Singapore.pdf>

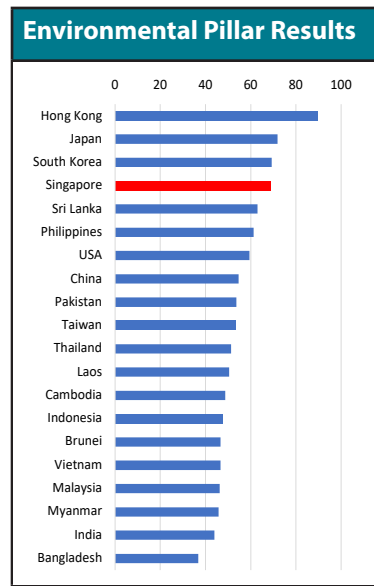
## Environmental pillar (continued)

### KEY TAKEAWAYS:

- Singapore ranked fourth overall in the environmental pillar in the 2018 Index, a fall from second place in 2016.
- Singapore topped the 2018 Index with a perfect score on the water pollution indicator. For this indicator, the share of wastewater treatment is a proxy for the level of water pollution in a country.
- Singapore’s biggest performance drop was in the air pollution indicator, which measures levels of particulate matter 2.5 (PM 2.5) in a country. Singapore fell from first place for this indicator in 2016 to 14th place in the 2018 Index— reflecting significantly higher levels of air pollution in Singapore.
- Singapore also recorded poorer scores in the indicators for transfer emissions, deforestation, share of natural resources in trade and environmental standards in trade on the 2018 Index.

Singapore’s stellar results on the water pollution indicator reflect the nation’s decade-long effort to improve water quality. After cleaning up the catchment area of the Singapore River, the nation is now taking a leading regional role encouraging nations to keep clean seas and oceans.

Singapore’s air pollution results have been affected by transboundary haze pollution. Domestically, the nation has taken important steps to enhance local air quality standards for industry and transport, creating incentives to encourage the early replacement of more polluting diesel commercial vehicles and discouraging the use of fossil fuels. For years, Singapore has been encouraging fellow Southeast Asian Nations to work together to prevent, monitor and mitigate haze and improvements should soon become measurable. All ASEAN nations have ratified the ASEAN Agreement on Transboundary Haze Pollution. This agreement aims to achieve a haze-free ASEAN by 2020 and we expect Singapore’s air quality ranking to improve in the future.<sup>2</sup>



SOURCE: Hinrich Foundation Sustainable Trade Index 2018

Environmental Indicators		
Indicator	Index Avg.	2018 Score
Water pollution	24.3	100
Transfer emissions	22.6	47
Deforestation	66.8	67
Share of natural resources in trade	85.3	87
Air pollution	67.2	61
Environmental standards in trade	66.7	50

SOURCE: Hinrich Foundation Sustainable Trade Index 2018

### KEY TAKEAWAYS: TRANSBOUNDARY HAZE REMAINS A BITING ISSUE IN SINGAPORE

Singapore is periodically shrouded in severe “transboundary haze pollution” (THP) due to land-clearing fires from its regional neighbors, such as Indonesia. The Singaporean government has taken steps to address these issues by passing the Transboundary Haze Pollution Act (THPA) in 2014, which makes it illegal for individuals or companies to create THP that severely affects the air quality in Singapore.<sup>3</sup> Enforcement of this law, however, has proven to be difficult. In 2016, Singapore gave notice to six Indonesian companies who were believed to be in violation of the THPA, yet only two companies answered the government’s inquiries.<sup>4</sup> Although steps are being taken, there remains room for improvement and enforcement.

<sup>2</sup> The Straits Times, “ASEAN adopts haze-free road map”, 12 August 2016- <https://www.straitstimes.com/asia/se-asia/asean-adopts-haze-free-road-map>

<sup>3,4</sup> Singapore Ministry of the Environment and Water Resources and Singapore National Environment Agency- “Factsheet on measures against haze”, <http://www.nea.gov.sg/docs/default-source/corporate/COS-2016/ep1--updated---cos-2016-media-factsheet---thpa-and-green-procurement.pdf>

# Hinrich Foundation Sustainable Trade Index

## Singapore Highlights

### 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](http://www.hinrichfoundation.com/trade-research/sustainable-trade-index) to download additional Sustainable Trade Index resources including:

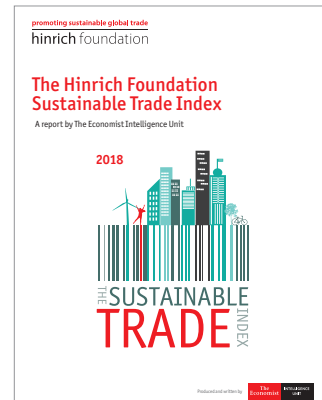
- **2018 Sustainable Trade Index white paper**- Prepared by the EIU, it presents and analyzes the 2018 Index findings for all 20 economies.
- **Index interactive data set and KPIs**- The comprehensive Index database allows users to directly interact with the Sustainable Trade Index data. For each economy, 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.

### Connect with us

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Economic Pillar		Social Pillar		Environmental Pillar	
Australia	82.4	Australia	82.4	Australia	82.4
Canada	82.4	Canada	82.4	Canada	82.4
China	82.4	China	82.4	China	82.4
India	82.4	India	82.4	India	82.4
Japan	82.4	Japan	82.4	Japan	82.4
South Korea	82.4	South Korea	82.4	South Korea	82.4
U.S.	82.4	U.S.	82.4	U.S.	82.4
U.K.	82.4	U.K.	82.4	U.K.	82.4
Germany	82.4	Germany	82.4	Germany	82.4
France	82.4	France	82.4	France	82.4
Italy	82.4	Italy	82.4	Italy	82.4
Spain	82.4	Spain	82.4	Spain	82.4
Sweden	82.4	Sweden	82.4	Sweden	82.4
Denmark	82.4	Denmark	82.4	Denmark	82.4
Netherlands	82.4	Netherlands	82.4	Netherlands	82.4
Belgium	82.4	Belgium	82.4	Belgium	82.4
Switzerland	82.4	Switzerland	82.4	Switzerland	82.4
Average (all economies)	82.4	Average (all economies)	82.4	Average (all economies)	82.4
Average (Asia economies)	82.4	Average (Asia economies)	82.4	Average (Asia economies)	82.4
Average (Asia-Pacific)	82.4	Average (Asia-Pacific)	82.4	Average (Asia-Pacific)	82.4

