TRANSNATIONAL ALLIANCE
TO COMBAT ILLICIT TRADE
TRACIT.ORG

THE LINK BETWEEN ILLICIT TRADE AND SOVEREIGN CREDIT RATINGS

TRACIT.ORG

ACKNOWLEDGMENTS

This report, *The Link Between Illicit Trade and Sovereign Credit Ratings*, was prepared by TRACIT, under the supervision of Dr. Ulrika Bonnier, TRACIT Director of Programs.

TRACIT is grateful to our partners at the Economist Intelligence Unit for the valuable contributions in preparing the Global Illicit Trade Environment Index.
https://www.tracit.org/featured-project-global-illicit-trade-index.html

FOR MORE INFORMATION

This report is available online in PDF format, along with an Executive Summary and ancillary documentation. Visit www.tracit.org/publications.html

MEDIA

All media inquiries should be directed to Cindy Braddon,
Head of Communications and Public Policy, (Cindy.Braddon@TRACIT.org)

SOCIAL MEDIA

Twitter: @TRACIT_org **LinkedIn:** www.linkedin.com/company/tracitorg

USE

LAYOUT

Graphic design and production by KAH Design Studios (www.kahdesignstudio.com)
Cover image © 2021 iStockphoto LP.

ABOUT TRACIT

The Transnational Alliance to Combat Illicit Trade (TRACIT) is an independent, private sector initiative to drive change to mitigate the economic and social damages of illicit trade by strengthening government enforcement mechanisms and mobilizing businesses across industry sectors most impacted by illicit trade.

Transnational Alliance to Combat Illicit Trade
One Penn Plaza, Suite #6295
New York, NY 10119
USA
www.TRACIT.org

THE LINK BETWEEN ILLICIT TRADE AND SOVEREIGN CREDIT RATINGS

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Countries that are poorly equipped to tackle illicit trade also suffer from poor credit worthiness. This is borne out by the positive correlation that exists between the *Global Illicit Trade Environment Index** and the credit ratings assigned by the major international credit rating agencies.

Countries with high scores on their capacity to fight illicit trade also have higher credit ratings. Conversely, countries with inadequate regulatory environments and weak institutions making them particularly unprepared to face illicit trade, also have lower credit rating scores.

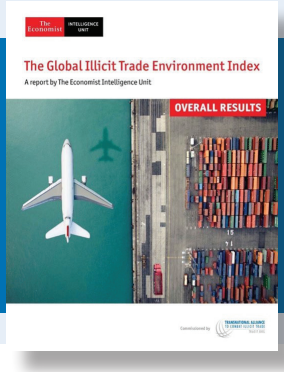
The correlation can be explained by the fact that illicit trade has a direct negative impact on the very economic, social, and institutional risk factors that credit rating agencies evaluate to determine countries' ability to honor their debt. The corruption, crime, human trafficking, money laundering, and environmental degradation connected with illicit trade all combine to weaken a country's economic, financial and institutional stability that underpin its credit ratings. This is disastrous because lower credit ratings affect a government's ability to borrow money on the international financial markets, dampen their attractiveness to foreign investment and ultimately choke their economic prospects.

Correcting the regulatory environment and economic circumstances that enable illicit trade can improve the environment upon which a country's credit ratings are based.

Moreover, the more a country is vulnerable to illicit trade, the fewer prospects it has to create employment, improve its economic performance, and consolidate its governance structures. This, in turn, results in lower credit rating determinations by international rating agencies, further dampening the economic and financial forecast and nurturing the perpetuation of the structural conditions where illicit trade prospers.

In contrast, if countries invest resources and develop policy initiatives to strenghten governance and institutional settings that would enable them to more effectively combat illicit trade, they can have a significant positive impact on credit scores. Correcting the regulatory environment and economic circumstances that enable illicit trade can improve the environment upon which a country's credit ratings are based. The dividends associated with better credit ratings include a lower cost of borrowing, enabling governments and domestic companies to raise capital in the international financial market, stimulating long term investment and growth.

The bottom line is that governments should prioritize and increase efforts to combat illicit trade, and the underlying conditions that facilitate it, because of the severe repercussions it has on society, the economy, and development, and because it is in their own financial interest to do so.



The Global Illicit Trade Environment Index is commissioned by the Transnational Alliance to Combat Illicit Trade (TRACIT) and produced by The Economist Intelligence Unit (EIU). The Index evaluates 84 countries on their structural capability to guard against illicit trade, highlighting specific strengths and weaknesses.

https://www.tracit.org/featured-project-global-illicit-trade-index.html

CHAPTER 1

WHAT ARE CREDIT RATINGS AND WHY DO THEY MATTER?

Political stability, financial strength, strong governance structures and institutional frameworks, supported by a system of accountability and overall integrity, are critical factors when determining a government's creditworthiness, i.e., the perceived likelihood that a government will meet its financial obligations.

In turn, governments' creditworthiness is often measured by their "credit rating," which is an assessment of their ability and willingness to service their debt in full and on time. Credit ratings, in particular:

- Influence the interest rates at which governments can obtain credit in the international financial markets.
- Are monitored by investors and managed funds with international portfolios to make investment and credit decisions. As some institutional investors are only allowed to invest in debt above a certain rating level, credit ratings affect a country's access to global capital markets.
- Act as a ceiling for the ratings assigned to corporate and other entities in the country.

Credit rating agencies play an important role in the global economy by assessing the financial strength of sovereign entities, especially their ability to meet principal and interest payments on their debts. A favorable credit rating enables governments to raise capital in the international financial market, as well as attract other forms of investments like foreign direct investments to a country. In contrast, a low credit rating or downgrade to a lower rating can discourage investors from purchasing the bonds or making direct investments in the country. Beyond the immediate effect of making a country's borrowing more expensive, the knock-on effects from a downgrade can be wide-ranging for the economy as a whole. Faced with increased borrowing costs, governments may find it harder to finance much-needed investments that are vital to long term growth prospects. This in turn can slow down the real economy, putting even more pressure on the government's credit rating.

While there are more than 70 credit rating agencies worldwide, the global market is dominated by three actors who control more than 90% of the market: Standard & Poor's, Fitch and Moody's. All three have a narrow and well-defined methodology for assigning ratings on ability and willingness of governments to service its debt (see Annex 1).

CHAPTER 2
WHAT IS ILLICIT TRADE?

In broad terms, illicit trade can be understood as any practice or conduct prohibited by the law relating to the production, assembly, shipment, receipt, possession, distribution, sale or purchase of goods or services.

While goods involved in illicit trade operations may be intrinsically legal (e.g., genuine tobacco products and alcoholic beverages), they may be manufactured and traded in contravention of tax laws, health, safety, and security regulations. By contrast, other goods may be intrinsically illegal. This is the case, for example, of fraudulent medicines produced with a different formula than that which is advertised, narcotics, or trade in endangered or protected species.

Illicit trade is increasingly recognized as a major policy and regulatory challenge worldwide. It encompasses a wide spectrum of illegal activities, conducted both offline and online, including narcotics and arms trafficking, environmental and wildlife crime, robbery and resale of antiquities and cultural artifacts. On the commercial side, it undermines a very wide range of industries: pharmaceuticals, consumer goods, tobacco, alcohol, entertainment content, petroleum products, fishing, forestry, agri-foods, diamonds, pesticides and thousands of products vulnerable to trademark counterfeiting and copyright piracy.

The adverse knock-on impacts of illicit trade are multifold. Depending on how it manifests itself, illicit trade may expose consumers to poorly made, unhealthy and unregulated products; deprive governments of tax revenues; clog legitimate trade routes and internet bandwidth; multiply burdens on border control; amplify the demand for forced labor; and create serious environmental degradation.

As illicit trade poses multiple threats to society and the economy, individual trafficking schemes can be highly complex involving a plurality of jurisdictions, supporting criminal activities and intermediaries acting in a web of connected illegal practices. Frequently, the same illicit trade operation entails the violation of multiple laws.

The main drivers of illicit trade are clearly the high profits to be won by traffickers. These feed a variety of black markets by exploiting the transport, technological and liberalization components of the global economy in the face of often low penalties applied by countries, low risks of detection/prosecution and even lower risks of having criminal proceeds confiscated.

According to some estimates, illicit trade along with associated transnational criminal activities accounts for 8 to 15 percent of global GDP.[1] In some developing countries, the figures may be much higher. For reasons developed in Chapter 4, this can leave them dangerously at risk of failing to achieve the UN Sustainable Development Goals.[2]

CHAPTER 3

CORRELATION BETWEEN INDIVIDUAL COUNTRIES' PREPAREDNESS TO CONFRONT ILLICIT TRADE AND THEIR CREDIT RATINGS

In light of the strong and widespread impacts of illicit trade on countries' economic output and performance, we have asked whether a correlation could be established between individual countries' creditworthiness and their vulnerability to illicit trade.

To verify this hypothesis, we have compared the credit ratings attributed by major international agencies and the scores attributed by the *Global Illicit Trade Environment Index* (GITEI).[3] Commissioned by the Transnational Alliance to Combat Illicit Trade (TRACIT), the *Global Illicit Trade Environment Index* has been built by the Economist Intelligence Unit (EIU) to evaluate 84 countries on their structural capability to effectively address illicit trade (See Annex 2).

Each country's performance has been assessed in four categories:

- **Government policy** - measuring the strength of countries' laws and governmental structures to tackle illicit trade. This category focuses on legal authority of relevant stakeholders, and considers intellectual property protection, cyber security, and money laundering laws.
- **Transparency and trade** - assessing the extent to which governments make themselves publicly accountable in their efforts to combat illicit trade. This category also considers best practices in trade governance.
- **Supply and demand** - considering the institutional and economic levers that can stem or amplify illicit trade flows.
- **Customs environment** - evaluating how effectively a country's customs service manages its dual mandate of trade facilitation while preventing illicit trade.

Within the above-mentioned policy areas, the *Global Illicit Trade Environment Index* has assigned country scores using 14 quantitative indicators and 6 qualitative indicators. Relevant information has been drawn from analyses carried out by EIU experts in the field, existing indices or benchmarking exercises from international sources, countries' adherence to illicit trade-related treaties as well as interviews with subject experts.

To demonstrate the macro-economic benefits associated with eliminating illicit trade and related criminal activities, we ran correlations to examine the relationship between the ratings given by the three major credit rating agencies and the *Global Illicit Trade Environment Index*.

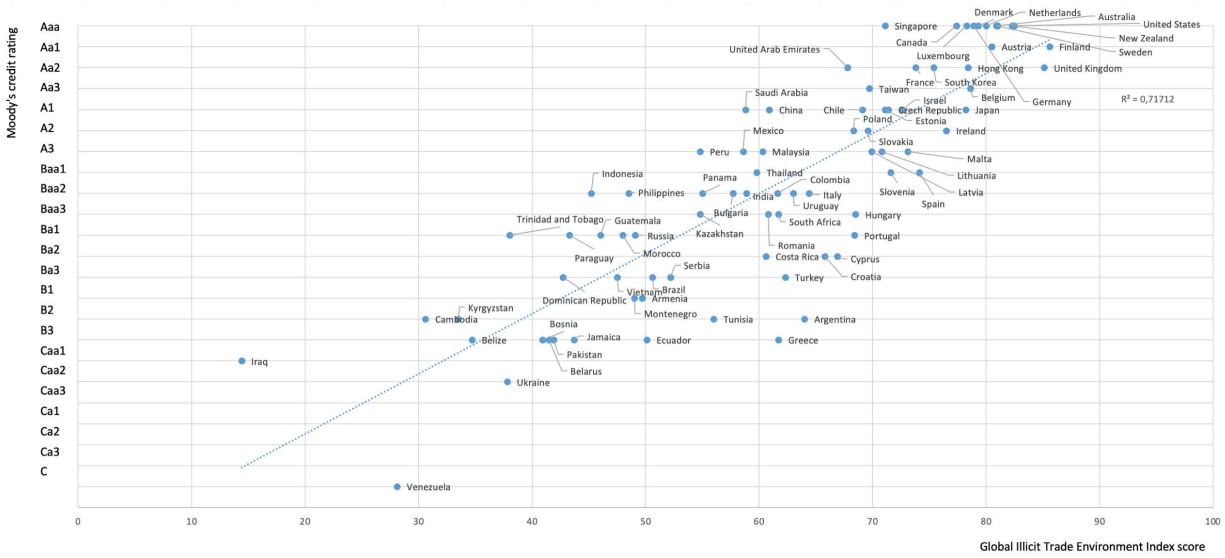
To conduct this analysis, the per country credit ratings were translated into numerical scores, with Moody's C-rating, the S&P's D-rating, and Fitch's D-rating translated to a numerical score of 1, with each additional higher level credit rating score receiving a 1 point addition to that score. For the *Global Illicit Trade Environment Index*, the numerical per country scores (not the rankings) were used, where higher scores indicate stronger performance.

In the analysis of Moody's credit ratings and the GITEI, 80 countries were included. For S&P and Fitch, the total number of countries included in the analysis were 75 and 73, respectively.[4]

As highlighted in the graphs below, we have observed strong correlations between the credit ratings from each of the three major agencies and the corresponding per country scores from the *Global Illicit Trade Environment Index*.

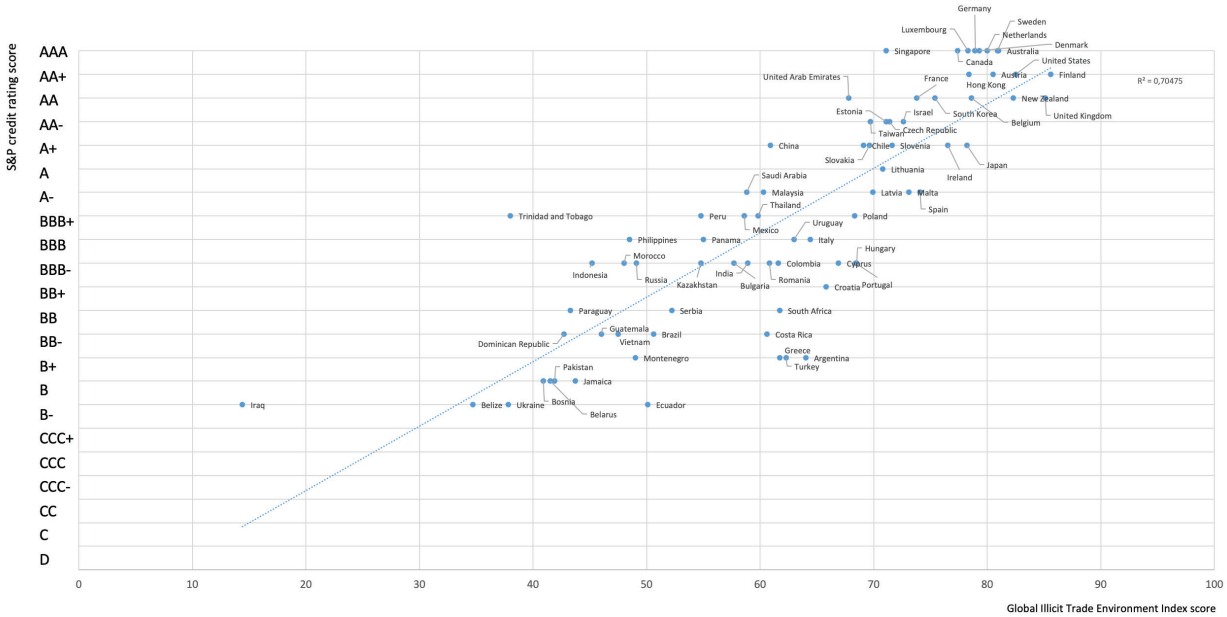
The R-squared (R^2) values are as follows: Moody's and GITEI: 0.71712; S&P and GITEI: 0.70475; Fitch and GITEI: 0.6984. R^2 is a statistical measure of the proportion of the variance in the dependent variable that is explained by an independent variable in a regression model. It measures the strength of the relationship between a linear model and the dependent variables on a 0 - 100% scale. In this specific case, the R^2 indicates how much of the variance in credit rating scores is explained by factors included in the GITEI. The answer to that is between 69.8% and 71.7%, which is significant.

Graph 1: Moody's credit ratings and the *Global Illicit Trade Environment Index*



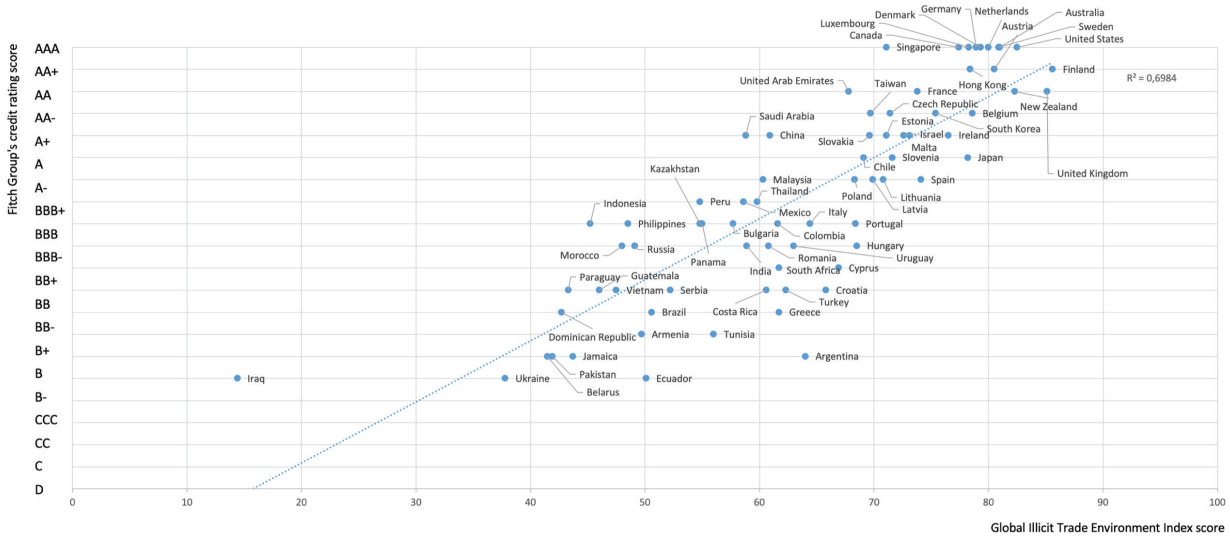
Source: Overall scores per country from the *Global Illicit Trade Environment Index*, available at: http://illicittradeindex.eiu.com; credit ratings: https://tradingeconomics.com/country-list/rating, accessed 17 September 2018.

Graph 2: S&P's credit ratings and the *Global Illicit Trade Environment Index*



Source: Overall scores per country from the *Global Illicit Trade Environment Index*, available at: http://illicittradeindex.eiu.com; credit ratings: https://tradingeconomics.com/country-list/rating, accessed 17 September 2018.

Graph 3: Fitch Group's credit ratings and the *Global Illicit Trade Environment Index*



Source: Overall scores per country from the *Global Illicit Trade Environment Index*, available at: http://illicittradeindex.eiu.com; credit ratings: https://tradingeconomics.com/country-list/rating, accessed 17 September 2018.

CHAPTER 4

EXPLAINING THE CORRELATION: ILLICIT TRADE'S ECONOMIC AND SOCIAL DISRUPTION

How can we explain this correlation? First and foremost, illicit trade has a direct impact on the very economic, social, and institutional risk factors that credit rating agencies evaluate to determine governments' credit worthiness.

In particular, the pillars upon which the three major credit rating agencies base their analysis include an assessment of countries':

- Economic strength.
- Institutional/structural strength (in particular: Government effectiveness, rule of law and control of corruption).
- External finances.
- Fiscal and monetary strength.

While each credit rating agency employs different indicators, weightings of indicators, and methodologies, the overarching factors that are reviewed are essentially the same.[5]

Against this backdrop, illicit trade negatively impacts countries' performance in a significant number of areas that the three main credit rating agencies hold as yardsticks for their evaluations.

Economic strength

Illicit trade diverts skills, capital, and financial resources from productive forms of economic activity. This will have a negative effect on long run growth prospects. Because they sidestep compliance with a range of tax, health, safety and security standards, traffickers are able to effectively compete with legitimate companies, particularly SMEs, capturing portions of their markets and in some cases driving them out of business. In turn, this "unfair" competition creates higher levels of unemployment and feeds informal markets and underground sectors. Also, illicit trade in the form of intellectual property (IP) violations stifles innovation and reduces businesses' ability to operate, grow and compete effectively in domestic and international markets. Furthermore, when considering a country's overall attractiveness as a destination for FDI, companies must be confident that investments in IP and innovation will not be undermined by counterfeit goods and IP infringements. If a robust and well-enforced intellectual property rights legal and regulatory regime is not in place, they could be incentivized to shift investments elsewhere.

Institutional/structural strength

Illicit trade increases opportunities for corruption in several ways. Moving goods along illegal supply chains requires "facilitation payments" to a number of intermediaries such as transporters, customs, and border agents. Illegal factories that produce counterfeit or sub-standard goods may require bribing local law enforcement officials. Corruption also plays a role in the process of obtaining fraudulent permits and licenses.

Moreover, the links between illicit trade and organized crime are well established, from human trafficking networks and tobacco smuggling, to the involvement of mafia-style organizations in the trade of counterfeit goods. Illicit trade operations are a major source of revenue for organized criminal groups (OCGs). In turn, "empowered" OGCs stand better chances to infiltrate fragile economies, thus weakening the rule of law and governments' overall ability to deliver services to societies. By encroaching upon a government's decision-making processes, powerful OCGs are often able to influence the attribution of public contracts, divert public funds and subsidies and even control democratic processes.

Fiscal strength

Illicit trade in its various manifestations significantly affects governments' fiscal solidity. Taken together, financial leakages across sectors susceptible to illicit trade are estimated to create an annual drain on the economy of US$2.2 trillion.[5] Lost taxes of all kinds—corporate, trade, sales, personal income, excise and value-added—deprive governments of key financial flows intended for basic social services and to ensure the proper functioning of critical national infrastructure.

CHAPTER 5
CONCLUSIONS

The analysis of country credit ratings and their scores under the *Global Illicit Trade Environment Index* shows a strong relationship between a government's credit worthiness and its structural ability to tackle illicit trade. Countries with high scores on their capacity to fight illicit trade also had the highest credit ratings. Conversely, countries with inadequate regulatory environments and weak institutions making them particularly unprepared to face illicit trade, also had low credit rating scores.

Where a country's underlying conditions make it vulnerable to illicit trade, it has fewer prospects it has to create legitimate employment, improve economic performance or move away from informal economic activity. These circumstances underpin credit ratings determinations by international rating agencies and can result in lower credit rating scores, with the unfortunate consequence of further dampening the economic and financial forecast and nurturing the perpetuation of the structural conditions where illicit trade proliferates.

The findings from this report suggest that governmental efforts and policies to prioritize the fight against illicit trade, and the underlying conditions that facilitate it, can have a significant positive impact on sovereign credit scores. Addressing the regulatory environment and economic circumstances that enable illicit trade can improve the environment upon which a country's credit ratings are based. The dividends associated with better credit ratings include a lower cost of borrowing, enabling governments to raise capital in the international financial market, stimulating long term investment and growth.

The bottom line is that governments should prioritize and increase efforts to combat illicit trade, and the underlying conditions that facilitate it, because of the severe repercussions it has on society, the economy, and development, and, because it is in their own financial interest to do so.

ANNEX 1:
FACTORS DETERMINING SOVEREIGN CREDIT RATINGS

Moody's sovereign rating

Moody's sovereign bond ratings are based on four key factors: Economic Strength; Institutional Strength; Fiscal Strength; and Susceptibility to Event Risk.[6]

The Institutional Strength pillar covers "Institutional Framework and Effectiveness" (with a 75% factor weight) and "Policy Credibility and Effectiveness" (with a 25% factor weight).[7] "Institutional Framework and Effectiveness" is measured using three World Bank indicators: the Worldwide Government Effectiveness Index, the Worldwide Rule of Law Index, and the Worldwide Control of Corruption Index.[8] "Policy Credibility and Effectiveness" is measured through indicators on inflation level and volatility.[9]

With a 75% factor weight towards the issues of corruption, government effectiveness and rule of law, the same societal issues that are negatively impacted by illicit trade would also negatively impact a sovereign's credit rating using Moody's methodology.

In addition, Moody's allows for an adjustment to the factor score based on a government's track record of default, Worldwide Governance Indicators (WGI) data considerations, and other considerations for policy effectiveness (i.e., that some countries do not operate their own monetary policy because they have pegged their currency against another currency).[10] On the WGI data considerations, Moody's state that they *"may conclude that the Worldwide Governance Indicators misrepresent a country's Institutional Strength. That may be because those measures tend to be backward looking. As a survey of surveys, they can be inconsistent and opaque, and a small number of survey data points for an individual country may skew its results. Where our own experience and expectations, either of the predictability and resilience of a country's institutions or of the effectiveness of its policy framework and policymakers, differ from that implied by the WGI scores, we may assign a Factor Score which differs materially from that implied by the metrics."*[12]

S&P's sovereign rating

Standard & Poor's (S&P's) sovereign rating is, in their own words, their assessment of *"a sovereign government's willingness and ability to service its financial obligations to nonofficial creditors on time and in full."*[13]

An indicative credit rating level is determined by the institutional and economic profile, as well as the flexibility and performance profile of a sovereign. The institutional and economic profile is determined by an institutional assessment and an economic assessment. The flexibility and performance profile is determined by an external assessment, a fiscal assessment and a monetary assessment.[14]

Of the five assessment pillars, the area most closely related to the impact of illicit trade on an economy is the Institutional Assessment, which reflects S&P's *"view of how a government's institutions and policymaking affect a sovereign's credit fundamentals by delivering sustainable public finances, promoting balanced economic growth, and responding to economic or political shocks."*[15] This area also reflects their *"view of the transparency and accountability of data, processes, and institutions; a sovereign's debt repayment culture; and potential external and domestic security risks."*[16]

Factors that S&P's analysis is based on include:

- Actual or potential challenges to political institutions, possibly involving domestic conflict, from popular demands for increased political or economic participation, or from significant challenges to the legitimacy of institutions on ethnic, religious, or political grounds.
- The cohesiveness of civil society as evidenced by social mobility, social inclusion, prevalence of civic organizations, degree of social order, and capacity of political institutions to respond to societal priorities.
- The perceived level of corruption in the country, which correlates strongly with the accountability of its institutions.
- The unbiased enforcement of contracts and respect for the rule of law (especially property rights), which correlates closely with respect for creditors' and investors' interests.

As is evident from this list, factors that are related to, or negatively impacted by the prevalence of illicit trade in an economy—corruption, social order, capacity of political institutions to respond to societal priorities, and the unbiased enforcement of contracts and respect for the rule of law, with particular focus on property rights—are important variables that S&P's analysis of a sovereign's credit rating is based on.

Fitch's sovereign rating

Fitch's sovereign credit risk analysis is a combination of quantitative and qualitative judgments *"that capture the willingness as well as the capacity of the sovereign to meet its debt obligations."*[17]

Fitch's analysis of a sovereign's creditworthiness is based on four analytical pillars:

- Structural features of the economy that render it more or less vulnerable to shocks, including the risks posed by the financial sector, political risk and governance factors.
- Macroeconomic performance, policies, and prospects, including growth prospects, economic stability and the coherence and credibility of policy.
- Public finances, including budget balances, the structure and sustainability of public debt and fiscal financing and the likelihood of the crystallization of contingent liabilities; and
- External finances, including the sustainability of current account balances and capital flows, and the level and structure of external debt (public and private).[18]

According to Fitch's rating criteria, *"structural features typically carry the highest weight within the analysis"*[19] at 54.7%, followed by external finances at 18.1%, public finances at 16.7%, and macroeconomic performance, policies and prospects at 10.5%.[20]

The structural features pillar includes a composite governance indicator that "is the simple average percentile rank across the six World Bank Governance Indicators: *"Rule of Law"; "Control of Corruption"; "Government Effectiveness", "Voice and Accountability", "Regulatory Quality" and "Political Stability and Absence of Violence."*[21] In particular, indicators addressing the control of corruption, rule of law, and political stability and absence of violence would be related to, or negatively impacted by the prevalence of illicit trade in an economy. Regulatory quality could also be negatively impacted in a situation where enforcement of intellectual property rights laws is not effective.

The general business environment is also taken into account as one of the key criteria factors under governance quality.[22] To the extent that illicit trade undermines the activities of legitimate businesses and discourages private sector investments, it would affect Fitch's qualitative analysis of the business environment which is *"reflected in, among other factors, the ability to attract investment."*[23]

ANNEX 2

SOVEREIGN CREDIT RATINGS AND GITEI SCORES

Country	GITEI score	S&P's rating	Moody's rating	Fitch's rating
Argentina	64	B+	B2	B
Armenia	49.7		B1	B+
Australia	81	AAA	Aaa	AAA
Austria	80.5	AA+	Aa1	AA+
Belarus	41.5	B	B3	B
Belgium	78.6	AA	Aa3	AA-
Belize	34.7	B-	B3	
Bosnia and Herzegovina	40.9	B	B3	
Brazil	50.6	BB-	Ba3	BB-
Bulgaria	57.7	BBB-	Baa2	BBB
Cambodia	30.6		B2	
Canada	77.4	AAA	Aaa	AAA
Chile	69.1	A+	A1	A
China	60.9	A+	A1	A+
Colombia	61.6	BBB-	Baa2	BBB
Costa Rica	60.6	BB-	Ba2	BB
Croatia	65.8	BB+	Ba2	BB
Cyprus	66.9	BBB-	Ba2	BB+
Czech Republic	71.4	AA-	A1	AA-
Denmark	79.3	AAA	Aaa	AAA
Dominican Republic	42.7	BB-	Ba3	BB-
Ecuador	50.1	B-	B3	B-
Estonia	71.7	AA-	A1	A+
Finland	85.6	AA+	Aa1	AA+
France	73.8	AA	Aa2	AA
Germany	78.9	AAA	Aaa	AAA
Greece	61.7	B+	B3	BB-
Guatemala	46	BB-	Ba1	BB
Hong Kong	78.4	AA+	Aa2	AA+
Hungary	68.5	BBB-	Baa3	BBB-
India	58.9	BBB-	Baa2	BBB-
Indonesia	45.2	BBB-	Baa2	BBB
Iraq	14.4	B-	Caa1	B-
Ireland	76.5	A+	A2	A+
Israel	72.6	AA-	A1	A+
Italy	64.4	BBB	Baa2	BBB
Jamaica	43.7	B	B3	B

Japan	78.2	A+	A1	A
Kazakhstan	54.8	BBB-	Baa3	BBB
Kyrgyzstan	33.5		B2	
Latvia	69.9	A-	A3	A-
Lithuania	70.8	A	A3	A-
Luxembourg	78.3	AAA	Aaa	AAA
Malaysia	60.3	A-	A3	A-
Malta	73.1	A-	A3	A+
Mexico	58.6	BBB+	A3	BBB+
Montenegro	49	B+	B1	
Morocco	48	BBB-	Ba1	BBB-
Netherlands	80	AAA	Aaa	AAA
New Zealand	82.3	AA	Aaa	AA
Pakistan	41.9	B	B3	B
Panama	55	BBB	Baa2	BBB
Paraguay	43.3	BB	Ba1	BB
Peru	54.8	BBB+	A3	BBB+
Philippines	48.5	BBB	Baa2	BBB
Poland	68.3	BBB+	A2	A-
Portugal	68.4	BBB-	Ba1	BBB
Romania	60.8	BBB-	Baa3	BBB-
Russia	49.1	BBB-	Ba1	BBB-
Saudi Arabia	58.8	A-	A1	A+
Serbia	52.2	BB	Ba3	BB
Singapore	71.1	AAA	Aaa	AAA
Slovakia	69.6	A+	A2	A+
Slovenia	71.6	A+	Baa1	A-
South Africa	61.7	BB	Baa3	BB+
South Korea	75.4	AA	Aa2	AA-
Spain	74.1	A-	Baa1	A-
Sweden	80.9	AAA	Aaa	AAA
Taiwan	69.7	AA-	Aa3	AA-
Thailand	59.8	BBB+	Baa1	BBB+
Trinidad and Tobago	38	BBB+	Ba1	
Tunisia	56		B2	B+
Turkey	62.3	B+	Ba3	BB
Ukraine	37.8	B-	Caa2	B-
United Arab Emirates	67.8	AA	Aa2	AA
United Kingdom	85.1	AA	Aa2	AA
United States	82.5	AA+	Aaa	AAA
Uruguay	63	BBB	Baa2	BBB-
Venezuela	28.1		C	
Vietnam	47.5	BB-	Ba3	BB

NOTES

[1] World Economic Forum. (2014). *Out of the Shadows: Why Illicit Trade and Organized Crime matter to us all, Global Agenda Council on Illicit Trade & Organized Crime 2012-2014*. Cologny and Geneva: World Economic Forum.

[2] See Transnational Alliance to Combat Illicit Trade. (2019). *Mapping the Impact of Illicit Trade on the Sustainable Development Goals.* New York: Transnational Alliance to Combat Illicit Trade. Available at: https://www.tracit.org/publications_illicit-trade-and-the-unsdgs.html

[3] The Economist Intelligence Unit. (2018). *The Global Illicit Trade Environment Index: Overall Results.* London: The Economist Intelligence Unit. Available at: https://www.tracit.org/uploads/1/0/2/2/102238034/eiu_global_illicit_trade_whitepaper_final.pdf

[4] For each individual correlation, all countries that were included in the GITEI that also had been assigned a credit rating by any or all of the three credit rating agencies were included.

[5] Lige, I. & Szőr, Z. (2016). Methodological issues of credit rating – Are sovereign credit rating actions reconstructible? *Financial and Economic Review, 15(1)*, 7–32. p. 17

[6] Global Financial Integrity. (2017). *Transnational Crime and the Developing World.* Washington D.C.: Global Financial Integrity.

[7] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 1

[8] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 14

[9] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 14

[10] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 14

[11] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 3

[12] Moody's Investor Service. (2018). *Rating Methodology: Sovereign Bond Ratings, November 27, 2018*. New York, NY: Moody's Investor Service. p. 16

[13] S&P Global. (2017). Criteria | *Governments | Sovereigns: Sovereign Rating Methodology, December 18, 2017*. New York, NY: S&P Global. p. 2

[14] S&P Global. (2017). *Criteria | Governments | Sovereigns: Sovereign Rating Methodology, December 18, 2017*. New York, NY: S&P Global. p. 2

[15] S&P Global. (2017). *Criteria | Governments | Sovereigns: Sovereign Rating Methodology, December 18, 2017*. New York, NY: S&P Global. p. 3

[16] S&P Global. (2017). *Criteria | Governments | Sovereigns: Sovereign Rating Methodology, December 18, 2017*. New York, NY: S&P Global. p. 3

[17] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 1

[18] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 1

[19] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 1

[20] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 7

[21] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 11

[22] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 11

[23] Fitch Ratings. (2018). *Sovereign Rating Criteria, 19 July 2018*. London: Fitch Ratings. p. 13

TRANSNATIONAL ALLIANCE
TO COMBAT ILLICIT TRADE
TRACIT.ORG

Transnational Alliance to Combat Illicit Trade
One Penn Plaza, New York, NY | +1.917.815.2824
email: info@TRACIT.org I TRACIT.org