MSB Model Law

The Suspension Bridge

Safety & Soundness Alternative Proposal

Safety & Soundness (S&S) Policy

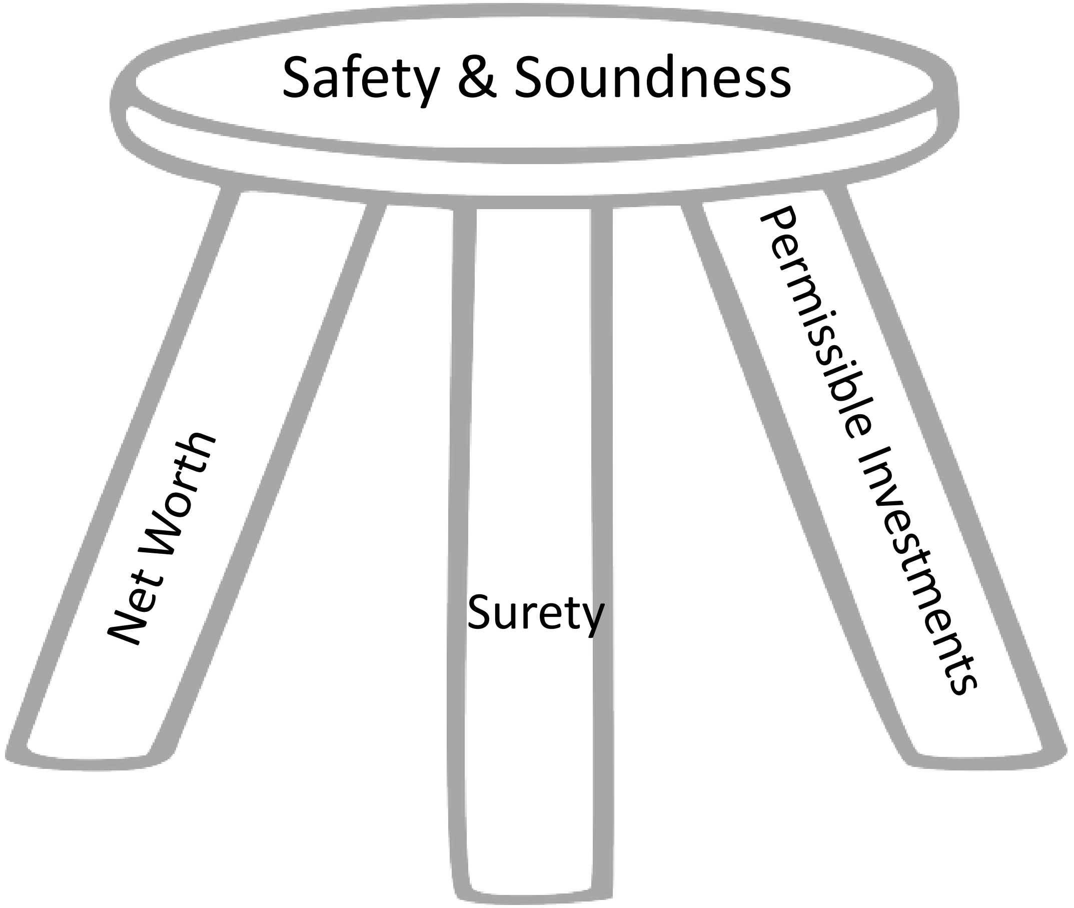
Scope: Largest companies

Purpose of Safety & Soundness:

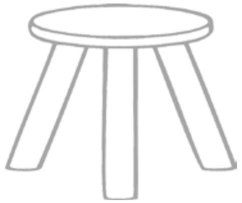
- **Protect Consumers** – limit consumer exposure to company's risk of loss
- **Absorb Losses** –institutions must be able to continue operating as a going concern during periods when operating losses of other adverse financial results are experienced
- **Promote Public Confidence** – measure of assurance that institution will continue to provide financial services even when losses have occurred
- **Restrict Unsustainable Asset Growth** – restrain unwarranted asset expansion by requiring that asset growth be funded by a commensurate amount of additional capital

Current S&S Framework: Three-Legged Stool

Category	Metric	Most Common Amount
Financial Condition	Net Worth	$100,000
Surety	Bond	$500,000
Permissible Investments	Transmission Liability	U.S. Liabilities
Permissible Investments	High Quality Liquid Assets	Riskier assets subject to haircut or limitation

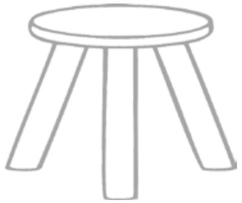


Shortcomings of Three-Legged Stool



Issue	Impact	Numbers
Financial condition requirements (net worth) do not scale for largest companies	Net worth insufficient for loss absorption	Largest net worth requirement ($3 million) is a fraction of 1% of the largest ADTLs
Surety requirements do not scale with increased customer liabilities	Surety insufficient to cover customer losses upon failure	• State bond requirements amount to ~$50m • 21 companies have an ADTL in excess of $50m • Bonding covers less than 25% of consumer funds at 9 largest companies
Permissible investments calculated in isolation of financial condition and bonding	Riskier assets secure customer funds even in times of financial distress	Analysis needed: what correlation exists between financial performance and PI held as risky assets?

Path Forward



Ratio-based financial condition requirement

- Compliance based on relation between assets and liabilities, remains effective with growth
- Proposed ratio: Tangible Assets / Total Liabilities
- Conversion to Buffer: (Tangible Assets / Total Liabilities) – 1

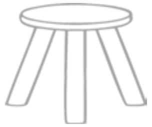
Rebrand permissible investments as "safeguarding"

- Explicitly prohibit conversion of customer funds
- Condition the types of permitted assets on strength of financial condition
- Consider funds safeguarded if 110% of funds are covered by a surety bond

Specify use of surety bonds

- Minimum Bond: amount required to fund a receivership (will grow with company)
- Maximum Bond: 110% of customer funds → no requirement to convert customer funds to safe assets

3-Legged Stool to Suspension Bridge



Three Legged Stool

- Static Net Worth Amount
- Static Investment Permissibility & Calculations
- Static Bond Amount

Suspension Bridge

- Foundation 1: tangible assets must be 105% of total liabilities
- Foundation 2: assets permitted to safeguard customer funds dictated by financial strength
- Flexible Support:
  - Bond covers cost of receivership
  - May be expanded to cover 110% of customer funds

Foundation 1: Tangible Asset Buffer

Policy

Minimum acceptable financial condition: tangible assets sufficient to cover an unexpected loss of 5%

Preferred financial condition: a company has tangible assets sufficient to cover an unexpected loss of 15%

Calculation

Tangible Assets / Total Liabilities

Conversion to a Buffer: If the Tangible Assets / Total liabilities is 105%, there is a 5% buffer

Enforcement

Adapted FDIC Prompt Corrective Action Framework

Prompt Corrective Action

Buffer Range	Prompt Corrective Action
2% or below	• Cannot accept new customer funds • Orderly winddown within 90-days
3 & 4%	• Cannot pay bonuses or increase compensation of officers • Must file an acceptable capital restoration plan • Cannot pay dividends or management fees • Notice: 90 days to restore 5%
5 – 15%	• Notice: must safeguard assets with insured deposits or Treasuries

Foundation 2: Tangible Asset Buffer Dictates how Customer Funds are Safeguarded

Policy

To ensure customer funds are protected during failure, companies with a weak financial condition must hold customer funds in the safest assets

Companies that can absorb asset losses can do so with other assets, subject to common limitations

Calculation

Adapt risk-based liquidity rules from the Federal Banking Agencies' Liquidity Coverage Ratio Requirement

Risk Adjustments

Liquidity Coverage Ratio haircuts apply

Riskiest assets can only count for 50% of safeguarded funds

Liquidity Coverage Ratio

Source: Federal Banking Agencies

Purpose: risk-based standard to ensure large banks can absorb a 30-day liquidity event

Calculation: $\frac{\text{High-Quality Liquid Assets}}{\text{Total Net Cash Outflows}} \geq 100\%$

HQLAs: divided into Level 1 and Level 2 assets

- Level 2 Assets subject to haircut & cap

Risk Weight Table: Level 1

LCR Asset	LCR Haircut	Proposed MSB Adaptation	MSB Haircut	MSB Cap
Balances held at Federal Reserve Bank	0%	Insured U.S. Deposits	0%	None
Balances at Foreign Central Banks	0%	OECD CRC 0-1 Deposits	0%	None
Other OECD Security for purposes of outflows in that jurisdiction	0%	Foreign Suspense Accounts	0%	ADTL in Jurisdiction
OECD CRC 0-1 Guaranteed Securities	0%	OECD CRC 0-1 Guaranteed Securities	0%	None
U.S. Treasuries	0%	U.S. Treasuries	0%	None
Agencies Fully Guaranteed by U.S. Gov.	0%	Guaranteed Agencies	0%	None

Risk Weight Table: Level 2

LCR Asset	LCR Haircut	LCR Cap	Proposed MSB Adaptation	MSB Haircut	MSB Cap 50% Total
Level 2A					
GSE Securities	15%	40%	GSE Securities	15%	40%
OECD CRC 2 Country-Issued Securities	15%	40%	OECD CRC 2 Country-Issued Securities	15%	40%
Level 2B					
Corporate Debt Security	50%	15%	Corporate Debt Security	50%	15%
Publicly traded common equity share	50%	15%	Publicly traded common equity share	50%	15%
Municipal Bonds	50%	15%	Municipal Bonds	50%	15%

Buffer Tiers Dictate Safeguarding Assets

Buffer Range	Assets Permitted for Safeguarding Customer Funds	Haircut	Cap
0–5%	• U.S. Insured Deposits • U.S. Treasuries	0%	None
5–15%	• Foreign Deposits: OECD 0-1 • OECD CRC 0-1 Guaranteed Securities • Fully Guaranteed Agencies	0%	None
15–50%	• GSEs (20%) • Foreign Deposits: OECD 2 (20%) Botswana · China · Kuwait · Malaysia · Saudi Arabia · United Arab Emirates	15%	40% each
50%+	• Corporate Debt Securities • Public traded common equity share (Russel 1000) • Municipal Bonds	50%	15% each

50%

Flexible Support 1: Bonding in Lieu of Permissible Assets

Policy

Customer funds are protected if a bond covers all funds

Prohibition on comingling funds prevents unauthorized use of funds

Precaution

Since customer liabilities fluctuate, 110% of customer funds must be insured

Supporting Innovation

A bonding model will likely be easier for startups with limited investment capabilities

Flexible Support 2: Receivership Insurance

Fact

Customer funds at largest companies greatly exceed bond requirements

Policy

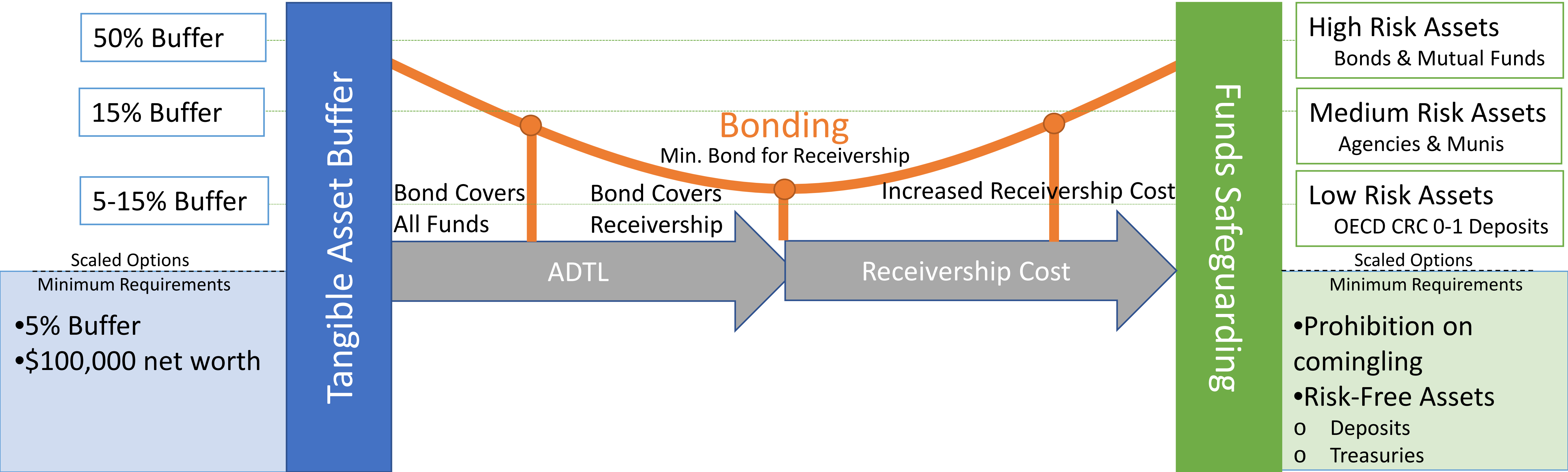
Use bonds to ensure a de minimis amount of funds are available to manage a receivership

Reasoning

Financial condition and asset safeguarding requirements protect consumer funds, but cash must be available to manage a bankruptcy corpus

Proposal: The Suspension Bridge

- Two pillars of support:
  - Tangible Asset Buffer
  - Funds Safeguarding Rules
- Flexible support:
  - Surety Bonds



Outstanding Issues

- GAAP application, including:
  - Customer Liabilities:
    - When established
    - When extinguished
  - Consistent reporting of tangible assets and total liabilities
  - Receivables
- Treatment of prefunded accounts in foreign jurisdictions
- Transition
- Predictive calculation of cost of receivership

Consideration: Risk-Based Liability Adjustments

- Bank must count the following assets against capital
- Should money transmitters do the same?

Asset		Haircut
Sovereign Default		150%
High-Volatility Commercial Real Estate Loans		150%
Publicly-traded equity exposures, including the ineffective portion of a hedge		300%
Non-publicly traded equity exposures		400%
Past Due Exposures		150%
Unsettled Transactions (business days after settlement date)		
	5 to 15	100%
	16 to 30	625%
	31 to 45	938%
	46 or more	1250%

Consideration: Letter of Credit

- The Fintech Industry Advisory Panel has consistently pushed for letters of credit to count for permissible investments
- Letters of credit are typically heavily conditioned by banks, requiring an “out” to avoid regulatory scrutiny
- A corporate parent might be a good source of strength, particularly those with large sums of cash
- Is a corporate source of strength a competitive advantage without a significant added amount of consumer protection?

Appendix A

Liquidity Coverage Ratio Rule Details

HQLA Level 1 Assets: No Haircut

- Balances held at a Federal Reserve Bank (with some exceptions)
- Foreign withdrawable reserves at a foreign central bank
- Security issued by, or unconditionally guaranteed as to the timely payment of principle and interest by, the U.S. Treasury
- A security issued by, or unconditionally guaranteed as to the timely payment of principal and interest by, any other U.S. government agency whose obligations are fully and explicitly guaranteed by the full faith and credit of the U.S. government, provided that the security is liquid and readily marketable.

HQLA Level 1 Assets: No Haircut continued…

- **A security issued by, or unconditionally guaranteed as to the timely payment of principal and interest by, a sovereign entity, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, European Community, or an MDB**, that is:
  - Assigned a 0% risk weight under the U.S. Basel III standardized approach capital rules as of the calculation date;
    - This category generally includes all OECD sovereign debt unless it has defaulted or was restructured in the previous 5 years.
  - Liquid and readily marketable;
  - Issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions;* and
  - Not an obligation of a financial sector entity or its consolidated subsidiary.

- **A security issued by, or unconditionally guaranteed as to the timely payment of principal and interest by, a sovereign entity that is not assigned a 0% risk weight under the U.S. Basel III standardized approach capital rules**, if:
  - The sovereign entity issues the security in its own currency;
  - The security is liquid and readily marketable; and
  - The banking organization holds the security in order to meet its net cash outflows in the jurisdiction of the sovereign entity, as calculated under the U.S. LCR final rule

Level 2A Assets (15% haircut) (capped at 40% of HQLAs)

- **A security issued by, or guaranteed as to the timely payment of principal and interest by, a U.S. GSE** (i.e., Fannie Mae, Freddie Mac, Federal Home Loan Banks (FHLB), and the Farm Credit System) that is:
  - Liquid and readily marketable;
  - Investment grade; and
  - Senior to preferred stock.

- **A security issued by, or guaranteed as to the timely payment of principal and interest by, a sovereign entity or MDB** that is:
  - Liquid and readily marketable;
  - Not included in Level 1 assets;
  - Assigned no higher than a 20% risk weight under the U.S. Basel III standardized approach capital rules as of the calculation date;
  - Issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions, as demonstrated by:
    - The market price of the security or equivalent securities of the issuer declining by ≤ 10% during a 30 calendar-day period of significant stress; or
    - The market haircut demanded by counterparties to secured lending and secured funding transactions that are collateralized by the security or equivalent securities of the issuer increasing by ≤ 10% during a 30 calendar-day period of significant stress; and
  - Not an obligation of a financial sector entity or its consolidated subsidiary.

Level 2B Assets (50% haircut) (capped at 15% of total HQLAs)

- **A corporate debt security** that is:
  - Liquid and readily marketable;
  - Investment grade;
  - Issued or guaranteed by an entity whose obligations have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions, as demonstrated by:
    - The market price of the corporate debt security or equivalent securities of the issuer declining by ≤ 20% during a 30 calendar-day period of significant stress; or
    - The market haircut demanded by counterparties to secured lending and secured funding transactions that are collateralized by corporate debt security or equivalent securities of the issuer increasing by ≤ 20% during a 30 calendar-day period of significant stress; and
  - Not an obligation of a financial sector entity or its consolidated subsidiary.

Level 2B Assets continued…

A publicly traded common equity share that is:

- Liquid and readily marketable;
- Included in:
  - The Russell 1000 Index; or
  - An index that a banking organization's supervisor in a foreign jurisdiction recognizes for purposes of including equity shares in Level 2B assets under applicable regulatory policy, if the share is held in that foreign jurisdiction;
- Issued in (1) U.S. dollars or (2) the currency of a jurisdiction where the banking organization operates and the banking organization holds the common equity share in order to cover its net cash outflows in that jurisdiction;
  - Example: A banking organization may hold a stock issued in Japanese yen as a level 2B asset only if the banking organization operates in Japan and the stock is available to support the organization's yen denominated net cash outflows in Japan.
- Issued by an entity whose publicly traded common equity shares have a proven record as a reliable source of liquidity in repurchase or sales markets during stressed market conditions, as demonstrated by:
  - The market price of the security or equivalent securities of the issuer declining by ≤ 40% during a 30 calendar-day period of significant stress; or
  - The market haircut demanded by counterparties to securities borrowing and lending transactions that are collateralized by the publicly traded common equity shares or equivalent securities of the issuer increasing by ≤ 40%, during a 30-calendar day period of significant stress;
- Not issued by a financial sector entity or by its consolidated subsidiary;
- If held by a depository institution, is not acquired in satisfaction of a debt previously contracted (DPC); and
- If held by a consolidated subsidiary of a depository institution, the depository institution can include the publicly traded common equity share in its Level 2B assets only if the share is held to cover net cash outflows of the depository institution's consolidated subsidiary in which the publicly traded common equity share is held, as calculated by the banking organization under the U.S. LCR final rule.

Liquid and readily marketable

Security is traded (through outright sales or repurchase transactions) in an active secondary market with:

- More than two committed market makers;
- A large number of non-market maker participants on both the buying and selling sides of transactions;
- Timely and observable market prices; and
- A high trading volume.

A banking organization should be able to demonstrate its security-by-security analysis (which may include time-series analyses about the specific security or comparative analysis of similar securities from the same issuer) that HQLAs meet the liquid and readily marketable standard.

Excluded Assets

- Vault cash
- Gold bullion
- Central bank restricted committed facility capacity
  - However, the Agencies stated they may propose at a future date to include such capacity as HQLAs.
  - The Basel Committee announced on January 12, 2014, an amendment to the Basel III Revised Liquidity Framework that included allowing capacity from restricted committed liquidity facilities of central banks as HQLAs.
- Asset-backed securities
- Covered bonds
- Private-label mortgage-backed securities
- Mortgage loans
- Investment company shares (e.g., shares of mutual funds and money market funds)
- ETFs
- Collateral pledged to FHLBs that are not otherwise HQLAs
- FHLB letters of credit
- FHLB collateralized advance availability

Appendix B

OECD Country Risk Classifications

0 & 1		2 & 3	4	5	6	7
Andorra	Micronesia	* 2 *	Algeria	Albania	Angola	Afghanistan
Australia	Monaco	Botswana	Aruba	Azerbaijan	Argentina	Antigua and Barbuda
Austria	Nauru	China	Colombia	Bahrain	Armenia	Bosnia and Herzegovina
Barbados	Netherlands	Hong Kong (China)	Croatia	Bangladesh	Belarus	Burkina Faso
Belgium	New Zealand	Kuwait	Dominican Republic	Bolivia	Benin	Burundi
Belize	Norway	Macau (China)	Guatemala	Brazil	Bhutan	Central African Republic
Brunei Darussalam	Palau	Malaysia	Namibia	Curaçao	Cabo Verde	Chad
Canada	Poland	Saudi Arabia	Oman	Egypt	Cambodia	Congo
Chile	Portugal	United Arab Emirates	Russia	El Salvador	Cameroon	Cuba
Comoros	Saint Kitts and Nevis		South Africa	Fiji	Côte d'Ivoire	Democratic People's Republic of Korea
Cyprus	Saint Lucia	* 3 *		Macedonia	Ecuador	Democratic Republic of the Congo
Czech Republic	Saint Vincent and the Grenadines	Bahamas		Honduras	Gabon	Djibouti
Denmark	Samoa	Bulgaria		Jordan	Georgia	Equatorial Guinea
Dominica	San Marino	Costa Rica		Kazakhstan	Ghana	Eritrea
Estonia	Sao Tome and Principe	India		Paraguay	Guyana	Ethiopia
Finland	Seychelles	Indonesia		Senegal	Iran	Gambia
France	Sint Maarten	Mauritius		Serbia	Jamaica	Guinea
Germany	Slovak Republic	Mexico		Tunisia	Kenya	Guinea-Bissau
Greece	Slovenia	Morocco		Turkey	Lesotho	Haiti
Grenada	Solomon Islands	Panama		Uzbekistan	Maldives	Iraq
Hungary	Spain	Peru		Viet Nam	Mongolia	Kosovo
Iceland	Sweden	Philippines			Myanmar	Kyrgyzstan
Ireland	Switzerland	Qatar			Nepal	Lao People's Democratic Republic
Israel	Tonga	Romania			Nigeria	Lebanon
Italy	Tuvalu	Thailand			Papua New Guinea	Liberia
Japan	United Kingdom	Trinidad and Tobago			Rwanda	Libya
Kiribati	United States	Uruguay			Sri Lanka	Madagascar
Korea	Vanuatu				Suriname	Malawi
Latvia					Swaziland	Mali
Liechtenstein	Chinese Taipei (1)				Tanzania	Mauritania
Lithuania					Timor-Leste	Moldova
Luxembourg					Togo	Montenegro
Malta					Turkmenistan	Mozambique
Marshall Islands					Uganda	Nicaragua
					Zambia	Niger
						Pakistan
						Sierra Leone
						Somalia
						South Sudan
						Sudan
						Syrian Arab Republic
						Tajikistan
						Ukraine
						Venezuela
						West Bank and Gaza
						Yemen
						Zimbabwe