

Future of Finance:

A Webinar with Prime
Brokers and Hedge Fund
Managers.



Acknowledgements

Thank you to Future of Finance and The Panel for inviting Credit Benchmark to participate in this webinar.

Moderator: **Dominic Hobson** - Future of Finance

The Panel:

Jack Seibald of Cowen

Jack Inglis of AIMA

Chris Caruso of Pangaea

Mark Faulkner of Credit Benchmark



Topic: What the current crisis is doing to prime brokerage – a Future of Finance webinar with prime brokers and hedge fund managers

Time: June 29, 2020, 2:00PM in London


Agenda

- Introduction
- Consensus Ratings in context
- Credit Benchmark coverage
- Buy-side use cases
- Q1 Loan Provisions of Major US & European Banks
- Financial Counterparts Risk Monitor
- Research & Updates

Credit Distributions:

- G-SIBs
 - North America
 - EMEA
 - Asia
- G-SIBs: Subsidiaries
 - North America
 - EMEA
- G-SIBs: Prime Brokers
 - North America
 - EMEA
- G-SIBs: Primer Broker Subsidiaries
 - North America
 - EMEA
- Broker Dealers
 - Banks
 - Non-Banks

The Credit Benchmark dataset represents the real-world credit views of major financial institutions with 'skin in the game' modelled by their specialist Credit Risk functions and overseen by their regulators



A Unique Source of Credit Risk Data



World's Only Source of Forward-Looking Consensus Credit Risk Data

- Fortnightly entity-level credit consensus ratings are provided on a 21-notch scale.
- Circa 45,000 corporates, financials, funds and sovereigns and over 700 aggregates have a consensus rating
- Sourced from firms with “skin in the game” the data highlights noteworthy, actionable, correlations and trends.



Not a Traditional Credit Rating








- Represents over 750,000 internal credit views from more than 40 financial institutions and 20,000 credit analysts.
- Traditional credit ratings are “issuer-paid”, do not change frequently and are produced by a single teams.
- Over 75% of the entities with consensus ratings are unrated by the large credit rating agencies.



Not Just Another Market-Derived or Alternative Data Point

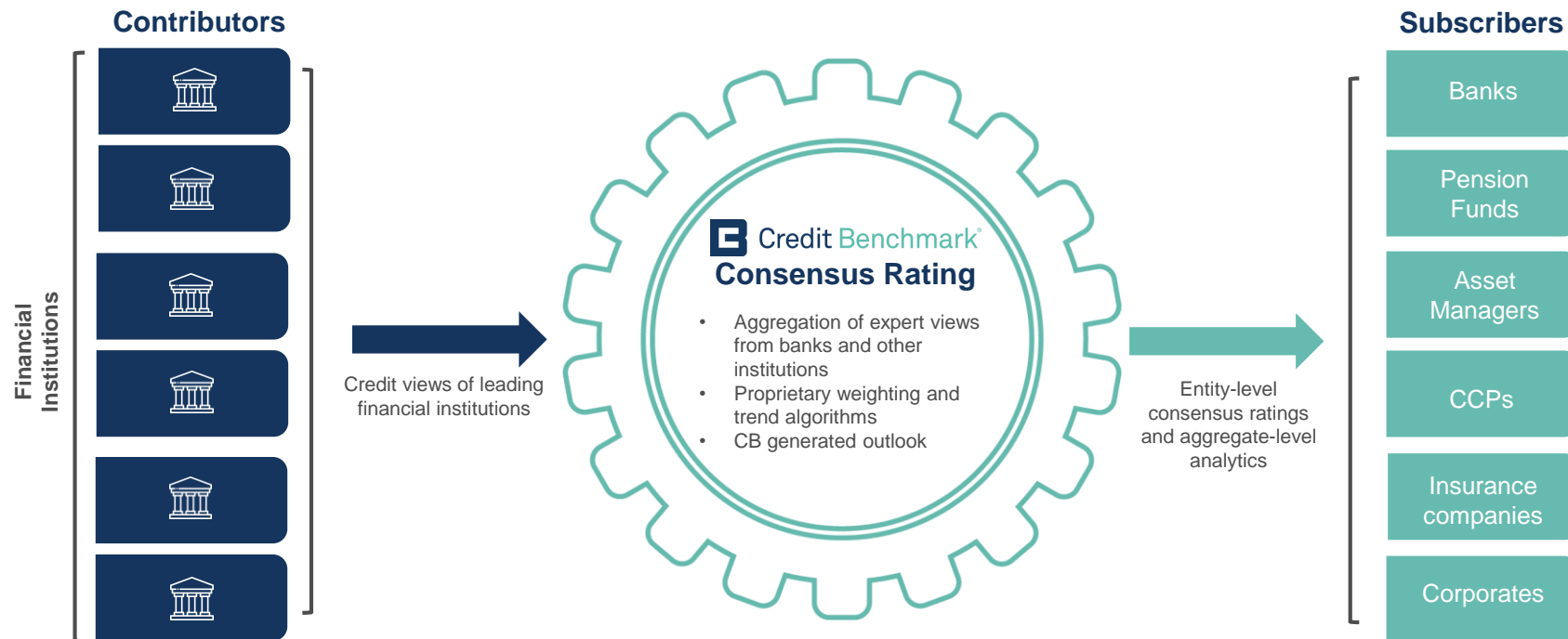
- Consensus ratings are less volatile than market-derived signals and reflect real-world creditworthiness.
- The data endures a rigorous, multi-step process to ensure confidentiality, accuracy, and relevance.
- Range, skew, dispersion, trend and opinion change metrics are provided for additional insight.

Contributed Data Models

Data	Provider
Earnings Estimates	  
CDS Pricing	 Totem
Broker Research	
Fixed Income Pricing	
Securities Finance	
Credit Risk Management	

The Process

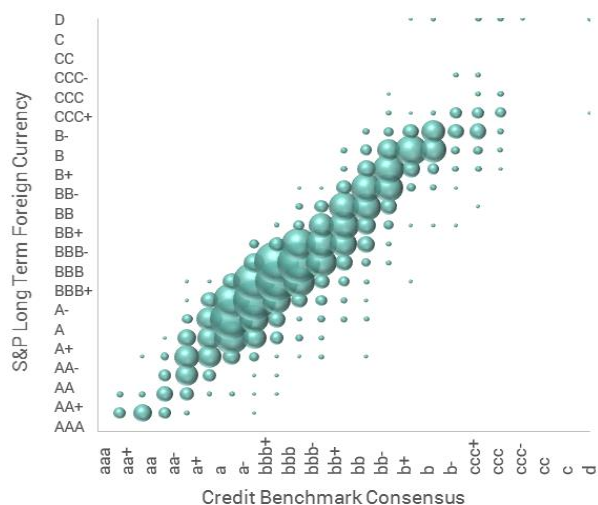
Aggregating the consensus credit risk views of the world's leading financial institutions to create a consensus rating



Credit Consensus Ratings in Context

Consensus vs. a Credit Rating Agency

As shown here, the consensus is comparable to S&P ratings on a like-for-like basis (correlation is 0.935)



- 82% of the consensus obligors and counterparts in the CB universe have no long-term S&P rating
- Overlap primarily possible on S&P rated corporates (60% of entities) and financials (30%)
- CRA upgrades and downgrades often appear in clusters in time. Our fortnightly consensus tends to show a more uniform pattern over time, and an indication of trends – analogous to the CRA “Watch” concept and avoiding “credit cliffs”

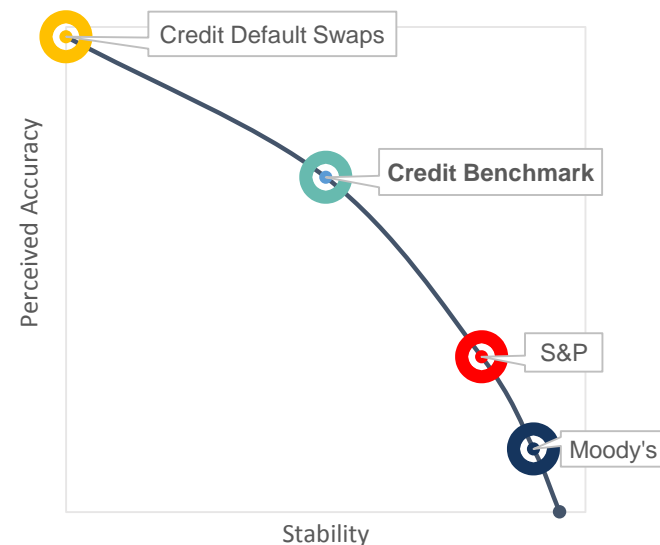
Credit Default Swaps & Credit Rating Agencies

- **CDS** prices can be volatile and contain “noise” that doesn’t necessarily reflect actual credit risk e.g. trading positions & hedging transactions.
- **CDS** liquidity does not extend to many single name entities, with the result that **CDS** indices are often used as a proxy – reducing accuracy.
- **CRA** ratings do not change very often over time - they are designed not to, as they are paid for by the issuer to be stable to support bond issuance
- **CRA** coverage is of limited scope as it requires issuers to pay to get a rating “issuer pays”

Credit Benchmark Consensus Ratings

- **Consensus** is less volatile than **CDS** prices and is produced fortnightly, reflecting the real-world credit risk assessments of teams of specialists
- **CB** data is produced more frequently than **CRA** ratings and moves as the market view of credit risk changes
- **CB** data is derived from the opinions of a network of sophisticated financial institutions and 10,000s of analysts – with “skin in the game”
- **CB** data covers more single name entities than all of the main **CRAs** and the **CDS** market combined

Perceived Accuracy vs. Stability



Broader, Deeper and More Timely Coverage

Recent fortnightly coverage statistics

45,000

Ratings at the
entity level

600

Aggregates

75

Sectors

300

Subsectors

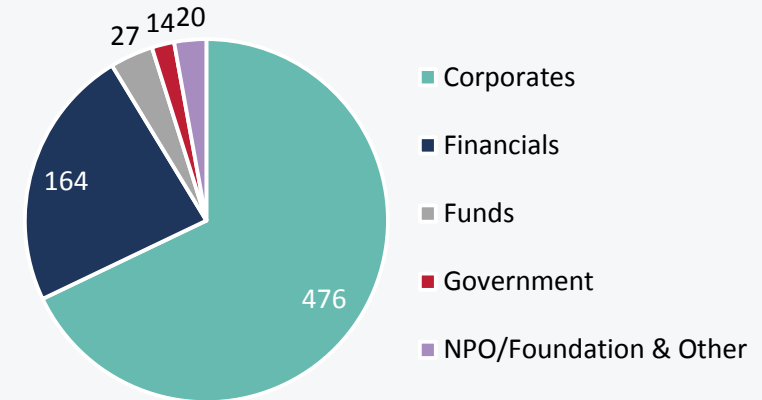
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Group level
(aggregates) ratings

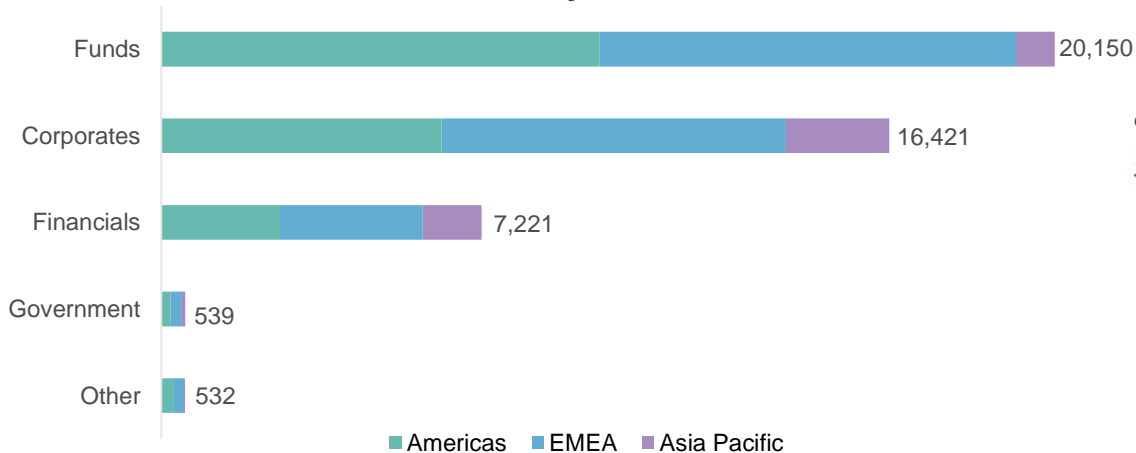
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Transition matrices

Aggregates coverage

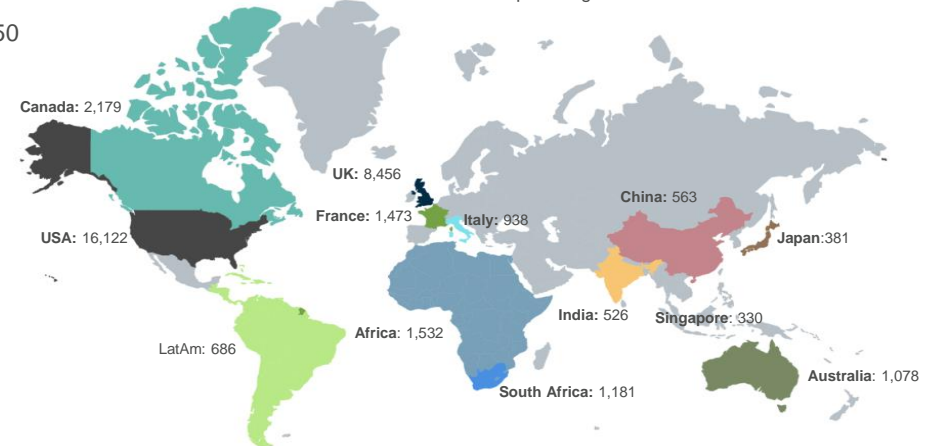


Breakdown by sector



Geographical coverage

c.40 banks have committed to providing data



CRAs Cover a Small Proportion of the Risk Universe

Comparison to the Credit Rating Agencies (CRA)

Most legal entities remain unrated by the Credit Rating Agencies

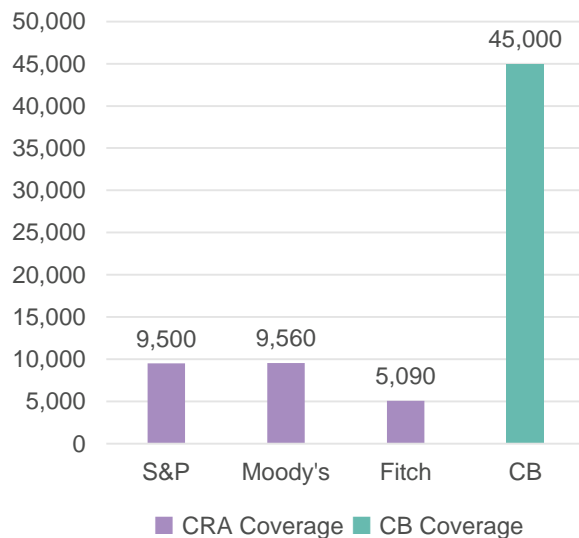
Rated Entities: c. 15.5k

- 73% of Sovereigns
- 15% of banks
- c.25% of listed corporates

Unrated Entities:

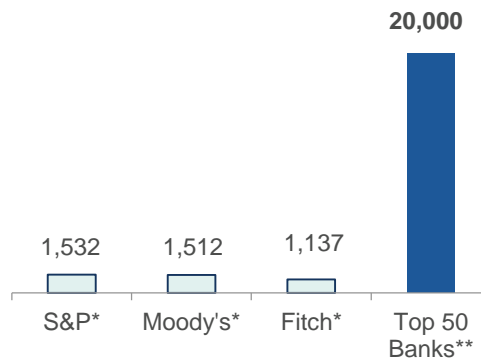
- 27% of Sovereigns
- 85% of Banks
- c. 75% of listed corporates
- Most private companies
- Most emerging market corporates
- Most SMEs
- Virtually all funds

CB coverage exceeds individual CRAs



Credit Risk Analyst Resources

Credit Benchmark pools collective intelligence from a very large group of expert analysts



CB Consensus Ratings Scale

Credit Benchmark Consensus Ratings (CR) is based on a 21-category alphabetic scale that summarizes consensus credit risk estimates to provide a benchmark for credit rating agency ratings.

CR-2	CR-4	CR-7	CR-21
Investment Grade	IGa	aaa	aaa
		aa	aa+
			aa
			aa-
		a	a+
			a
			a-
	IGb	bbb	bbb+
			bbb
			bbb-
High Yield / non Investment Grade	HYb	bb	bb+
			bb
			bb-
		b	b+
			b
			b-
	HYc	c	ccc+
			ccc
			ccc-
			cc
c			
Default	d	d	d

Credit Benchmark Use Cases



Counterpart Credit Risk Analysis

- Qualify and assess the credit risk of new and existing counterparts in KYC and ODD
- Monitor your counterpart universe, benefitting from automated surveillance and alerts
- Review prime brokers, B/Ds, custodians, sub-custodians and CCPs (and members)
- Extensive coverage across unrated financial subsidiaries, unique to Credit Benchmark



Quantitative Funds

- A full historical dataset is available for market signal identification
- Entity- and Aggregate-level data available across global markets
- Signals have been found across all major markets – equity, credit and derivatives



Discretionary Funds

- Generate single entity ideas/signals and benchmark internal credit views
- Assess credit trends and sentiment across 700 aggregate
- Ratings are available by geography sector, entity type and broad credit grade
- Monitor existing credit portfolio exposures and automatically receive alerts



Securities Lending Borrowing & Repo

- Insight into exposures across Securities Finance – Lending, Borrowing & Repo books
- Supports SFTR, ALD, RWA - speeding up onboarding and enhancing reporting
- Second-order risks across CCPs and prime brokers can be better understood
- Peer-to-peer opportunities open up with unique visibility into potential counterparties

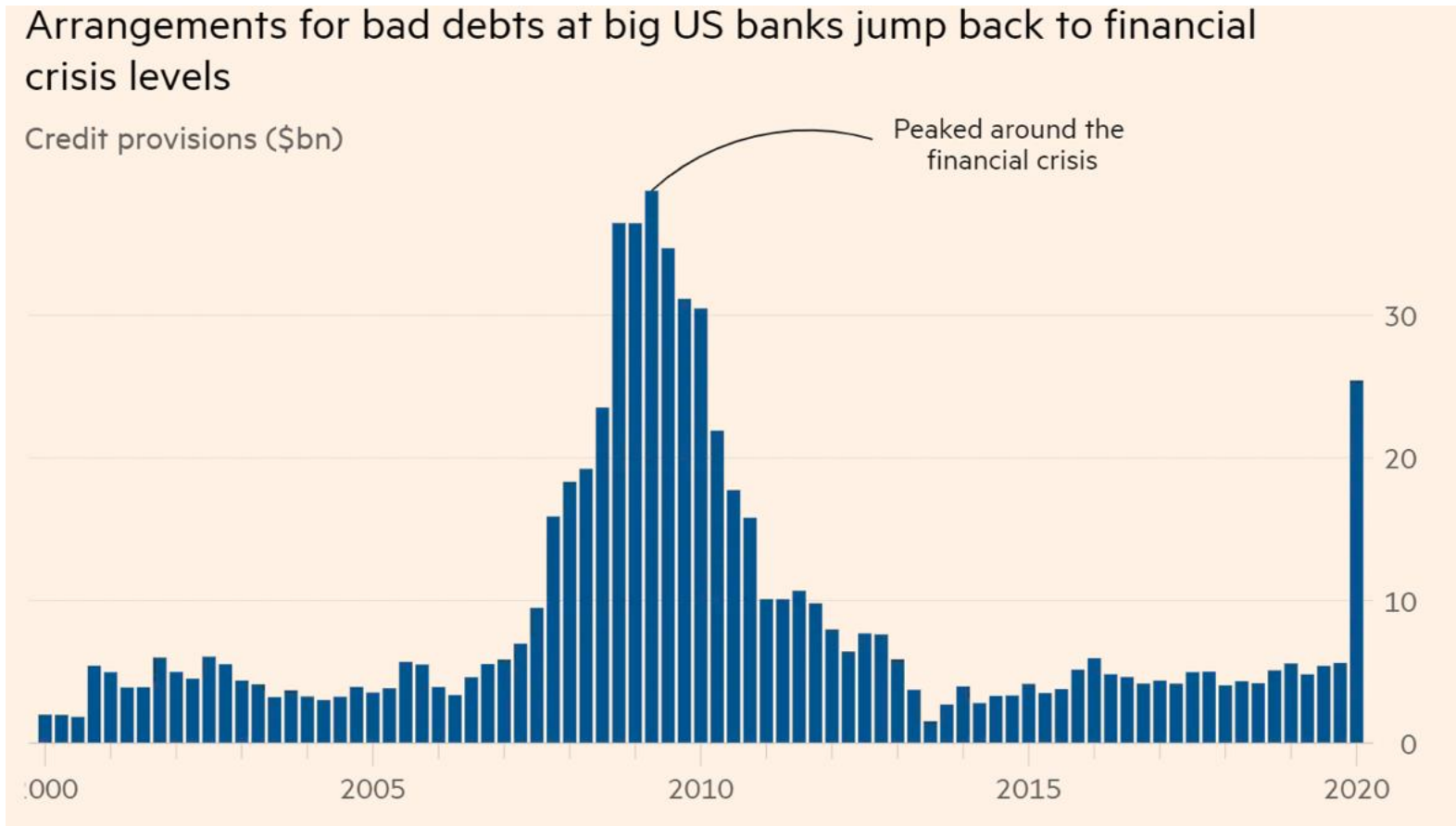


Supply Chain Alerting & Surveillance

- Monitor your supply chain and vendor risk systematically
- Review potential and existing investments in corporates with complex supply chains
- Be alerted to changes in creditworthiness automatically
- Compliment and increase the productivity of your credit team

Q1 Loan Provisions of Major US Banks

The Financial Times observes that bad debts @ big US banks hit levels not seen since the 2008 Global Financial Crisis



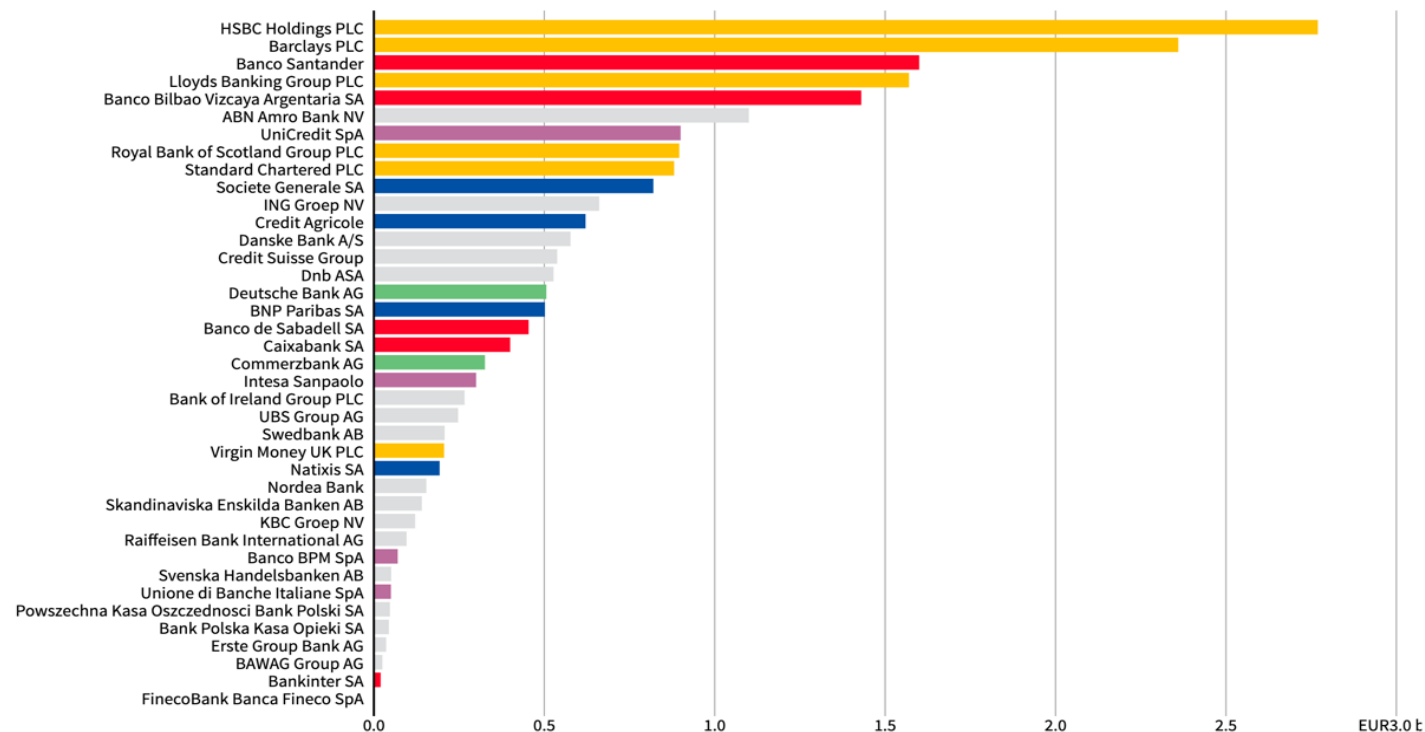
Source: Financial Times

Q1 Loan Provisions of Major Europe Banks

Thomson Reuters list the loss provisions of the larger European Banks – the colours relate to the country of domicile of the banks - UK, Spain, Italy, France, Germany

Loan loss provisions by European banks, Q1 2020

Largest lenders by market value in the Stoxx Europe 600 Bank Price Index. Country grouping by colour in note below, amounts in EUR billions.



Source: Thompson Reuters

Financial Counterparts Risk Monitor

At Credit Benchmark we are already seeing material credit transitions in the credit consensus data we collect from 40 of the world's largest banks.

The pace of credit transitions is accelerating with a bias to the downside as the extract from a recent Bank and Non- bank Financial Institutions Monitor demonstrates.

This high-level macro analysis is also available at a micro or entity level for Credit Benchmark clients - but for the purposes of this webinar discussion, macro analysis is sufficient.

BETA

Credit Benchmark®

Bank and Non-Bank Financial Institutions Risk Monitor

9th Jun 2020

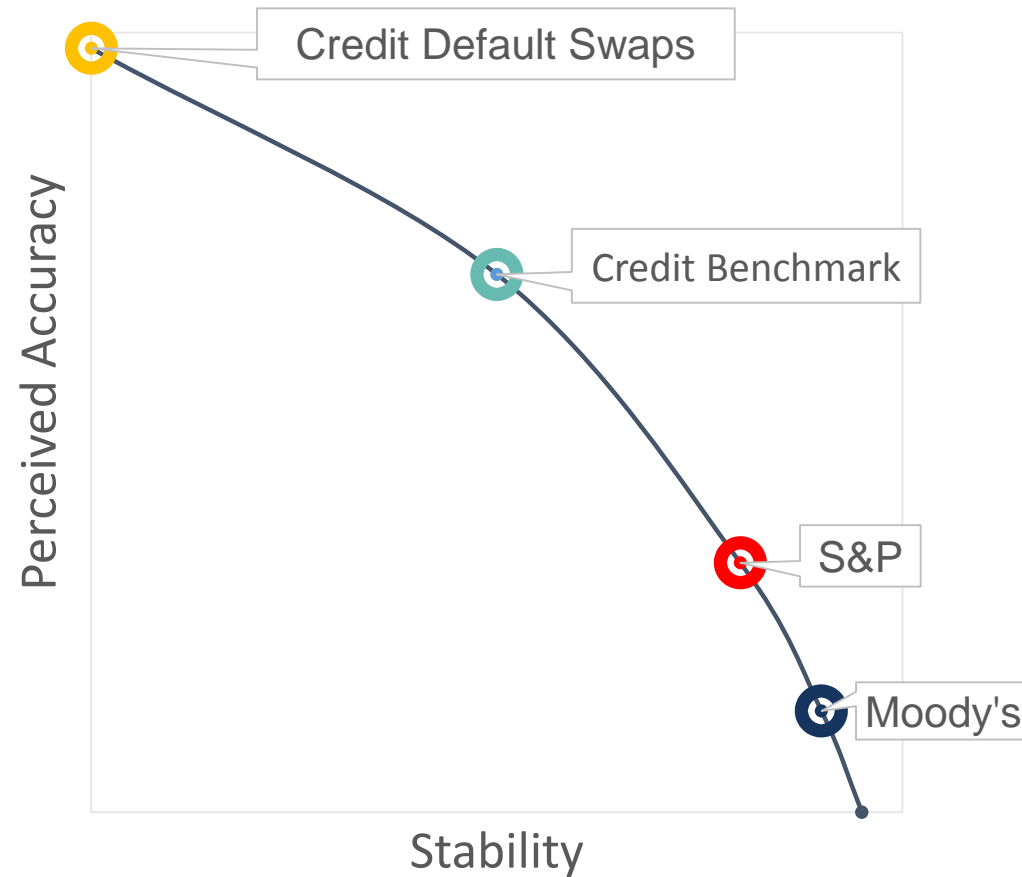
This report summarizes the changes in credit consensus of different groups of financial counterparts as well as their current credit distribution and any migration from investment grade to high yield.

Credit Benchmark offers global coverage of financial counterparts at a legal entity level. To monitor and be automatically alerted to the changing credit consensus of your financial counterparts, please email info@creditbenchmark.com.

	Total	Credit Consensus Changes			Credit Consensus Distribution						
		Deteriorations	Improvements	IG to HY	aaa	aa	a	bbb	bb	b	c
Banks											
Central Banks	112	9.8%	6.3%	1	17	13	17	17	26	17	5
Globally Systemically Important Banks	30	6.7%	6.7%	0		7	21	2			
Banks - Global	2,026	10.3%	2.9%	16	2	63	624	691	455	151	40
Banks - North America	311	13.2%	0.3%	12	2	12	109	159	27	1	1
Banks - Latin America	146	37.7%	0.7%	0			8	54	67	6	11
Banks - EMEA	1,057	7.7%	3.5%	9		37	316	300	274	102	28
Banks - APAC	509	6.3%	3.7%	2		14	191	177	85	42	

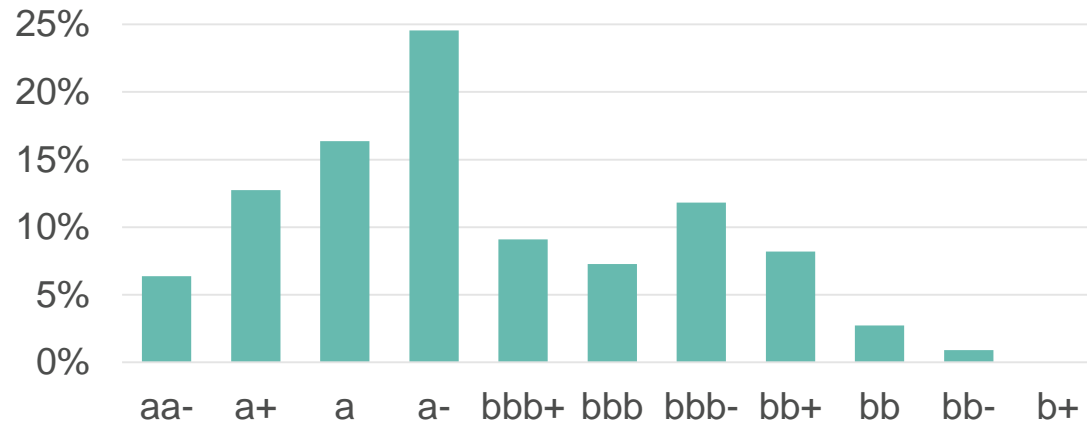
Credit Consensus Ratings in Context

Perceived Accuracy vs. Stability

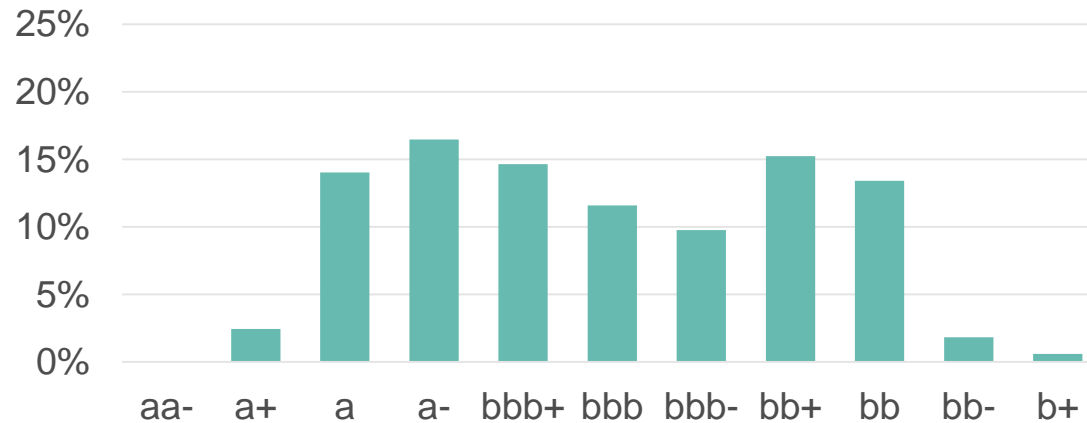


Broker Dealers: Bank vs Non-Bank

Bank Broker Dealers (110)



Non-Bank Broker Dealers (164)



Q2 US Banks Provisions & Reserves

Provisions and reserves at US banks, Q1'20

Earnings reported up to April 17

Company (ticker)	Q1'20 total assets (\$B)	Provision for loan losses (\$M)		Loan loss reserves/gross loans*	
		Q1'20	YOY change	Q1'20 (%)	YOY change (bps)
JPMorgan Chase & Co. (JPM)	3,139.4	8,285.0	6,793.0	2.29	87
Bank of America Corp. (BAC)	2,620.0	4,761.0	3,753.0	1.49	48
Citigroup Inc. (C)	2,219.8	7,027.0	5,083.0	NA	NA
Wells Fargo & Co. (WFC)	1,981.3	4,005.0	3,160.0	1.09	6
U.S. Bancorp (USB)	542.9	993.0	616.0	1.92	55
PNC Financial Services Group Inc. (PNC)	445.5	914.0	725.0	1.48	33
Citizens Financial Group Inc. (CFG)	176.7	600.0	508.0	1.66	61
KeyCorp (KEY)	156.2	359.0	295.0	1.29	32
Regions Financial Corp. (RF)	133.5	373.0	282.0	1.76	75
First Republic Bank (FRC)	123.9	48.1	33.9	0.57	-2
IBERIABANK Corp. (IBKC)	32.2	69.0	56.4	1.16	54
Western Alliance Bancorp. (WAL)	29.2	51.2	47.7	1.02	16
Home BancShares Inc. (HOMB)	15.5	86.8	86.8	2.01	104

Data compiled April 21, 2020.

NA = not available

Includes U.S. banks with more than \$10 billion in assets as of March 31, 2020, that reported earnings up to April 17, 2020.

Data based on GAAP filings.

* Loan loss reserves exclude allowance for unfunded commitments.

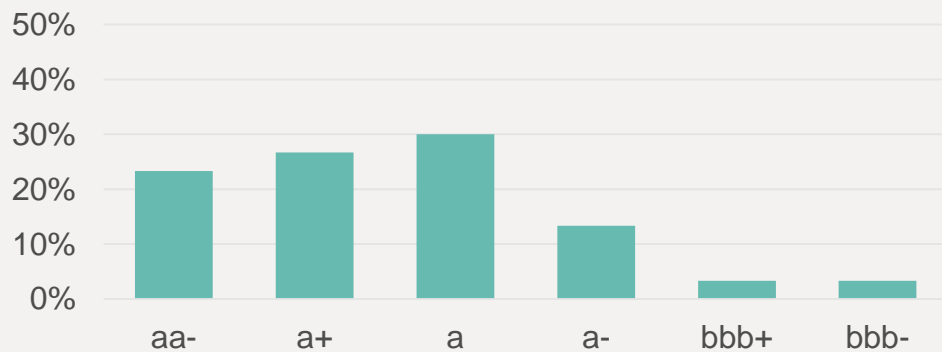
Source: S&P Global Market Intelligence

Financial Counterparts Risk Monitor: Intermediaries

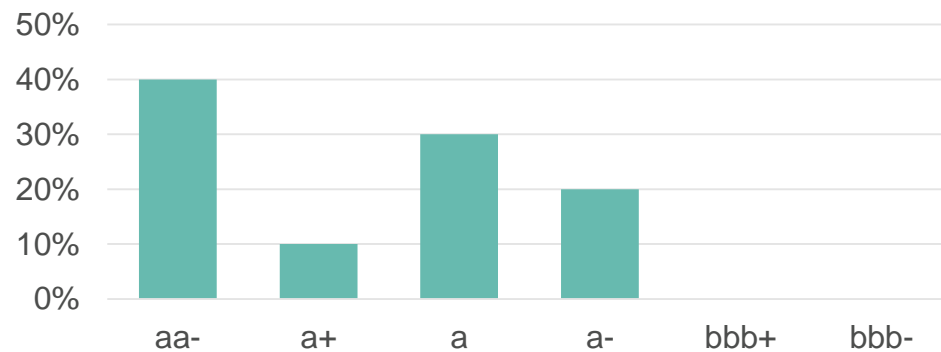
	Credit Consensus Changes				Credit Consensus Distribution						
	Total	Deteriorations	Improvements	IG to HY	aaa	aa	a	bbb	bb	b	c
Intermediaries											
Central Clearing Counterparts (CCP)	40	2.5%	2.5%	0		6	15	19			
CCP Members	1,904	11.3%	5.1%	4	6	119	953	520	275	21	10
Broker Dealers	261	7.3%	2.3%	0		7	108	83	62	1	
Custodians and Sub Custodians	151	13.2%	7.9%	0		16	61	26	31	13	4

G-SIBs: Credit Distribution

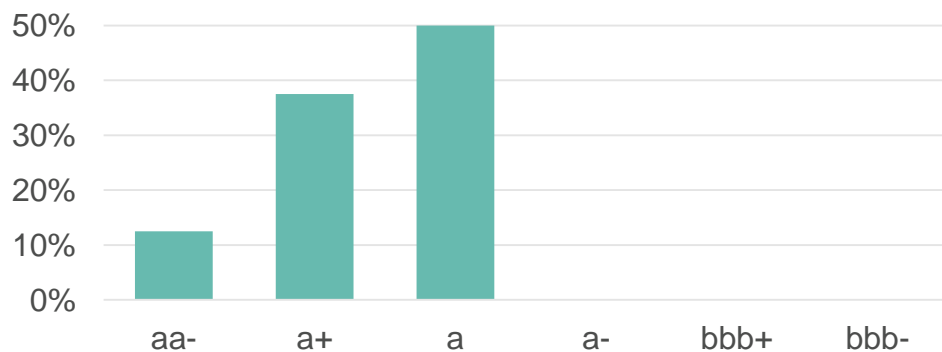
GSIBs: All (30)



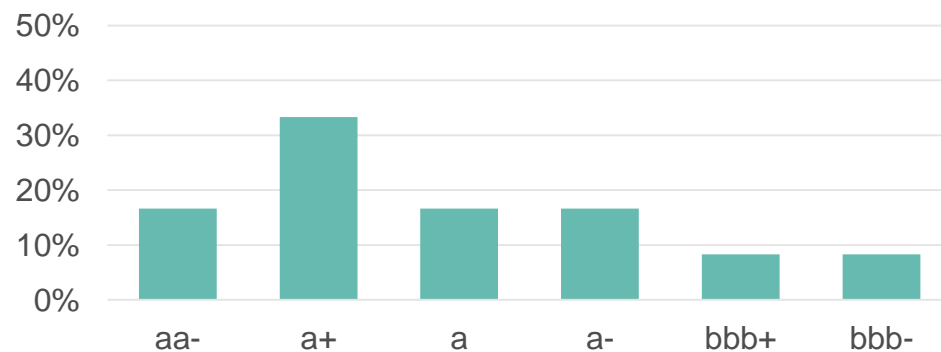
GSIBs: North America (10)



GSIBs: Asia (8)

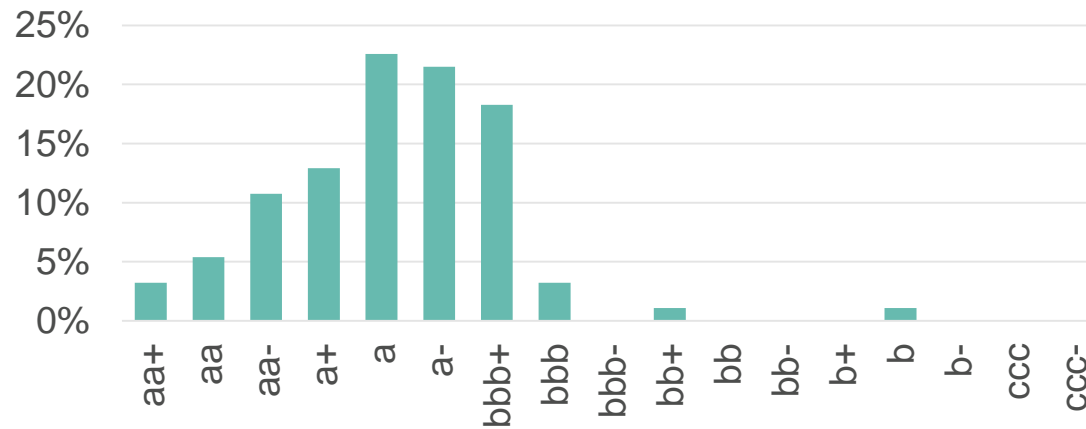


GSIBs: EMEA (12)

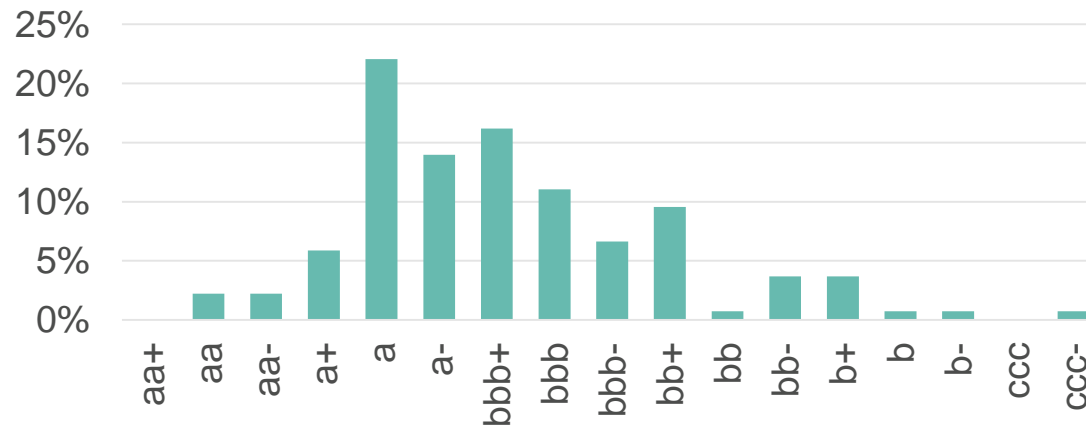


G-SIBs: Subsidiaries

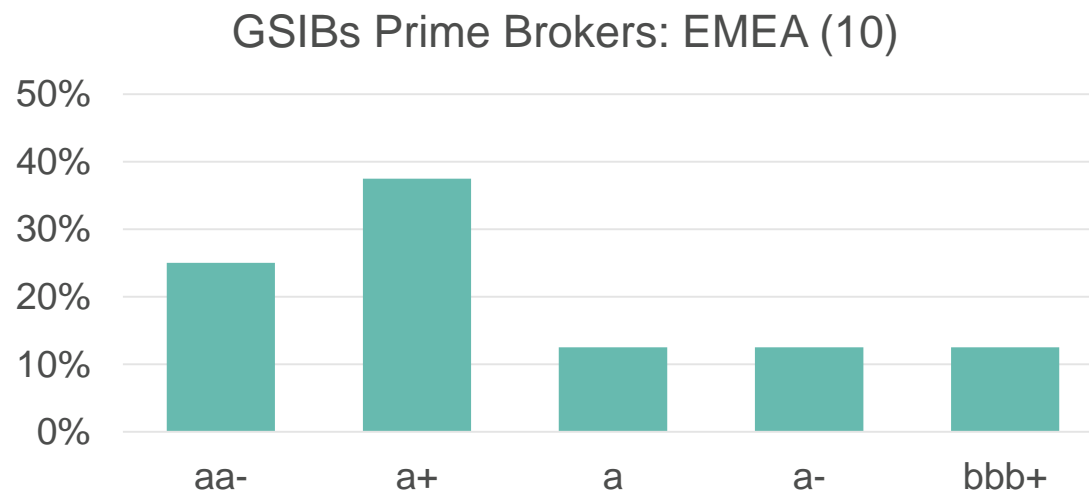
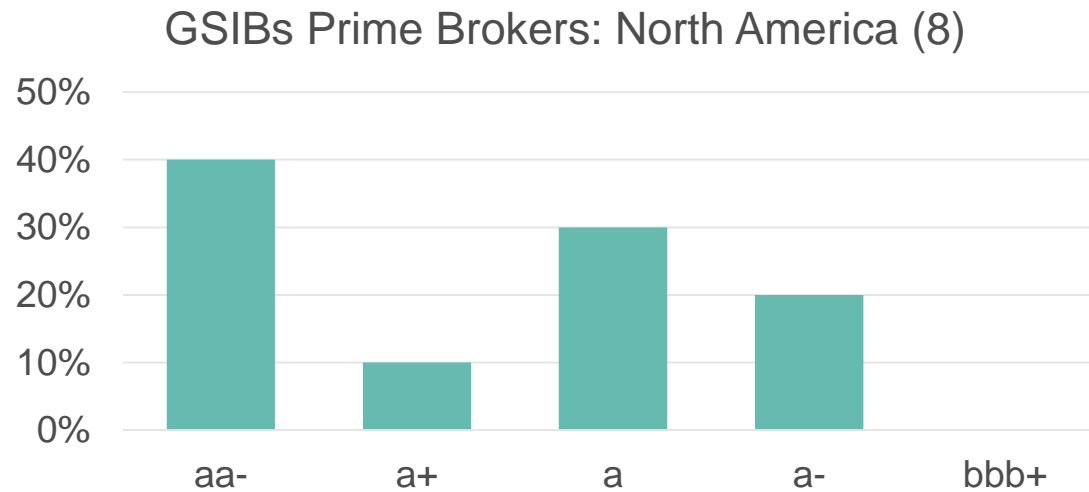
GSIBs Subsidiaries: North America (93)



GSIBs Subsidiaries: EMEA (136)

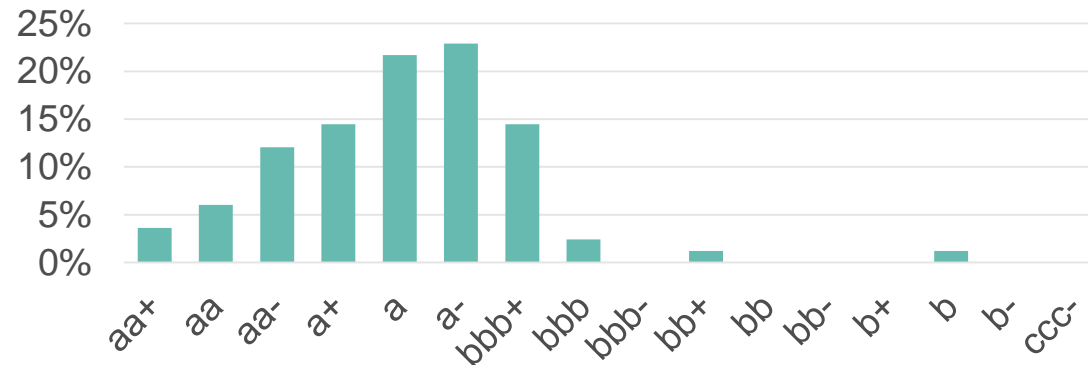


G-SIBs: Prime Brokers

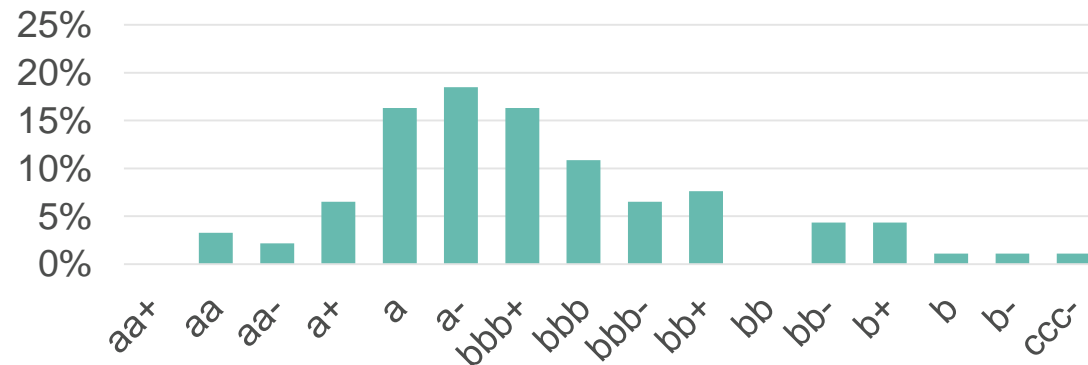


G-SIBs: Prime Broker Subsidiaries

GSIBs Prime Broker Subsidiaries: North America (83)



GSIBs Prime Broker Subsidiaries: EMEA (92)



A Cost Comparison of Three Scenarios

Current; Proposed Regulation; and ECAI source Credit Benchmark

Current		
		\$1Bn
Risk weight	5%	50,000,000
EAD	25%	250,000,000
RWA (RW x EAD)	1.25%	12,500,000
Capital @ 10 %	0.125%	1,250,000
Cost of Capital @ 10%	0.0125%	125,000

Basel III using unrated Risk Weights @100%		
		\$1Bn
Notional		
Risk weight	100%	1,000,000,000
EAD	25%	250,000,000
RWA (RW x EAD)	25%	250,000,000
Capital @ 10 %	2.5%	25,000,000
Cost of Capital @ 10%	0.25%	2,500,000

Difference in Standardised RWA of \$200mm per billion notional

Basel III using ECAI Risk Weights @20%		
		\$1Bn
Risk weight	20%	200,000,000
EAD	25%	250,000,000
RWA (RW x EAD)	5%	50,000,000
Capital @ 10 %	0.5%	5,000,000
Cost of Capital @ 10%	0.05%	500,000

Difference in Standardised Cost of Capital of 20bps per billion notional

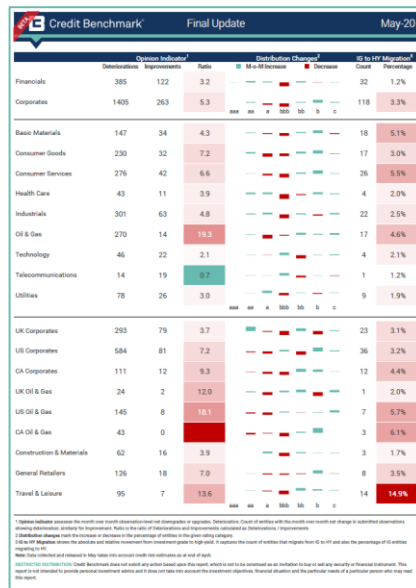
Credit Benchmark has credit consensus data on many of the world's largest funds

Credit Benchmark rated funds by type and credit quality

Fund Type	a- and above	%	bbb+ and below	Grand Total
Mutual Fund	17,531	98%	399	17,930
Pension Fund	1,815	93%	134	1,949
Sovereign Wealth Fund	14	93%	1	15
Grand Total	19,360	97%	534	19,894

Credit Benchmark rated funds by Country

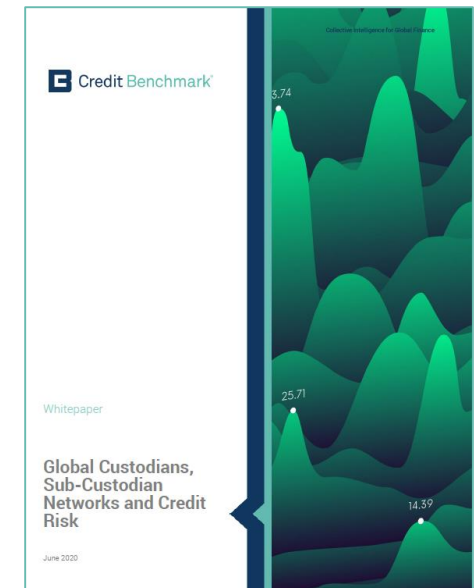
Fund Domicile	a- and above	%	bbb+ and below	Grand Total
United States	6,727	98%	115	6,842
Luxembourg	3,476	99%	32	3,508
Germany	1,314	100%	6	1,320
United Kingdom	1,234	98%	20	1,254
France	1,040	99%	7	1,047
Ireland	1,018	99%	13	1,031
Italy	712	99%	8	720
Canada	594	98%	11	605
Australia	479	97%	15	494
Cayman Islands	291	77%	86	377
Other	2,475	92%	221	2,696
Grand Total	19,360	97%	534	19,894



Mid-Month & End-of-Month Flash Updates



Whitepaper: The Creditworthiness of CCPs and the Global Clearing Member Network



Whitepaper: Global Custodians, Sub- Custodian Networks and Credit Risk

To download this slide deck, please visit:

www.creditbenchmark.com/the-future-of-finance-webinar/

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