



Bank Rating Methodology

Overview

Agenda

1. Overview
2. Baseline Credit Assessment (BCA) Structure
3. Support and Structural Analysis

1

Overview

Methodology highlights

Changes to our methodology responds to fundamental changes in the industry.

- » **Initiation of a “Loss Given Failure” component to our analysis**
 - Distinguishes loss severity by individual creditor classes for banks subject to resolution
 - Recognises that deposits may be preferred to senior unsecured debt in resolution
- » **Baseline Credit Assessment (BCA) structured around a new single global Scorecard**
 - Fully integrates key financial metrics and analytical judgments
 - BFSRs to be withdrawn
- » **BCA Scorecard focussed on five financial factors, supported by five financial metrics**
 - Backtesting has shown these to be strongly predictive of failure or the need for support
 - Analysts and rating committees to consider additional ratios as relevant for each institution
 - Forward-looking scenario analysis incorporated directly into the financial ratios that drive the Scorecard
- » **Introduction of a ‘Macro Profile’ integrating system-level pressures into our analysis**
 - Produced with Sovereign Risk Group, based on macro-economic and financial indicators
 - Each financial factor scored as a function of both a financial ratio and the Macro Profile

Key feedback

88 formal responses of which 20 are public

» Overall

- Generally positive reception to increased clarity over structure
- Comments on transparency / complexity

» BCA

- Recognition of value of Macro Profile albeit some concern over “double counting”
- Alternatives or modifications to key ratios suggested
- Role of stress testing and forecasts

» LGF

- Concept universally welcomed
- Questions on relative weight of subordination and instrument volume
- Restricted application to Operational Resolution Regimes generally accepted
- Differing views on De Jure / De Facto probabilities and resolution perimeter under SRM
- Some challenge to loss rate assumptions

» Government support

- No significant issues raised

Changes relative to RFC

Some modifications in response to feedback, mainly in respect of LGF

» **BCA**

- Some modifications to Macro Profile construction
- More explicit recognition of collateral and provisions in Asset Risk score
- More discriminating Capital scoring scale

» **Advanced LGF (for banks in Operational Resolution Regimes)**

- Loss rates expressed as a % of assets not liabilities
- Residual equity included within the waterfall and may be varied
- Notching tables re-designed to ensure a unit of subordination is always at least as beneficial as a unit of pari passu debt
- Probability of “de facto” junior deposit preference in the EU reduced to 25% from 50%

» **Counterparty Risk Assessment**

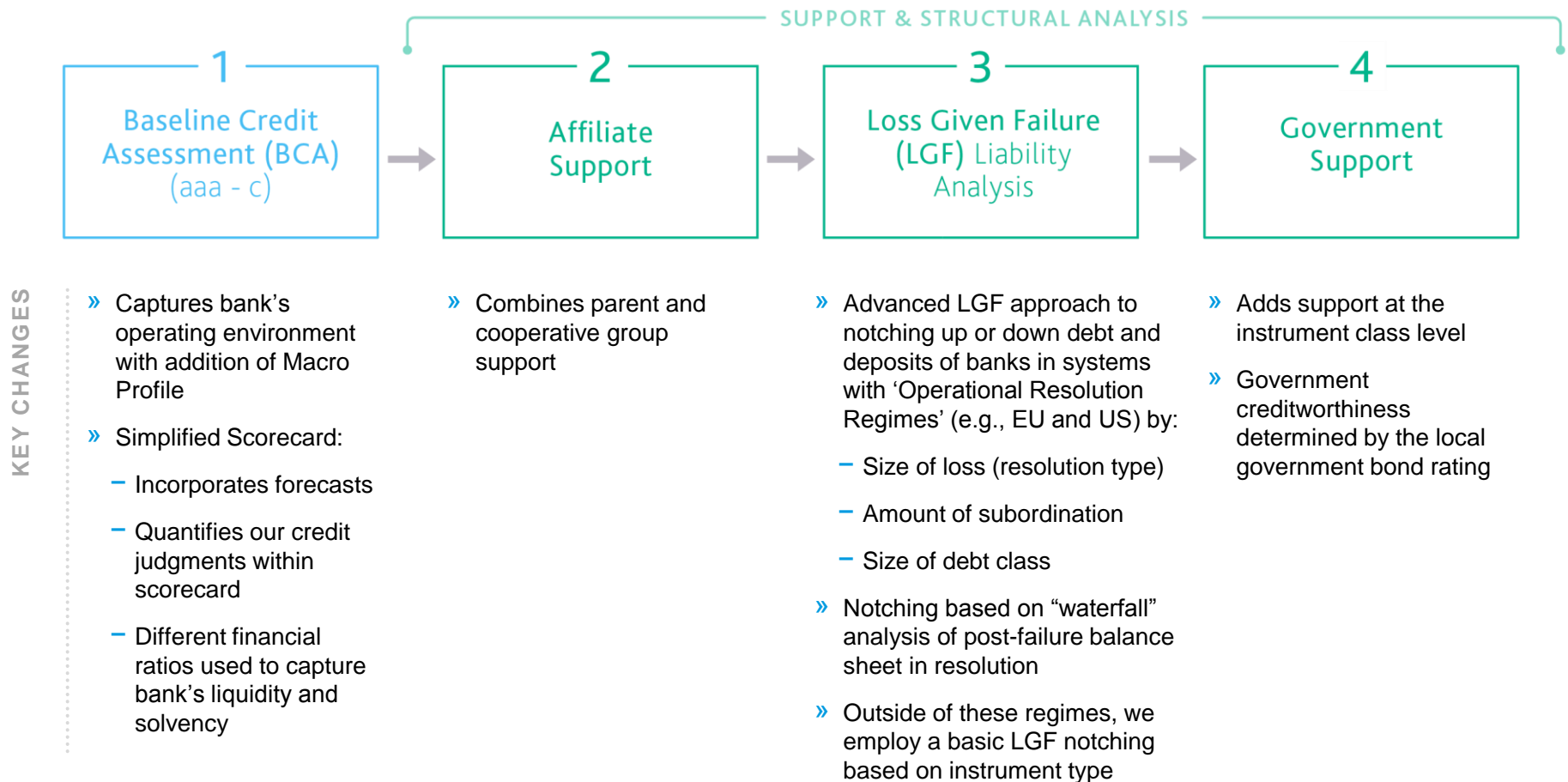
- New indicator introduced to speak to probability of default on operating obligations

» **Impact**

- More BCA movement than at time of RFC but generally balanced
- In the EU, uplift to deposit ratings slightly lower due to reduced probability of de facto waterfall; senior unsecured uplift modestly higher

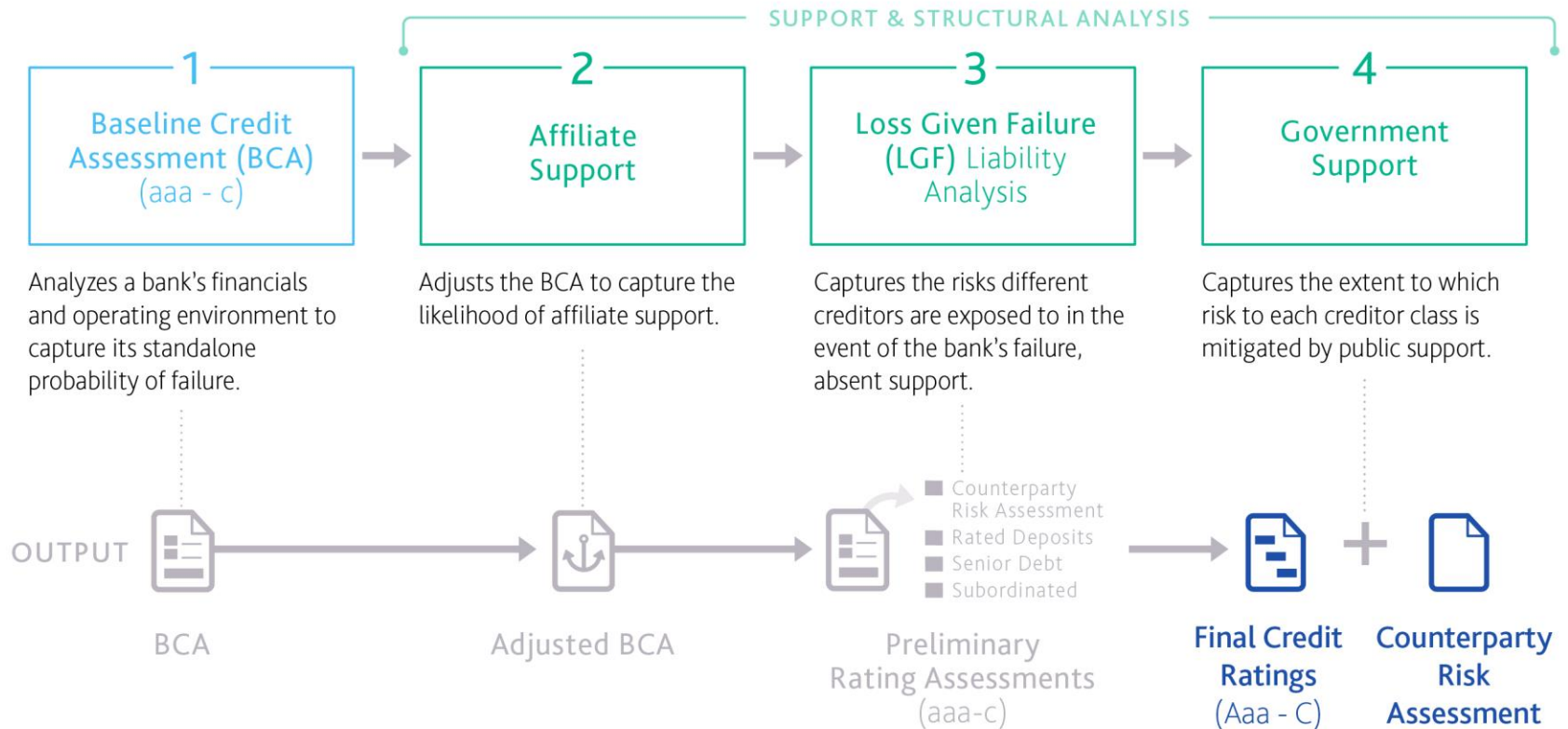
Key Changes

Introduction of Loss Given Failure component responds to new resolution regimes.



Rating Structure

BFSR has been retired and replaced with BCA



Introduction of a Counterparty Risk Assessment (CRA)

CRA speaks to probability of default on operational obligations

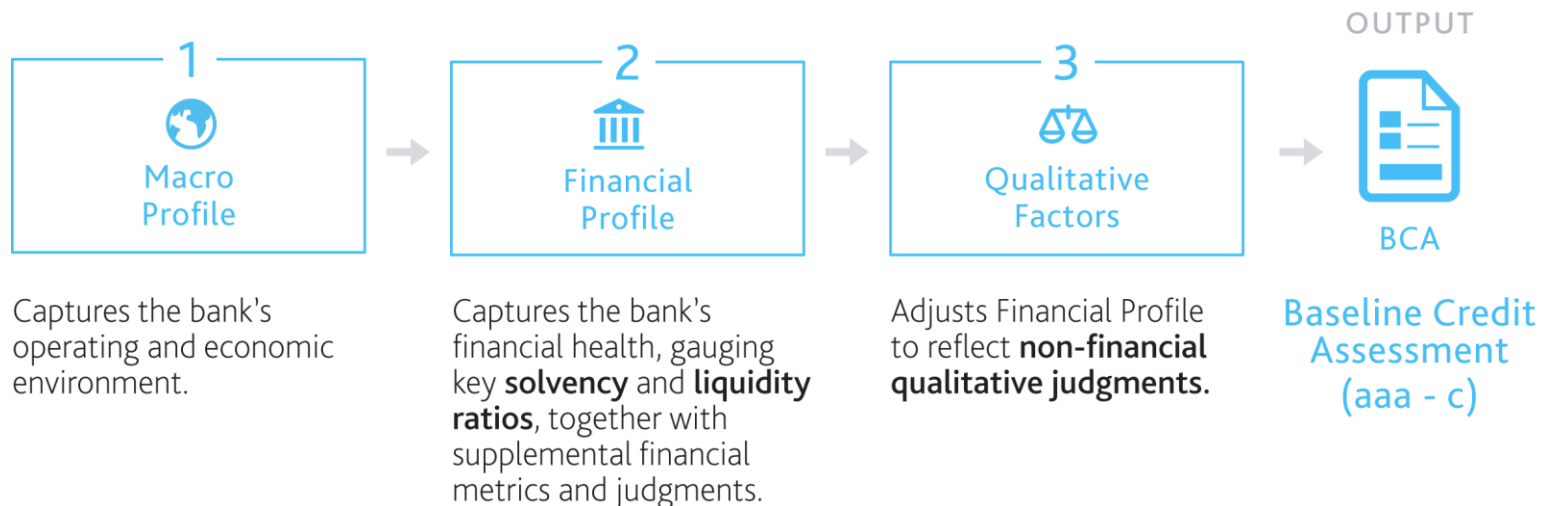
- » The CR Assessment being introduced with the methodology will represent our opinion of the relative likelihood of default of various senior operating obligations and other contractual commitments that are less likely to be subject to bail-in or the application of other resolution tools, to ensure the continuity of operations
- » This reflects authorities' goals of preserving key operations and flow of payments to limit any potential market disruptions and contagion
- » The CR Assessment is distinct from debt, deposit or issuer ratings in that it measures default probability rather than expected loss, and applies to counterparty obligations and contractual commitments, which may be preserved even when a bank has entered a resolution process, rather than debt or deposit instruments
- » The CR Assessment will be positioned relative to the adjusted BCA – also a measure of default probability and our opinion of issuers' standalone intrinsic strength – and incorporate government support where applicable
- » The CR Assessment will serve as a reference point in structured and public finance transactions
- » The CR Assessment is an input to credit ratings and not a final credit rating. This is denoted by a (cr) modifier, e.g. Baa2 (cr)
- » We expect to assign CRAs in the coming months. Timing will be aligned with closing of reviews where applicable

2

Baseline Credit Assessment Structure

BCA Structure

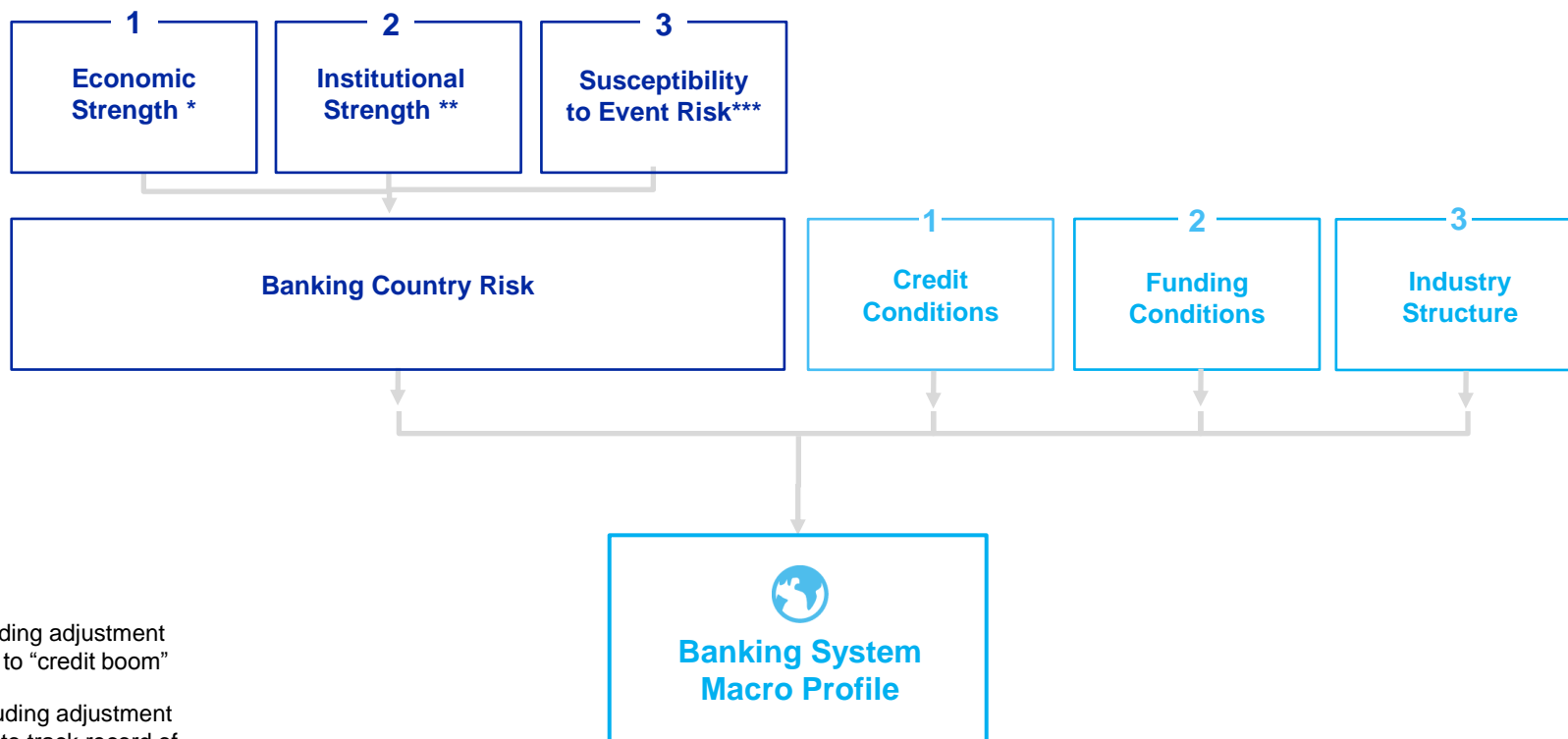
Our bank BCAs describe the probability of a bank defaulting on any of its rated instruments, in the absence of external support. There are three stages to the BCA analysis: a 'Macro Profile' reflecting system risks, the Financial Profile, incorporating key metrics, and additional Qualitative Factors.



Macro Profile

Macro Profile builds on three components from our sovereign scorecard, and three banking components. Credit Conditions factor gains more weight as metrics deteriorate.

KEY: ■ Sovereign Component ■ Banking Component



* Excluding adjustment related to “credit boom”

** Excluding adjustment related to track record of sovereign default

*** Excluding banking factors

Macro Profile Rank Ordering

Macro Profiles for selected systems (March 2015).

Country	Banking Country Risk	Credit Conditions	Funding Conditions	Industry Structure	Macro Profile
AUSTRALIA	Very Strong	0	-1	1	Very Strong
CANADA	Very Strong	-2	0	1	Very Strong -
FRANCE	Very Strong	0	-1	0	Very Strong -
GERMANY	Very Strong	0	0	-1	Very Strong -
UNITED KINGDOM	Very Strong	-1	0	0	Very Strong -
UNITED STATES	Very Strong	-1	1	-1	Very Strong -
JAPAN	Very Strong -	-1	0	0	Strong +
KOREA	Very Strong -	0	0	-1	Strong +
MEXICO	Strong	-1	0	0	Strong -
SAUDI ARABIA	Strong	-1	0	0	Strong -
BRAZIL	Strong -	0	0	-1	Moderate +
CHINA	Strong	-2	0	0	Moderate +
ITALY	Strong +	-2	-1	0	Moderate +
SPAIN	Strong	-2	0	0	Moderate +
INDIA	Moderate +	0	0	-1	Moderate
INDONESIA	Moderate	0	0	0	Moderate
SOUTH AFRICA	Strong -	-1	-1	0	Moderate
TURKEY	Strong -	-2	0	0	Moderate
KAZAKHSTAN	Moderate -	0	0	-1	Weak +
RUSSIA	Weak +	0	0	0	Weak +
AZERBAIJAN	Weak -	0	0	0	Weak -
ARGENTINA	Very Weak +	0	0	-1	Very Weak
CYPRUS	Strong -	-5	-3	0	Very Weak
EGYPT	Weak	-2	-1	0	Very Weak
UKRAINE	Very Weak -	0	-1	0	Very Weak -

Selected Macro Profile Rank Ordering

Example BCA Scorecard: Macro Profile

Macro Profile determines the relationship between financial ratios and unadjusted scores.

Example Scorecard:

Baseline Credit Assessment

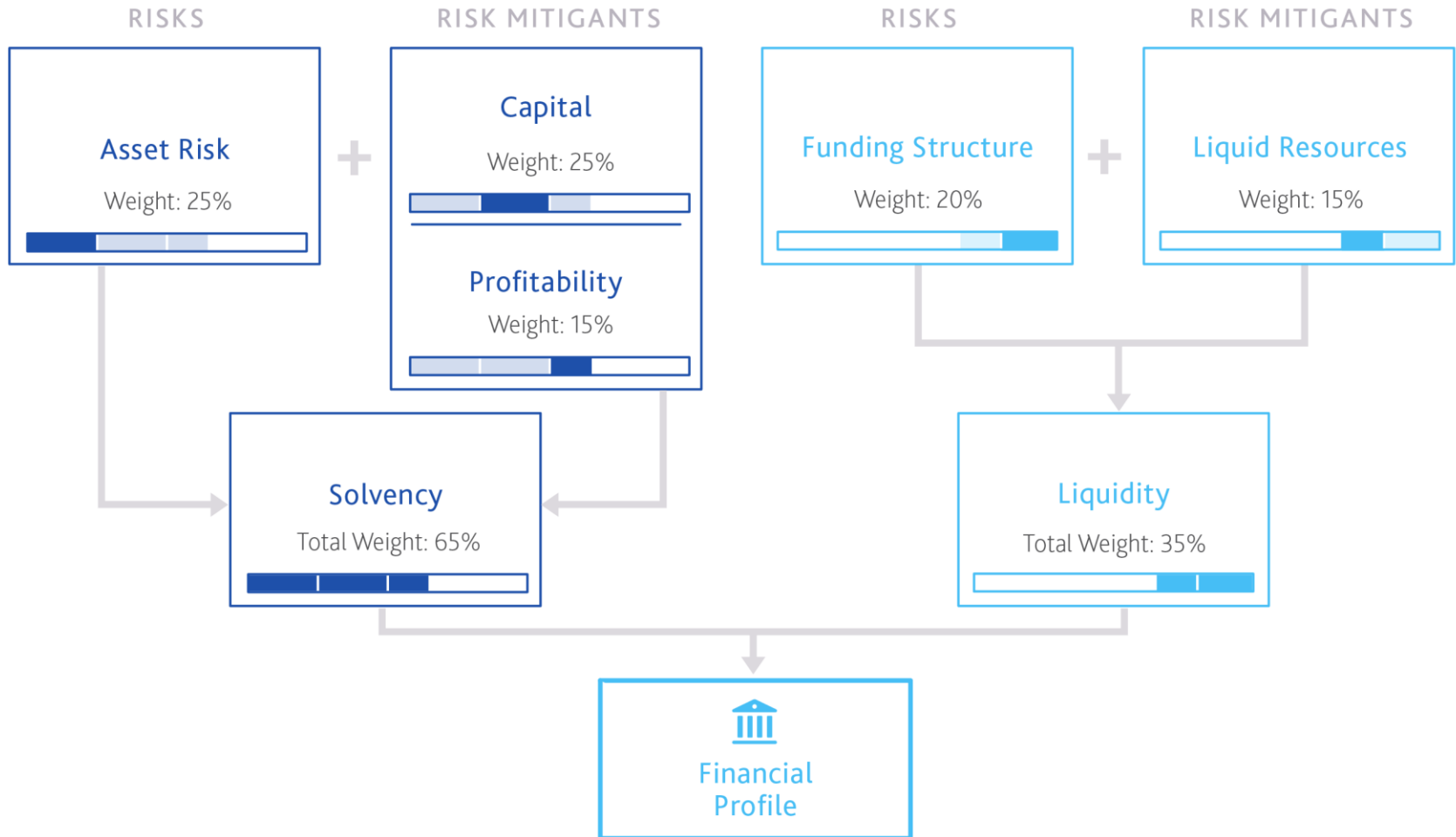
Banking Group ABC Inc
Country XYZ

Macro Factors

	Country / Region	Macro Profile	Weight
Country 1	Country 1	Very Strong	60%
Country 2	Country 2	Strong	20%
Country 3	Country 3	Moderate +	20%
Weighted Macro Profile		Strong +	100%

Financial Factors

Our assessment of a bank's financial profile is structured around key risks and their mitigants.



Each financial factor is informed by a single ratio

Each ratio is scored on a global scale before integration of Macro Profile

	VS+	VS	VS-	S+	S	S-	M+	M	M-	W+	W	W-	VW+	VW	VW-
Asset Risk	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	>
Problem Loans / Gross Loans	0.5%	0.75%	1.0%	1.5%	2.0%	3.0%	4.0%	5.0%	6.0%	8.0%	10.0%	15.0%	20.0%	25.0%	25.0%
Capital	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
TCE / RWAs(Basel I)	19.7%	17.7%	15.8%	14.8%	13.8%	12.8%	11.8%	10.8%	9.9%	8.9%	7.9%	6.9%	5.9%	4.9%	4.9%
TCE / RWAs(Basel II)	20.7%	18.6%	16.6%	15.5%	14.5%	13.5%	12.4%	11.4%	10.4%	9.3%	8.3%	7.2%	6.2%	5.2%	5.2%
TCE / RWAs(Basel III)	20.0%	18.0%	16.0%	15.0%	14.0%	13.0%	12.0%	11.0%	10.0%	9.0%	8.0%	7.0%	6.0%	5.0%	5.0%
Profitability	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
Net income / tangible assets (%)	2.5%	2.25%	2.0%	1.75%	1.5%	1.25%	1.0%	0.75%	0.5%	0.375%	0.25%	0.125%	0.0%	-1.0%	-1.0%
Funding Structure	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	<=	>
Market funds / Tangible Banking Assets	2.5%	3.75%	5.0%	7.5%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	60.0%	70.0%	70.0%
Liquid Resources	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	>=	<
Liquid Assets / Tangible Banking Assets	70.0%	60.0%	50.0%	40.0%	35.0%	30.0%	25.0%	20.0%	15.0%	10.0%	7.5%	5.0%	3.75%	2.5%	2.5%

Initial scores result from Macro Profiles + financial ratios

Rating of banks in weak systems are less sensitive to their individual financial metrics and more reflective of changes in the macro environment.

Example:	Bank's Financial Ratio	Country's Macro Profile	Initial Score
Bank in Country 1	Moderate	Strong	baa2
Bank in Country 2	Moderate	Weak	b1

Macro Profile	Financial Ratio														
	VS+	VS	VS-	S+	S	S-	M+	M	M-	W+	W	W-	VW+	VW	VW-
VS+	aaa	aaa	aa1	aa1	aa2	aa3	a1	a3	baa1	baa2	ba1	ba3	b2	caa1	caa3
VS	aaa	aa1	aa1	aa2	aa3	a1	a2	a3	baa1	baa3	ba1	ba3	b2	caa1	caa3
VS-	aa1	aa1	aa2	aa2	aa3	a1	a2	baa1	baa2	baa3	ba2	b1	b2	caa1	caa3
S+	aa1	aa2	aa2	aa3	a1	a2	a3	baa1	baa2	ba1	ba2	b1	b3	caa1	caa3
S	aa2	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba3	b1	b3	caa1	caa3
S-	aa3	aa3	a1	a2	a3	a3	baa2	baa3	ba1	ba2	ba3	b2	b3	caa2	caa3
M+	a1	a1	a2	a3	a3	baa1	baa2	baa3	ba2	ba3	b1	b2	b3	caa2	caa3
M	a2	a2	a3	baa1	baa1	baa2	baa3	ba1	ba2	ba3	b1	b3	caa1	caa2	caa3
M-	a3	a3	baa1	baa2	baa3	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3
W+	baa1	baa2	baa2	baa3	ba1	ba2	ba2	ba3	b1	b2	b3	b3	caa1	caa2	caa3
W	baa2	baa3	ba1	ba1	ba2	ba3	ba3	b1	b2	b3	b3	caa1	caa2	caa2	caa3
W-	baa3	ba1	ba2	ba3	ba3	b1	b2	b2	b3	b3	caa1	caa1	caa2	caa2	caa3
VW+	ba1	ba3	ba3	b1	b2	b2	b3	b3	caa1	caa1	caa2	caa2	caa2	caa3	caa3
VW	ba3	b1	b2	b3	b3	caa1	caa1	caa1	caa2	caa2	caa2	caa2	caa3	caa3	caa3
VW-	b1	b3	caa1	caa1	caa2	caa2	caa2	caa3	caa3	caa3	caa3	caa3	caa3	caa3	caa3

Example BCA Scorecard: Financial Profile

Assigned score incorporates forward-looking expectations, auxiliary ratios, qualitative aspects & stress scenarios.

Example Scorecard:

Financial Profile	Financial factors	Score incorporating Macro Profile			Qualitative factors quantified	
	Historic Ratio	Initial Score	Expected trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
<i>Problem Loans / Gross Loans</i>	2.0%	a1	↓↓	baa2	Geographical concentration	Capital market risk
Capital						
<i>Tangible Common Equity / RWA</i>	8.5%	ba2	↔	b1	Risk-weighted capitalisation	Nominal leverage
Profitability						
<i>Net Income / Tangible Assets</i>	0.5%	baa2	↔	a3	Earnings quality	
Combined Solvency Score				baa3		
Liquidity						
Funding Structure						
<i>Market Funds / Tangible Banking Assets</i>	15.0%	a2	↔	baa2	Term structure	
Liquid Resources						
<i>Liquid Banking Assets / Tangible Banking Assets</i>	20.0%	baa1	↑	baa1	Expected trend	Intragroup restrictions
Combined Liquidity Score		a3		baa2		
Financial Profile				baa3		

Qualitative Factors

We may adjust our initial BCA score by one or more notches if we judge any of these factors has a material bearing on the bank's overall risk profile.

1

Business diversification

Gauges a bank's sensitivity to deterioration in a single business line.

+ Positive adjustments

E.g. a one-notch increase for a firm with a diverse range of business activities that provide an overall reliable earnings stream, or the stability provided by an entrenched and state-protected franchise

- Negative adjustments

E.g. a one-notch decrease for a bank which derives more than about three-quarters of its revenues or earnings from a single business line.

2

Opacity and complexity

An institution's riskiness increases with its complexity, other things being equal.

+ Positive adjustments

None.

- Negative adjustments

E.g. a one-notch decrease (or more in extreme cases) if a bank has numerous business lines across many geographies and legal entities, significant exposure to derivatives, complex legal structure, large, complex and / or long-dated exposures to other financial institutions.

3

Corporate behavior

A bank's creditworthiness can be influenced by what we term its "corporate behavior", which can also signal other concerns.

+ Positive adjustments

E.g. sustained exemplary stewardship over time with tangible impact on the risk profile

- Negative adjustments

One or more notch decreases considering the following factors: key man risk, insider and related party risks, strategy and management, dividend policy, and compensation policy.

Example BCA Scorecard: Qualitative Factors

BCA incorporates qualitative factors and is assigned by Rating Committee based on range.

Example Scorecard Continued:

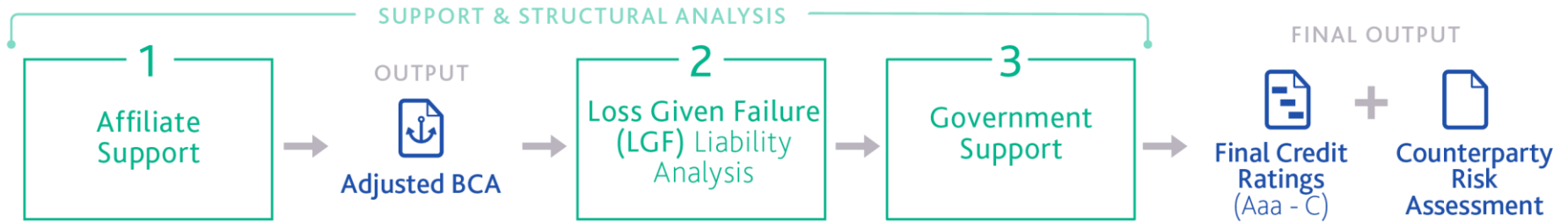
Financial Profile		baa3	Qualitative factors quantified within scorecard
Qualitative Adjustments	Adjustment	Comment	
<i>Business Diversification</i>	0	Highly complex organisation	
<i>Opacity and Complexity</i>	-1		
<i>Corporate Behavior</i>	0		
Total Qualitative Adjustments	-1		
Sovereign or Affiliate constraint		Aaa	Government rating
BCA range	baa3 - ba2		
Assigned BCA	ba1	Rationale: Appropriate position vs peers	

3

Support and Structural Analysis

Support & Structural Analysis

Support and structural analysis consists of three components.



- » How likely is a bank to be supported by affiliates?
- » Determines the Adjusted BCA

- » The risk that different creditors are exposed to in the event of the failure of a bank, absent government support
- » This enables us to distinguish between the BCA, bank senior unsecured, bank holding company senior unsecured, and deposits

- » The extent to which risks to creditors are mitigated by public support

Affiliate Support

Our approach to assessing Affiliate Support.



Variables are as follows:

- 1 | **Unsupported rating (BCA)**
- 2 | **Creditworthiness**
- 3 | **Support probability**
- 4 | **Dependence (correlation)**

These will determine a range of potential uplift under our Joint-Default Approach (JDA)

$$\text{Probability of Default (PD)} = (1 - \text{Support Probability}) * \text{BCA} + \text{Support Probability} * ((\text{Dependence} * \min(\text{BCA}, \text{Creditworthiness}) + (1 - \text{Dependence}) * \text{BCA} * \text{Creditworthiness})$$

Issuer Affiliate Support

Affiliate Support is assessed, uplift estimated using JDA and assigned by Rating Committee.

Assumptions

Country of supporting affiliate	Country XYZ
Supporting Affiliate	Parent Bank Inc
Reference creditworthiness	BCA
Creditworthiness of support provider	baa1
Dependence	Very High

BCA	Level of support	Notching guidance (Min - Mid - Max)	Assigned notching	Assigned Adjusted BCA
ba1	High	1 - 1 - 2	1	baa3

Adjusted Baseline Credit Assessment

Loss Given Failure analysis

Choice of approach depending on type of resolution regime

Operational Resolution Regime?

YES

Advanced LGF
Liability-side analysis

- » Specific legislation enabling orderly resolution of failed bank
- » Clear understanding of impact on depositors and other creditors
- » Reduced likelihood of support for senior creditors

WHERE:

European Union, Norway, Liechtenstein, Switzerland, United States (Title I and Title II), Others (esp. G-20) likely to follow

NO

Basic LGF

Notching based on instrument type
Senior @ BCA, Subordinated @ BCA-1, etc

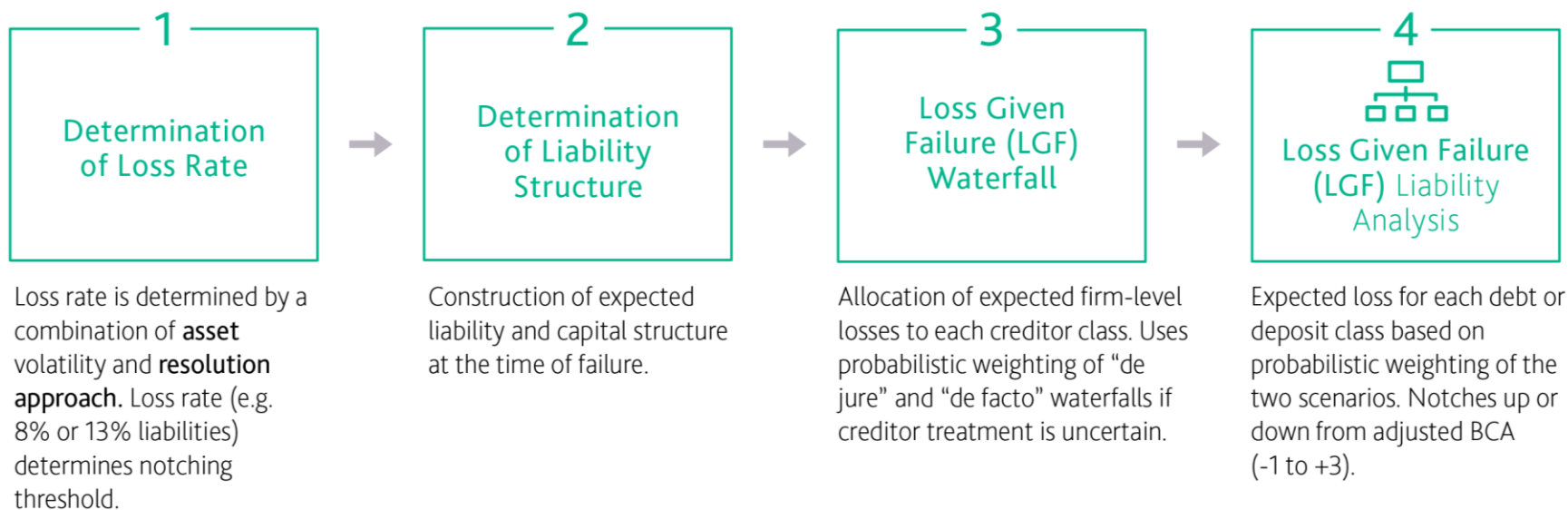
- » Expectation that the largest, most systemically important banks are typically resolved through support rather than bail-in
- » Statutory alternative is bankruptcy, but resolution approaches tend to be defined only in a crisis

WHERE:

Everywhere else for now

Advanced Loss Given Failure Analysis

Banks in operational resolution regimes will be subject to Advanced LGF analysis



Determination of Loss Rate

We combine our Macro Profile and the resolution approach to determine the loss rate.



We determine the asset volatility with reference to historic loss rates, the macro profile and other factors.

We consider the way in which the resolution approach might affect losses.

Allocation of loss rate.

Resolution Approach Examples:

Loss Rate

8% of tangible banking assets

US Title II Bank: Single Point of Entry resolution framework preserves franchise value and reduces losses

EU bank with ‘very strong’, ‘strong’ or ‘moderate’ Macro Profiles—losses expected to be contained

13% of tangible banking assets

US Title I Bank: Higher losses than a Title II bank given receivership-based approach

EU bank with ‘weak’ or ‘very weak’ Macro Profiles—losses expected to be greater due to higher stress on assets in failure

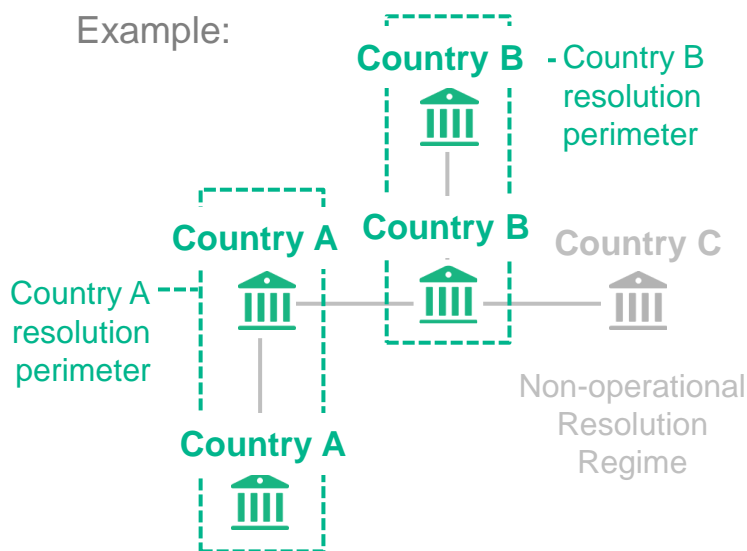
Determination of Liability Structure

We construct a view of the bank's balance sheet in failure and identify affected debt and deposits.

1 | We divide the consolidated group into sub-groups according to their jurisdictions, allowing for the possibility some entities might be resolved separately from the rest of the group.

2 | Looking at the isolated balance sheet, we construct the hierarchy of debt and deposits under resolution.

Example:



Example:

Country A



Country B



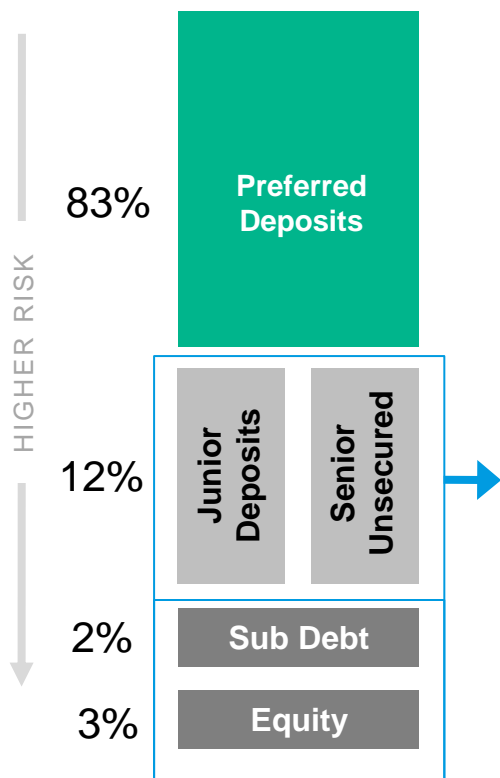
HIGHER RISK

LGF Waterfall (1)

Once the loss rate and balance sheet are established, each instrument class can be assessed for its relative risk and then notched up – or down – from the Adjusted BCA.

Failure Balance Sheet

Established under liquidation principles
% of tangible banking assets



Volume and subordination % Tangible Banking Assets

	>= 0 <6 %	>= 6 <8 %	>= 8 <10 %	>= 10 <12 %	>= 12 <14 %	>= 14 <16 %	>= 16 %
>= 0 <6 %	-1	-1	0	0	1	1	2
>= 6 <8 %	na	0	0	1	1	2	2
>= 8 <10 %	na	na	1	1	2	2	3
>= 10 <12 %	na	na	na	2	2	3	3
>= 12 %	na	na	na	na	3	3	3

Subordination % Tangible Banking Assets

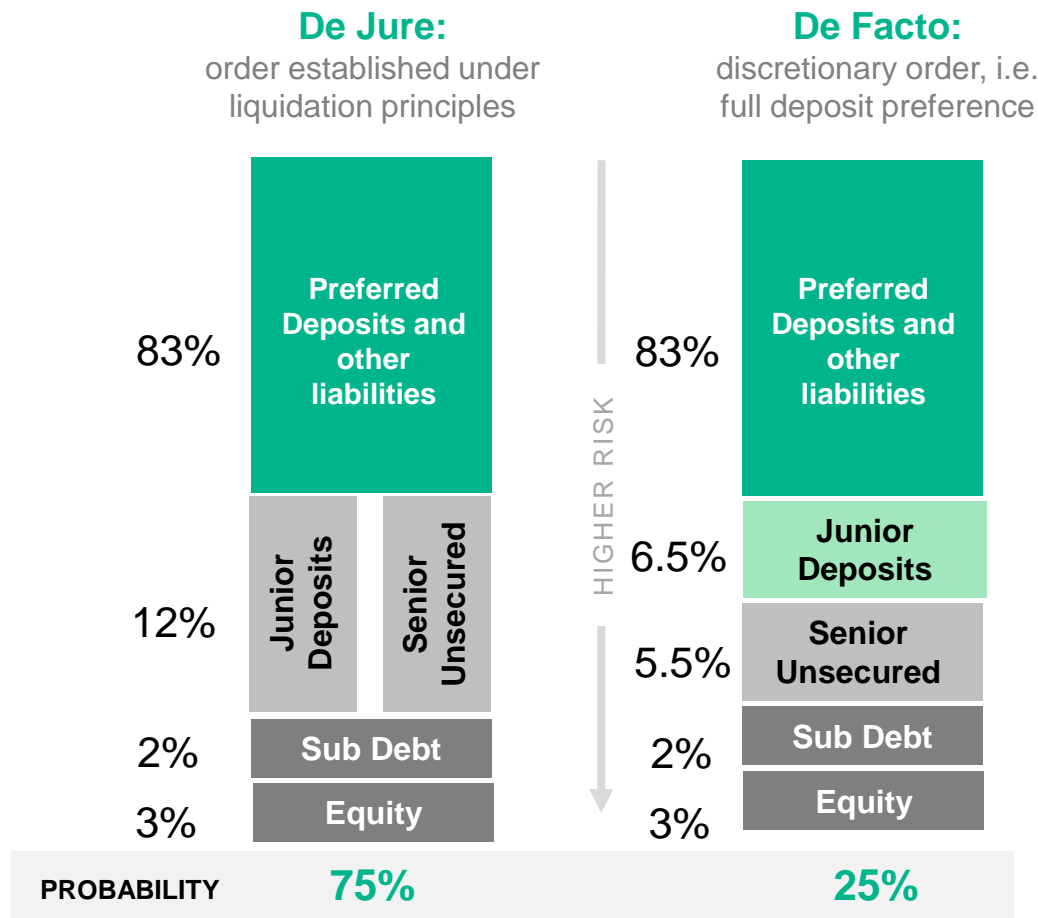
LGF Waterfall (2)

Where appropriate, we construct two waterfalls and weight them accordingly.

Example:

EU's Bank Recovery and Resolution Directive (BRRD)

- » **De Jure:** The BRRD establishes a hierarchy of claims under liquidation, with some – but not all – deposits preferred to senior unsecured debt.
- » **De Facto:** However the BRRD also allows authorities to exclude certain liabilities from bail-in. We believe this discretion is most likely to be applied to junior deposits (non-eligible deposits) – effectively introducing full deposit preference.
- » We weight the expected loss (EL) under each outcome by the estimated probability of each scenario.



Typical waterfall by region

Our liability ranking assumptions vary with relevant legislation and preference in resolution

	United States	DE JURE	EU*	DE FACTO	Switzerland	
HIGHER RISK ↓	1	DEPOSITS	1	PREFERRED DEPOSITS	1	PRIVILEGED DEPOSITS
	2	COUNTERPARTY RISK ASSESSMENT	2	COUNTERPARTY RISK ASSESSMENT	2	JUNIOR DEPOSITS
	3	SENIOR LONG-TERM DEBT (bank)	3	JUNIOR DEPOSITS	3	COUNTERPARTY RISK ASSESSMENT
	4	DATED SUBORDINATED DEBT (bank)	3	SENIOR LONG-TERM DEBT (bank)	4	SENIOR LONG-TERM DEBT (bank)
	5	JUNIOR SUBORDINATED (bank)	5	SENIOR LONG-TERM DEBT (holding company)	5	SENIOR LONG-TERM DEBT (holding company)
	6	PREFERENCE SHARES (bank)	6	DATED SUB. DEBT (bank)	6	DATED SUB. DEBT (bank)
	7	SENIOR LONG-TERM DEBT (holding company)	6	DATED SUB. DEBT (holding co)	6	DATED SUB. DEBT (holding co)
	8	DATED SUBORDINATED DEBT (holding company)	8	JUNIOR SUB. (bank)	8	JUNIOR SUB. (bank)
	9	JUNIOR SUBORDINATED (holding company)	8	JUNIOR SUB. (holding co)	8	JUNIOR SUB. (holding co)
	10	PREFERENCE SHARES (holding company)	10	PREFERENCE SHARES (bank)	10	PREFERENCE SHARES (bank)
		10	PREFERENCE SHARES (holding co)	10	PREFERENCE SHARES (holding co)	

* European Union, Norway, Liechtenstein

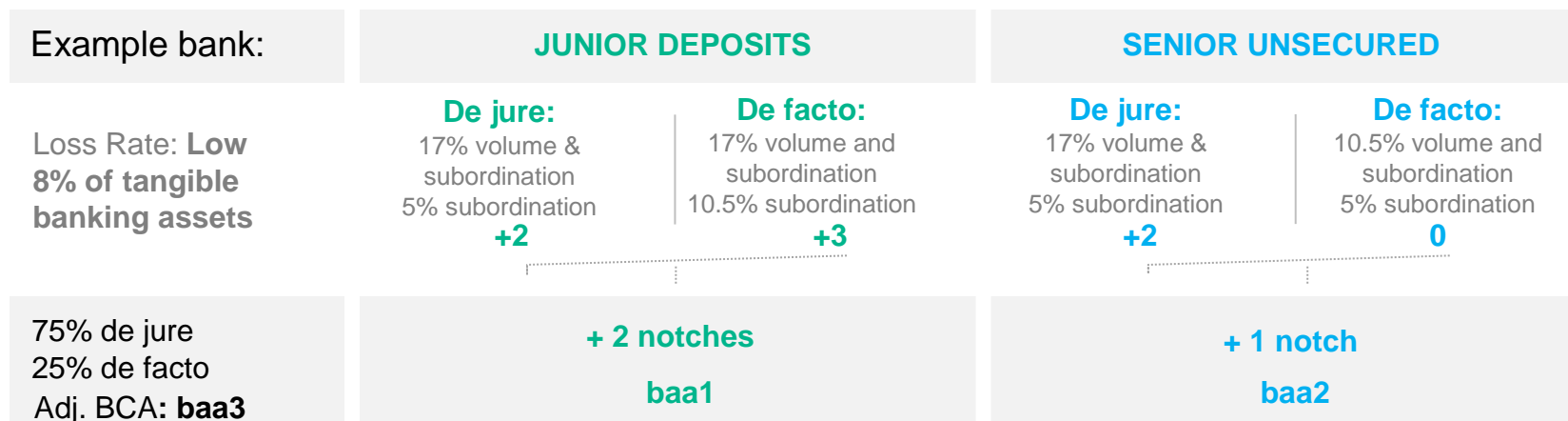
Probability-weighted Advanced LGF outcome

Example of how the two scenarios are weighted to determine the appropriate uplift.

Instrument volume and subordination / Tangible Banking Assets (%) *de jure*

Subordination / Tangible Banking Assets (%)	>=0 <6%	>= 6 <8 %	>= 8 <10 %	>= 10 <12 %	>= 12 <14 %	>= 14 <16 %	>= 16 %
>= 0 <6 %	-1	-1	0	0	1	1	2
>= 6 <8 %		0	0	1	1	2	2
>= 8 <10 %			1	1	2	2	3
>= 10 <12 %				2	2	3	3
>= 12 %					3	3	3

de facto (indicated by lines connecting the 10-12% and 12-14% columns in the 10-12% and 12-14% rows)



Example Advanced LGF Analysis

Bank in an Operational Resolution Regime

Adjusted BCA: **baa3**

Instrument class	LGF Notching			Additional notching	Total Instrument Notching	Preliminary Rating Assessment
	De jure	De facto	Assigned LGF notching			
Counterparty Risk Assessment (CRA)	3	3	3	0	3	a3 (cr)
Deposits	2	3	2	0	2	baa1
Bank senior unsecured long-term debt	2	0	1	0	1	baa2
Holding company senior unsecured long-term debt	-1	-1	-1	0	-1	ba1
Bank dated subordinated debt	-1	-1	-1	0	-1	ba1
Bank non-cumulative preference shares	-1	-1	-1	-2	-3	ba3

- » “LGF notching” captures loss severity
- » “Additional notching” captures coupon-related issues affecting timeliness of payment

Example Basic LGF Analysis

Bank in an Non-Operational Resolution Regime

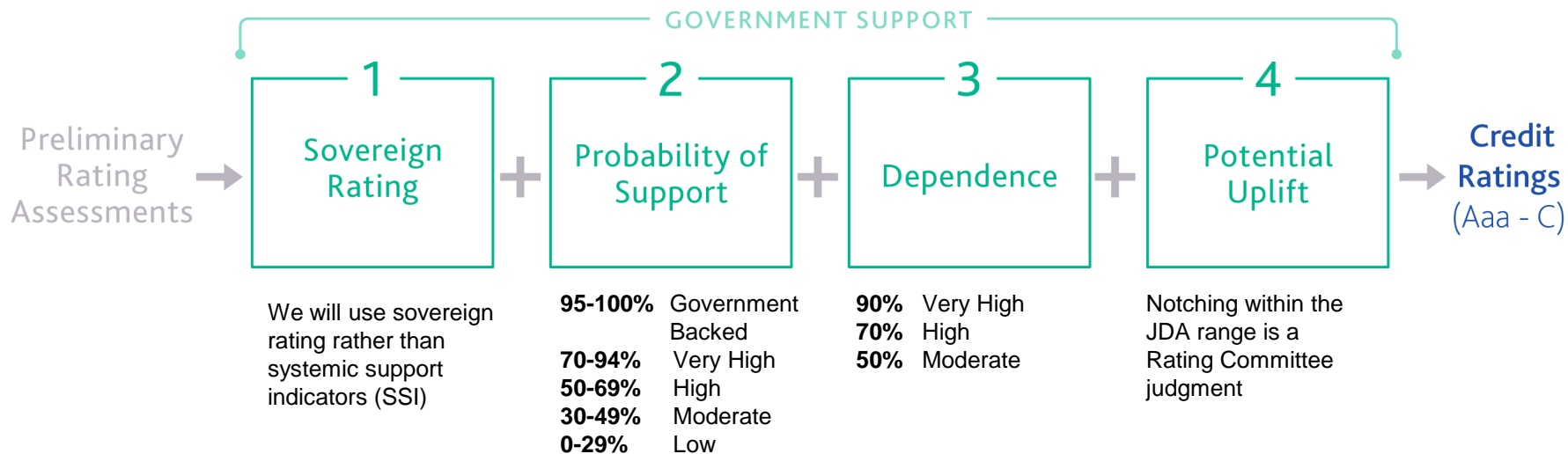
Adjusted BCA: **baa3**

Instrument class	LGF Notching			Additional notching	Total Instrument Notching	Preliminary Rating Assessment
	De jure	De facto	Assigned LGF notching			
Counterparty Risk Assessment (CRA)	na	na	1	0	1	baa2 (cr)
Deposits	na	na	0	0	0	baa3
Bank senior unsecured long-term debt	na	na	0	0	0	baa3
Holding company senior unsecured long-term debt	na	na	-1	0	-1	ba1
Bank dated subordinated debt	na	na	-1	0	-1	ba1
Bank non-cumulative preference shares	na	na	-1	-2	-3	ba3

- » “LGF notching” captures loss severity
- » “Additional notching” captures coupon-related issues affecting timeliness of payment

Government Support

Government support is assessed for each creditor class and uplift derived using JDA.



Example Bank:		Preliminary Rating Assessment	Sovereign Rating	Probability of Support	Dependence	JDA Range	Credit Rating
Adj. BCA: baa3	Junior Deposits	baa1 (+2)	Aaa	Moderate	Very High	+1 to +1	A2 (+1)
	Senior Unsecured	baa2 (+1)		Moderate		+1 to +1	Baa1 (+1)
	Subordinated Debt	ba1 (-1)		Low		+0 to +1	Ba1 (+0)

Example of Government Support

Government Support is assigned, usually within a range derived from Joint-Default Analysis

Assumptions

Supporting authority	Country XYZ
Creditworthiness of support provider	Aa2
Dependence	Very High
Local Currency bank deposit ceiling	Aaa
Local Currency country ceiling	Aaa
Foreign Currency bank deposit ceiling	Aaa
Foreign Currency country ceiling	Aaa

Assigned Instrument Ratings

Instrument class	Preliminary Rating Assessment	Level of support	Notching guidance (Min - Mid - Max)	Assigned notching vs PRA	LC Country ceiling impact	Assigned LC rating	FC Country ceiling impact	Assigned FC rating
Counterparty Risk Assessment (CRA)	a3 (cr)	Moderate	1 - 1 - 1	1	0	A2 (cr)	--	--
Deposits	baa1	Moderate	1 - 1 - 1	1	0	A3	0	A3
Bank senior unsecured long-term debt	baa2	Moderate	1 - 1 - 1	1	0	Baa1	0	Baa1
Holding company senior unsecured	ba1	Low	0 - 0 - 1	0	0	Ba1	0	Ba1
Bank dated subordinated debt	ba1	Low	0 - 0 - 1	0	0	Ba1	0	Ba1
Bank non-cumulative preference	ba2	Low	0 - 0 - 1	0	0	Ba2 (hyb)	0	Ba2 (hyb)

Example Credit Ratings Summary

Ratings construct summarised

Banking Group ABC Inc

Macro Profile

Standalone assessment

Baseline Credit Assessment

Affiliate Support uplift

Adjusted Baseline Credit Assessment

Country XYZ

Strong +

ba1

1

baa3

Credit Ratings

Debt class	Instrument notching	Preliminary Rating Assessment	Government Support Notching	Local Currency ratings			Foreign Currency ratings		
				Long-term	Outlook	Short-term	Long-term	Outlook	Short-term
Counterparty Risk Assessment (CRA)	3	a3 (cr)	1	A2 (cr)	--	Prime-1 (cr)	--	--	--
Deposits	2	baa1	1	A3	Stable	Prime-2	A3	Stable	Prime-2
Bank senior unsecured long-term debt	1	baa2	1	Baa1	Stable	Prime-2	Baa1	Stable	Prime-2
Holding company senior unsecured long-term debt	-1	ba1	0	Ba1			Ba1		
Bank dated subordinated debt	-1	ba1	0	Ba1			Ba1		
Bank non-cumulative preference shares	-2	ba2	0	Ba2 (hyb)			Ba2 (hyb)		

Moody's Bank Rating Universe



950

baseline credit assessments

This is our core analytical universe and the focus of our impact assessment

RATED DEBT OUTSTANDING

\$6.6 trillion

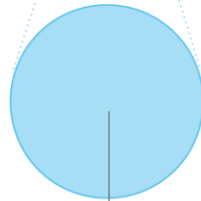
A WIDE RANGE OF GEOGRAPHIES:



96
countries

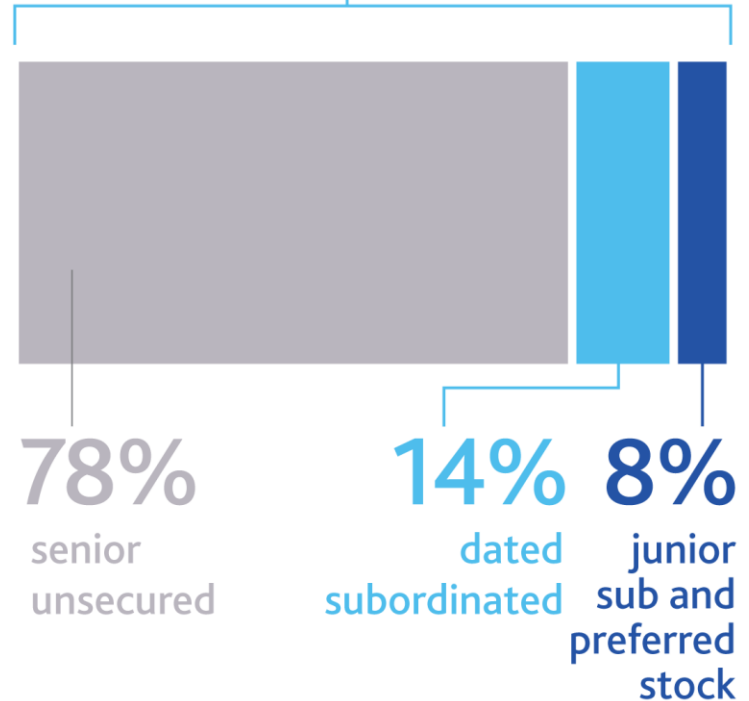
BALANCE SHEETS RANGING FROM:

\$7 million



\$3.3 trillion

2,500
issuing entities



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