RETHINKING BANKING:

FITTING YOUR BUSINESS MODEL TO REGULATORY CONSTRAINTS

ALVAREZ & MARSAL

Contents

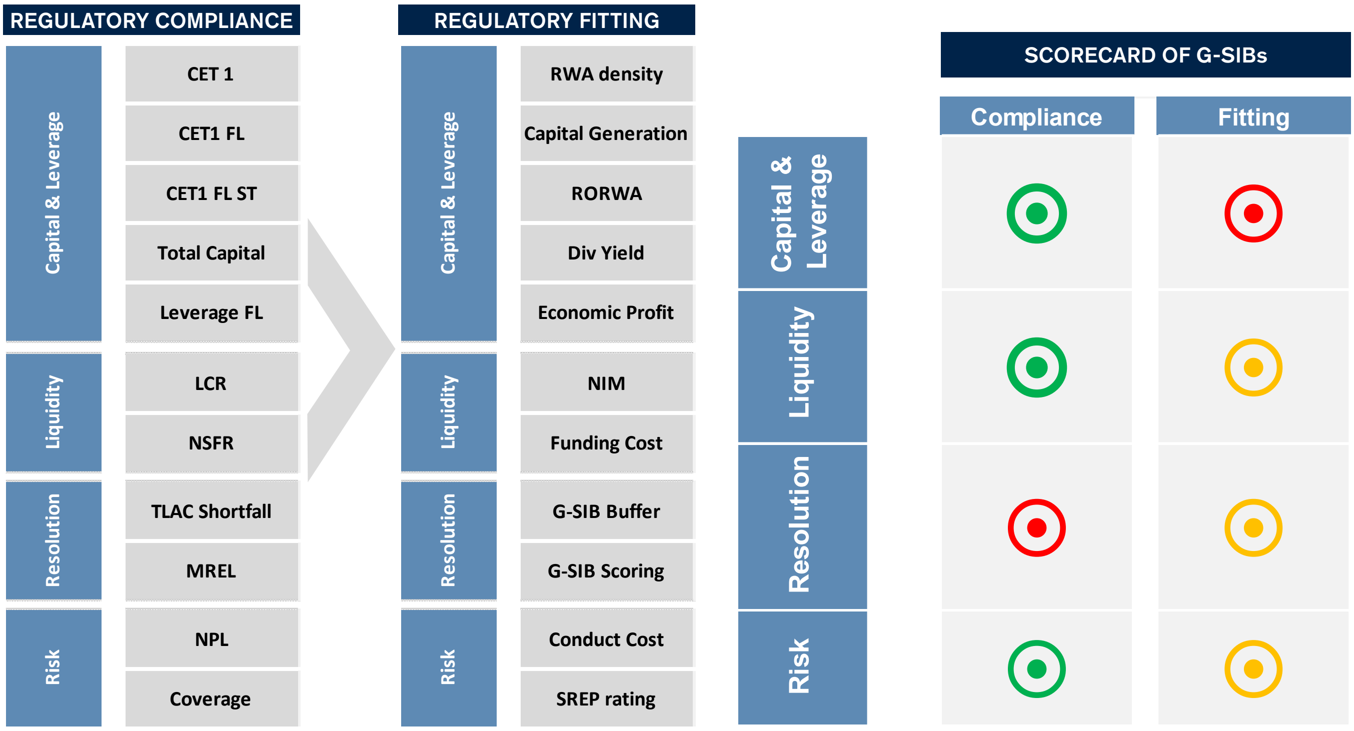
INTRODUCTION

November 2015

Global banks (labeled global systemically important banks (G-SIBs) by supervisors) have been busy coping with regulatory change and complying with new business restrictions (capital, liquidity, leverage, TLAC, stress test requirements). G-SIBs have been for the most part successful in anticipating and meeting the new regulatory hurdles. They have done so by individually undertaking balance sheet corrections to meet constraints.

As the regulatory uncertainty diminishes and the fog starts to lift, it is clear that banks are finding it challenging to meet investor demands for adequate returns. It is time for banks to embed the new regulatory constraints in strategic planning and management performance systems, so that proper incentives are in place to achieve business model optimisation. In other words, **it is time for banks to fit their business models to regulatory constraints.**

At Alvarez & Marsal, we have developed a structured methodology and toolset to assist banks on their path towards regulatory compliance and more importantly regulatory fitting their business models. We propose a series of measures that combine the multiple regulatory constraints that banks face today, together with its interdependencies (see table below for metrics and scorecard).



1. **Capital and Leverage –** The challenge for banks is not compliance anymore, G-SIBs are reaching levels close to 12 percent CET1 Fully Loaded and 6 percent CET1 Fully Loaded post-stress. However, ROE does not meet the cost of capital and RORWA levels remain low and will continue to be challenged due to RWA inflationary supervisory measures. Efficient regulatory capital allocation is essential.

2. **Liquidity –** Similarly to capital, G-SIBs have strengthened their liquidity buffers and are in compliance with new LCR and NSFR minimum thresholds. However, opportunities exist to implement funding and liquidity optimisation strategies.

3. **Resolution –** It is the only topic where G-SIBs are still non-compliant as new TLAC rules get defined and implemented. Shortfalls will be easy to address, but continue to put pressure on funding costs. In addition, operational continuity will become the critical topic for banks to address resolvability fitting of their business.

4. **Risk –** As credit risk profiles continue to improve, risk management priorities are turning towards conduct risk management and supervisory relations management.

CHALLENGES FOR FIRMS

The combined impact of new regulatory constraints on banking is significant and makes evaluation and management of business models very complex. There is a compelling case for rethinking performance measurements and banking management practices in this new environment.

A number of questions need careful consideration by banks:

- How is the divergence between economic and regulatory measures addressed?
- How can we introduce more forward-looking measures?
- How are capital, liquidity and leverage constraints managed as a portfolio?
- How to account for are softer factors such as resolvability and conduct?
- What are the implications of stress tests on capital and liquidity?
- How distinct regulatory geographical requirements are considered?

REGULATORY UNCERTAINTY

Banks are seeing the light at the end of the regulatory tunnel. 2015 was a year when many capital, leverage and resolution constraints were better defined by supervisory initiatives. It was the launch year of the Single Supervisory Mechanism in Europe and provided further clarity through the U.K. and European stress tests.

While some uncertainty remains, primarily in the area of further capital reform (Basel IV) and harmonised rules, banks are in a better position to develop integrated capital and funding plans that align to new banking strategies to restore profitability.

THE WAY FORWARD

In order to generate higher levels of return on capital, banks need to rethink their frameworks for business optimisation and performance measurement.

They can do so in the following ways:

1. Revamp **performance measurement methods** to integrate return on regulatory capital and other constraints (leverage, liquidity, stress tests, economic capital, TLAC, etc.). This would be as supplementary measures to economic capital in business performance MIS, incentives, portfolio management and pricing tools. It is important that banks identify their capital and liquidity binding constraints and prioritise their management. Banks need to track constraining measures by business, segment, geography, product and client.

2. Incorporate **linkages and interdependencies of competing regulatory constraints** into measures of return on capital. Regulators are using multiple supplementary measures to constraint bank balance sheets, and banks need to measure the portfolio impact.

3. Consider the **various / differing regulatory views** of balance sheet constraints across multiple jurisdictions including awareness of key differences between corporate group and local entity calculations

4. **Address uncertainty on components** of key regulatory developments impacting performance measures by using forward looking 'what if' and sensitivity analyses.

5. Develop **strategic capital management dashboard** for the Capital Committee to balance capital adequacy with capital allocation decision making.

6. Upgrade the **capital planning process** to introduce regulatory capital and return on regulatory capital plans and budgets, and implement **balance sheet steering** and monitoring at business unit and portfolio levels.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A&M REGULATORY COMPLIANCE AND FITTING DASHBOARD

COMPANY DASHBOARD INCLUDES PLAN STATUS, YTD CHANGE, HISTORICAL TREND, FORWARD LOOKING TREND AND BENCHMARKING FOR SELECTED SET OF METRICS

REGULATORY COMPLIANCE

			Status 2015 YTD	YoY Change Bps	CAGR 2010-2015	Forward Trend	Peers
Capital & Leverage	CET 1	12.3%		+40bps	↑ 5.1%	↑	2Q
	CET1 FL	10.4%		+0bps		↑	3Q
	CET1 FL ST	-233				↓	2Q
	Total Capital	15.5%		+40bps	↑ 2.5%	↑	3Q
	Leverage FL - (T. Assets)	7.1%		-20bps	↑ 3.6%	→	1Q
Liquidity	LCR	>100%					
	NSFR	93%		+235bps	↑ 3.2%	↑	2Q
Resolution	TLAC Shortfall	TBC				↓	n.a.
	MREL	-	Assumed Convergence to TLAC				
Risk	NPL	6.7%		+25bps	↑ 8.7%	↑	4Q
	Coverage	70		+2bps	↑ 2.7%	↑	2Q

REGULATORY FITTING

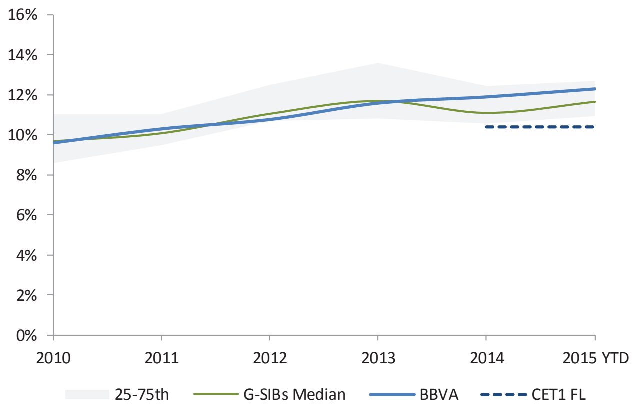
			Status 2015 YTD	YTD Change Bps	CAGR 2010-2015	Forward Trend	Peers
Capital & Leverage	RWA density	52.7%		-280bps	↓ -1.4%	↓	4Q
	Capital Generation	40		+9bps	↓ -13.1%	→	2Q
	RORWA	1.7%		+80bps	→ 1%	↑	2Q
	Div Yield	4.2%		-98bps	↓ -4.8%	↓	1Q
	Economic Profit	-1.0%		+0bps		↓	2Q
Liquidity	NIM	2.4%		-22bps	↑ -1.5%	↓	1Q
	Funding Cost	1%		-35bps	↓ -4.3%	↓	4Q
Resolution	G-SIB Buffer	0.0%	-	-1bps	↓		
	G-SIB Scoring	90		-3bps		↓	-
Risk	Conduct Cost	TBC		Limited information available			
	SREP rating	TBD		Pending full SSM implementation			

METRICS VIEWS WITH HISTORICAL TRENDS AND PEER BENCHMARKING ANALYSIS

CAPITAL FLEXIBILITY

This graph explains the relative position of the bank nowdays vs. Basell full implementation

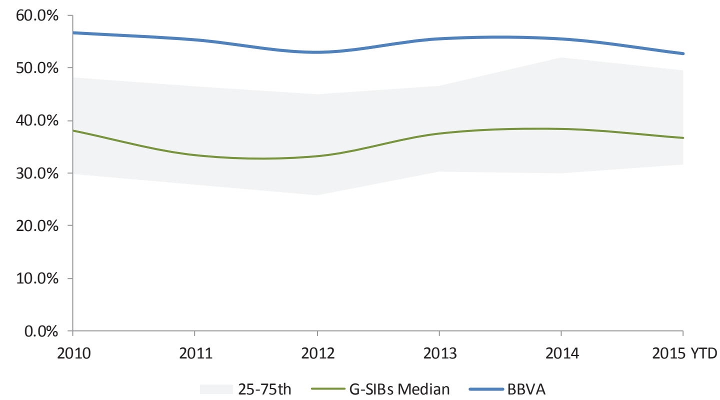
CET1 & CET1 FL



CONSUMPTION RETURN

This graph explains the relative position of the bank nowdays vs. Return / Density on Risk-weighted Assets

Choose Metric **RWA Density**



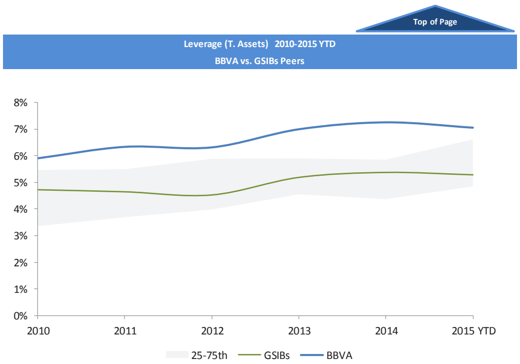
DETAILED METRIC BREAKDOWN AND SENSITIVITY ANALYSIS

LEVERAGE (T. ASSETS)

BANK	Leverage	Status 2015 YTD	YoY Change Bps	CAGR 2010-2015	Forward Trend	Peers
BBVA	7.1%		+40	5%	→	1Q
Median G-SIBs	5.3%		+7	2.7%	→	n.a.
Median EUROPE	5.1%		+1	3.6%	→	n.a.
JP Morgan Chase	7.9%		+71	3.4%	↑	1Q
Citigroup	9.5%		+41	n.a.	n.a.	1Q
Goldman Sachs	9.6%		+42	n.a.	n.a.	1Q
Morgan Stanley	8.0%		(4)	n.a.	n.a.	1Q
Bank of America	8.2%		+17	2.6%	→	1Q
BNY Mellon	5.3%		(5)	-0.8%	↓	3Q
State Street	5.3%		(47)	-7.2%	↓	2Q
Wells Fargo				n.a.	n.a.	n.a.
HSBC	6.1%		+24	2.7%	↑	2Q
Barclays	5.0%		+48	4.5%	↑	3Q
BNP Paribas	3.9%		(8)	2.7%	↑	4Q
Deutsche Bank	5.1%		(47)	16.1%	→	3Q
Credit Suisse	4.6%		(32)	10.9%	→	4Q
Royal Bank of Scotland	5.9%		+14	3.7%	↑	2Q
BBVA	7.1%		(20)	3.6%	→	1Q
Groupe BPCE				n.a.	n.a.	n.a.
Crédit Agricole	2.4%		+11	-0.2%	→	4Q
ING Bank				n.a.	n.a.	n.a.
Nordea	4.0%		+1	0.4%	↑	4Q
Santander	6.2%		+58	5.1%	↑	2Q
Société Générale				n.a.	n.a.	n.a.
Standard Chartered	6.0%		+47	-1.0%	→	2Q
UBS	5.0%		(34)	8.4%	→	3Q
Unicredit Group	5.3%		(10)	2.7%	→	2Q
Mitsubishi UFJ FG	5.0%		+19	0.3%	↑	3Q
Mizuho	3.9%		(2)	3.2%	→	4Q
Sumitomo Mitsui FG	4.7%		+7	-0.7%	→	4Q

Choose Denominator

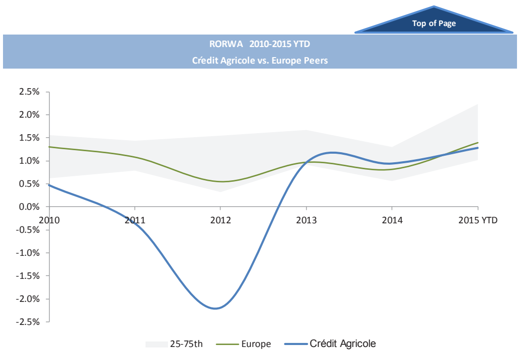
T. Assets



Source: SNL Database. Data used up to June 2015. G-SIB assessment sample - end-2012 / 2013 & 2014 exercise
Methodology: Tier 1 Capital / [Total Assets or T. Exposure]. Note: Derivative liabilities for total assets in European banks was removed in order to show similarity with USGAAP.

RORWA

BANK	RORWA	Status 2015 YTD	YoY Change Bps	CAGR 2011-2015	Forward Trend	Peers
Crédit Agricole	1.3%		+34	4%	↑	3Q
Median G-SIBs	1.6%		69	0.3%	→	n.a.
Median EUROPE	1.4%		+68	0.3%	→	n.a.
JP Morgan Chase	2.5%		+126	10.8%	↑	1Q
Citigroup	2.2%		+169	n.a.	n.a.	2Q
Goldman Sachs	1.7%		+50	n.a.	n.a.	2Q
Morgan Stanley	2.6%		+182	n.a.	n.a.	1Q
Bank of America	1.9%		+152	-264.4%	→	2Q
BNY Mellon	3.0%		+158	3.2%	↑	1Q
State Street	1.5%		+2	-10.4%	→	3Q
Wells Fargo	2.7%		+96	15.6%	↑	1Q
HSBC	1.8%		+69	6.6%	↑	2Q
Barclays	1.1%		+88	-1.1%	→	3Q
BNP Paribas	1.4%		+131	-1.8%	→	3Q
Deutsche Bank	0.7%		+23	-0.4%	→	4Q
Credit Suisse	1.5%		+68	-9.8%	→	3Q
Royal Bank of Scotland	0.2%		+95	-190.1%	↓	4Q
BBVA	1.7%		+80	1.0%	↑	2Q
Groupe BPCE	1.0%		+14	-0.3%	↓	4Q
Crédit Agricole	1.3%		+34	22.2%	↑	3Q
ING Bank	2.2%		+176	n.a.	n.a.	1Q
Nordea	2.7%		+43	13.6%	↑	1Q
Santander	1.7%		+48	2.0%	↑	2Q
Société Générale	1.3%		+50	0.9%	→	3Q
Standard Chartered				n.a.	n.a.	n.a.
UBS	3.1%		+149	-2.5%	→	1Q
Unicredit Group	0.6%		+3	11.0%	→	4Q
Mitsubishi UFJ FG	0.6%		(62)	4.0%	→	4Q
Mizuho	0.3%		(107)	-13.1%	↓	4Q
Sumitomo Mitsui FG	0.5%		(120)	-7.8%	↓	4Q



Source: SNL Database. Data used up to June 2015.

Methodology: Net Income x 2/ Total Risk Weighted Assets.

ACRONYMS

Generic

- **G-SIBs:** Global Systemically Important Banks
- **SREP:** Supervisory Review and Evaluation Process
- **MIS:** Management Information System
- **YTD:** Year To Date

Capital and Leverage

- **CET1:** Common Equity Tier 1 Ratio
- **CET1 FL:** Common Equity Tier 1 Fully Loaded Ratio
- **CET1 FL ST:** 2016 Common Equity Tier 1 Fully Loaded post-stressed

Ratio

- **RWA:** Risk-Weighted Assets
- **RORWA:** Return on Risk-Weighted Assets
- **ROE:** Return on Equity
- **Div. Yield:** Dividend Yield

Liquidity

- **LCR:** Liquidity Coverage Ratio
- **NSFR:** Net Stable Funding Ratio
- **NIM:** Net Interest Margin

Resolution

- **TLAC:** Total Loss Absorbing Capacity
- **MREL:** Minimum Requirement for own funds and Eligible Liabilities

Risk

- **NPL:** Non Performing Loans

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Banks are in the process of reshaping their business models due to stricter balance sheet regulatory constraints. Integrated regulatory compliance and fitting scorecard tools can help the industry to rethink banking models.

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ACTION
RESULTS

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