

Leveraged Transactions

Overview

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Executive Summary

This document is organised in 3 sections: 1. ECB Guidance, 2. Why it is important, and 3. Management Ideas.



Leverage Transactions ECB Guidance

- On May 17 the SSM published the final draft to leveraged transactions for banks. The guide seeks to establish sound origination and risk management practices to facilitate a smooth financing of the real economy.
- The SSM is focusing on credit risk, a prove of that are latest guidance published on NPLs and now on Leveraged Transactions.
- The guidance includes the following topics: scope, definition of leveraged transactions, RAF & Governance, syndication activities, Policies & Procedures, secondary market activities, Reporting & MIS.



Why LT is important

- A&M analysis and benchmark shows how Spanish economy, especially for listed companies, has traditionally had a high Debt to EBITDA ratio. Although some reduction was experienced during the crisis, the levels are still high and in many cases above the threshold of 4 set by the guidance.
- A drill down per sector shows that some of the most leveraged sectors continue to be the ones were Spanish banks are highly exposed, thus triggering the application of the guidance.
- The application of the guidance implies relevant changes: 1. Adapting governance, policies & procedures, 2. Including LT in RAF and 3. Reporting to senior management and SSM.



Management Ideas

- Our suggested ideas:
 1. Banks need to include LT into the **RAF**: Debt to EBITDA and other leverage measures at different aggregation levels within total portfolio but also size and performance of LT exposures. On going monitoring must cover: status, trend, FW looking view (Stress Testing) and peers through **dashboards**. Policies update.
 2. **Stress Tests and EWS** have become indispensable for both supervisors and banks. A&M stress testing tools can provide you with an adequate framework for capital impact estimate.
 3. Comprehensive **advise** over LT and credit risk under the **SREP process**. Our team, which includes former SSM and BdE supervisors familiar with the methodology leading to P2, has developed a tool to replicate SREP.



Leveraged Transactions (LT) - ECB guidance


The ECB has considered that closer supervisory scrutiny of leveraged transactions (LTs) is needed and justified due to the following reasons: low interest rates, recovery of leveraged transactions market, weaker deal structures / leniency in policies, and poor governance and monitoring

Topic	Description
Overview	<ul style="list-style-type: none"> Any loan or credit exposure that meets at least one of the following: <ul style="list-style-type: none"> Borrower's post-financing total debt to EBITDA ratio > than 4X* Borrower is owned by one or more financial sponsors (Private equity>50%) Exclusions: minimum threshold € 5 million, SMEs excluded (except if private equity), investment grade, specialized lending
RAF and Governance	<ul style="list-style-type: none"> Clear RAF regarding leverage finance and related monitoring Expected to have a sound governance structure in place for LT, including comprehensive / consistent oversight on all LT originated, syndicated or purchased LTs. Review and approval by an independent risk function (2nd line). Threshold in credit approval need to be in place for all LT including granular sub-limits (including sector if relevant). All new transactions (renewal or refinancing) should trigger a due diligence, originated by 1st line and reviewed by 2nd line of defense
Policies, Process & Analytics	<ul style="list-style-type: none"> Internal standards for underwriting & syndication should include: <ul style="list-style-type: none"> Market appetite assessment and related pricing risk Limits: Total <u>Debt to EBITDA > 6X</u> should remain exceptional and trigger committee referral Policies for "Hung transactions", transfer to banking book and diversification categories Conflicts of interest and reputational risk must be covered Analysis of company business case and adverse case through a stress testing framework that analysis tail-end market events such increments in default rates, in migration risk and haircuts in collateral. Severe but plausible scenarios. Also for analysing potential disruptions on the underwriting and syndication pipeline. UTP criteria in place. Impairment tests when a covenant is breached, leverage is increased, bullet refinancing, Cash Flows concerns.
Internal Controls	<ul style="list-style-type: none"> On going monitoring by the syndication unit of pending transactions (at least annually but more frequently for higher risk exposures). Monitoring and targeting diversification by categories (funds, issuer, banks, etc.) Institutions should ensure regular portfolio monitoring including assessment of payment capacity & impairment test in some cases: covenant breach, increase in leverage, bullet refinancing, situation worse than projected. Perform regular review of LT & of the guidance compliance is compulsory at least every 3 years. Internal Audit must issue a report.
Data & Infrastructure	<ul style="list-style-type: none"> MIS should be sufficiently granular & sound enough to identify, aggregate and monitor LTs and cover all guidance relevant aspects. Reports should cover: exposure, trend, RAF, concentrations and potential covenants breaches Regular comprehensive reports for senior management should be in place, including underwriting book and "hold book"



Leveraged Transactions (LT) - FED guidance

The problem might be different Leveraged Transactions definitions across the jurisdictions, this slide in particular shows the scope of the 'Interagency Guidance on Leveraged Lending' approved by the Board of Governors of the FED, FDIC and OCC in March 2013. PRA does not have similar rules.

Definition	FED Expectations (comparison with ECB)
 <p>Leverage Lending Guidance (Mar 13)</p>	<ul style="list-style-type: none"> • Broader definition, without specific thresholds that trigger applicability: The policies of financial institutions should include criteria to define leveraged lending that are appropriate to the institution. For example, numerous definitions of leveraged lending exist throughout the financial services industry and commonly contain some combination of the following: <ul style="list-style-type: none"> ○ Proceeds used for buyouts, acquisitions or capital distributions ○ Transactions where the borrower's Total Debt divided by EBITDA (earnings before interest, taxes, depreciation, and amortization) or Senior Debt divided by EBITDA exceed 4.0X EBITDA or 3.0X EBITDA, respectively, or other defined levels appropriate to the industry or sector (Cash should not be netted). ○ A borrower with high debt-to-net-worth ratio. ○ Transactions when the borrower's post-financing leverage, as measured by its leverage ratios (for example, debt-to-assets, debt-to-net-worth, debt-to-cash flow, or other similar standards common to particular industries or sectors), significantly exceeds industry norms or historical levels (designation of a financing as "leveraged lending" is typically made at loan origination, modification, extension, or refinancing, "Fallen angels" excluded) • An institution engaging in leveraged lending should define it within the institution's policies and procedures in a manner sufficiently detailed to ensure consistent application across all business lines. A financial institution's definition should describe clearly the purposes and financial characteristics common to these transactions, and should cover risk to the institution from both direct and indirect exposure via limited recourse financing secured by leveraged loans, or financing extended to financial intermediaries (such as conduits and SPEs) that hold leveraged loans. • Main differences with ECB: <ul style="list-style-type: none"> ○ Much broader definition, open to banks to set any specific thresholds ○ Ownership by a financial sponsor does not automatically trigger the designation of LT under FED approach ○ No limits or exclusions to the broader definition of the FED approach
<p>FAQs (Nov 14)</p>	<ul style="list-style-type: none"> • The FED issued additional clarifications on Nov 14 due to foster understanding of the guidance: <ul style="list-style-type: none"> ○ Loans excluded from the scope: SMEs, loans with tangible collateral. ○ Included: traded assets, covenant-lite structures ○ Bright-line rules does not exist, but excessive leverage raises concern for instance Debt to EBITDA > 6x, also: over optimistic cash flows, large EBITDA adjustments without third party DD, and PE with history of paying dividends to itself quickly after buyout.

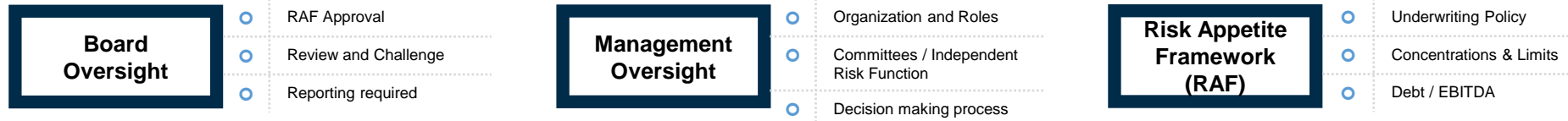


As a result some studies show that between 13-15 the LT share of top largest leveraged lender banks in US was significantly reduced, in favor of other non-bank competitors. Proportionality principle also applies in US.

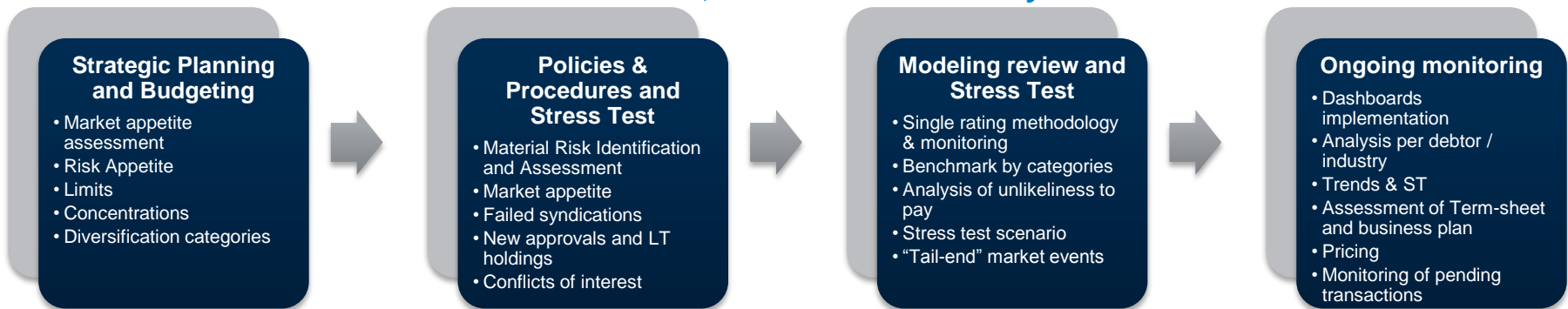
Leveraged Transactions - A&M approach

A&M approach for the implementation of the ECB guidance is comprehensive and include capabilities along the following key dimension of our Risk Management Framework: 1. Governance; 2. Processes and Analytics; 3. Internal Controls and; 4. Data and Infrastructure.

1. RAF and Governance



2. Policies, Processes and Analytics



3. Internal Controls

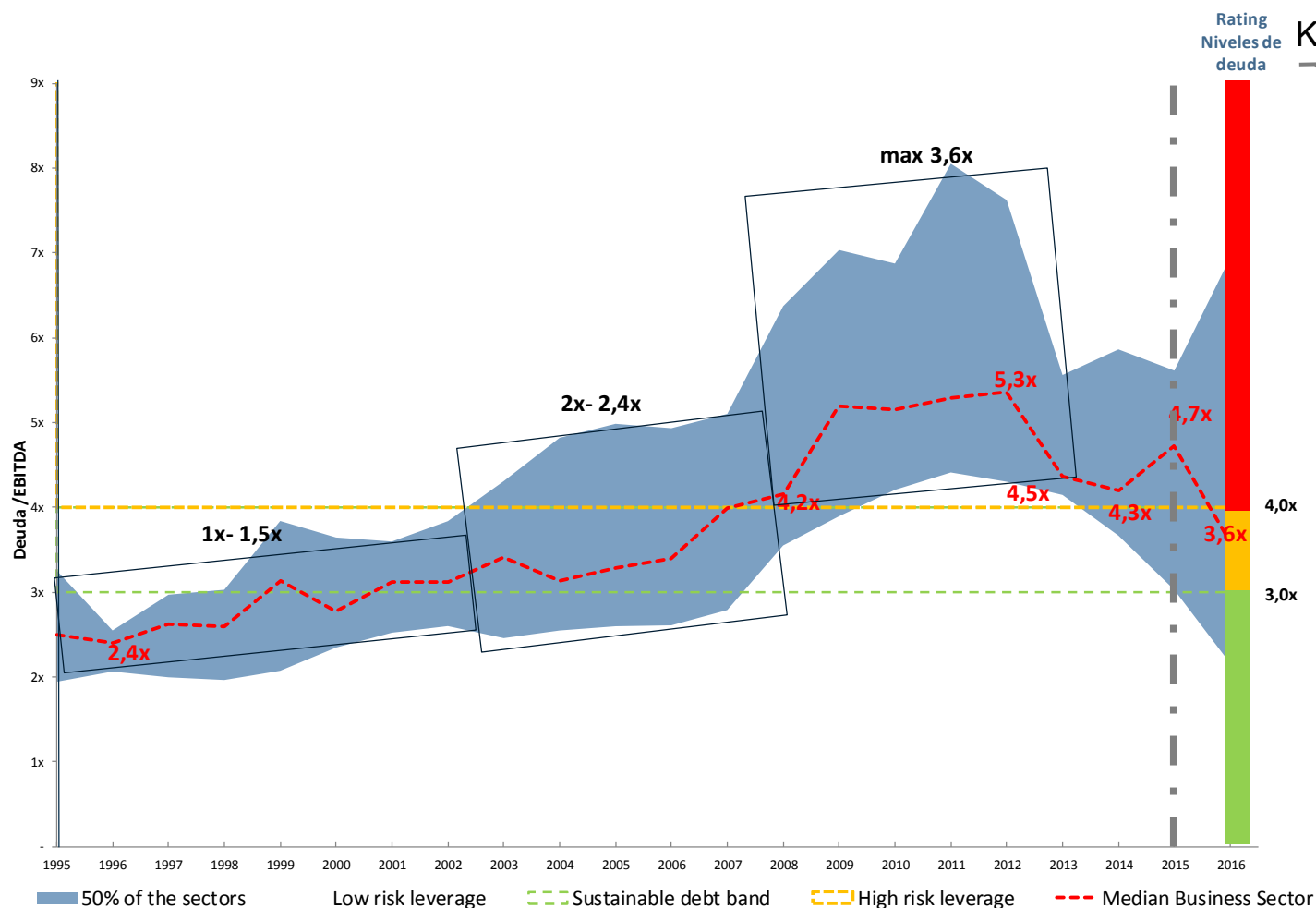


4. Data and Infrastructure



Why LT is important – Analysis and Benchmark

Debt to EBITDA ratio in Spain



Key Highlights

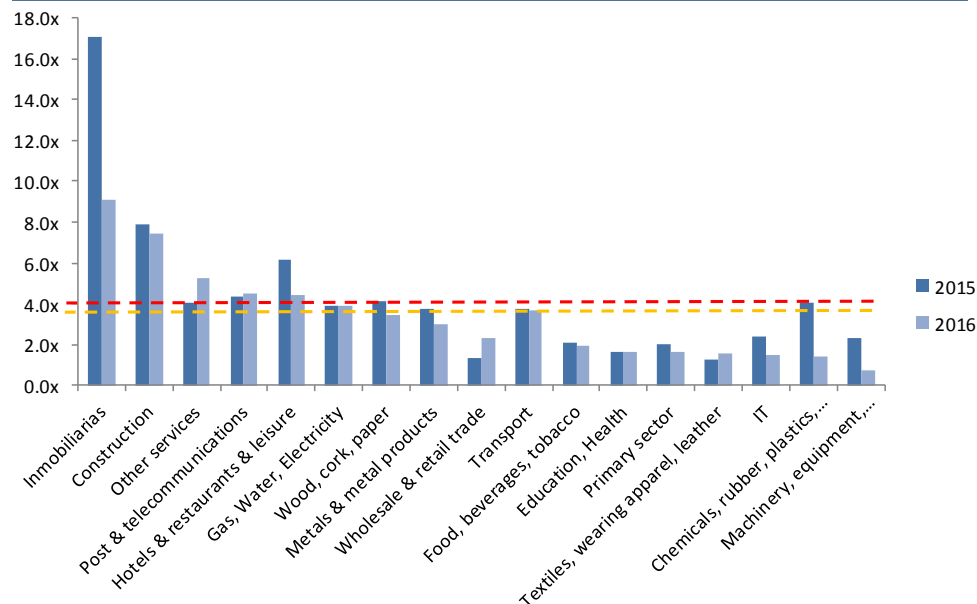
- Graph shows median ratios
- The tendency of the median ratio had an inflection point in 2011, showing an improvement after the increase in 2008.
- The levels of leverage in 2013-2014 are similar to those pre-crisis.
- The last available data from BDE (2015) shows how the levels of leverage increased again to levels around 4.7x.
- Banco de España database includes non financial Spanish firms.
- In 2016, the Debt to EBITDA ratio reaches 3.6x and represents the median of the listed companies in Spain only (see annex for more detail on methodology).

Source: Banco de España, balance sheet of companies listed in Spanish markets and A&M analysis

Why LT is important – Analysis and Benchmark

Debt to EBITDA in Spain and banking loans per sector of activity

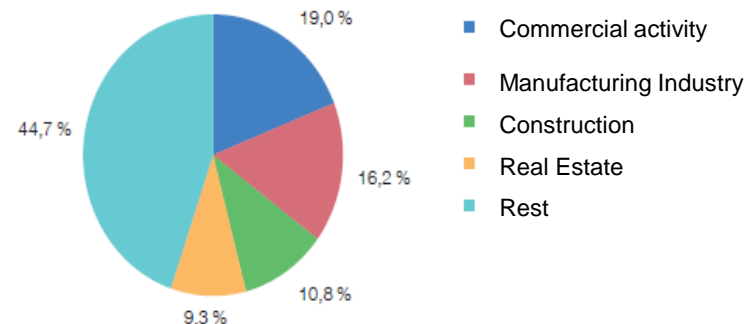
Debt to EBITDA per sector



Source: Balance sheets of companies and A&M analysis

- The median leverage level of the companies in IBEX 35 is of 3.7x: - - - -
Very close to the 4.0x level: - - - -
- The sectors that continue to show a high leverage above the threshold of 4x are **Real State Management** and **Construction** companies.
- The hostelry, utilities and telecommunications are slightly above the threshold established in the guidelines, and must be on watch.

Banking loans to non-financial corporations



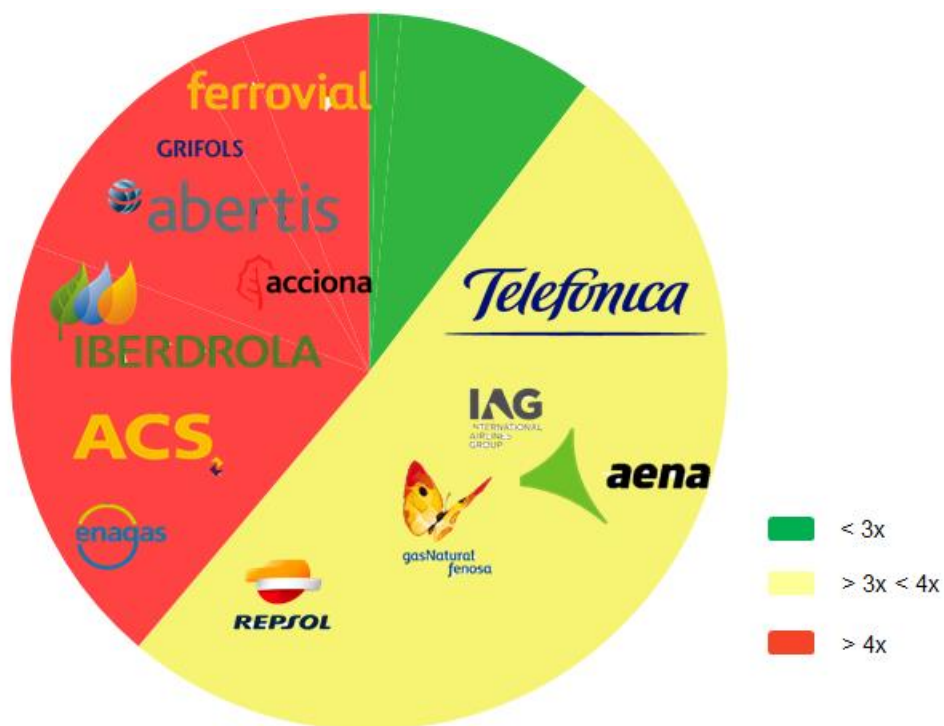
Source: Banco de España

- Construction and Real Estate, which are the most leveraged sectors still account for 19% of the loans to non financial corporates of Spanish banks in 2016
- Thus application of the Guidelines applies for a significant banking exposure
- Private Equity owned exposures are also to be included in the scope (if the Debt to EBITDA breach has not been triggered already)

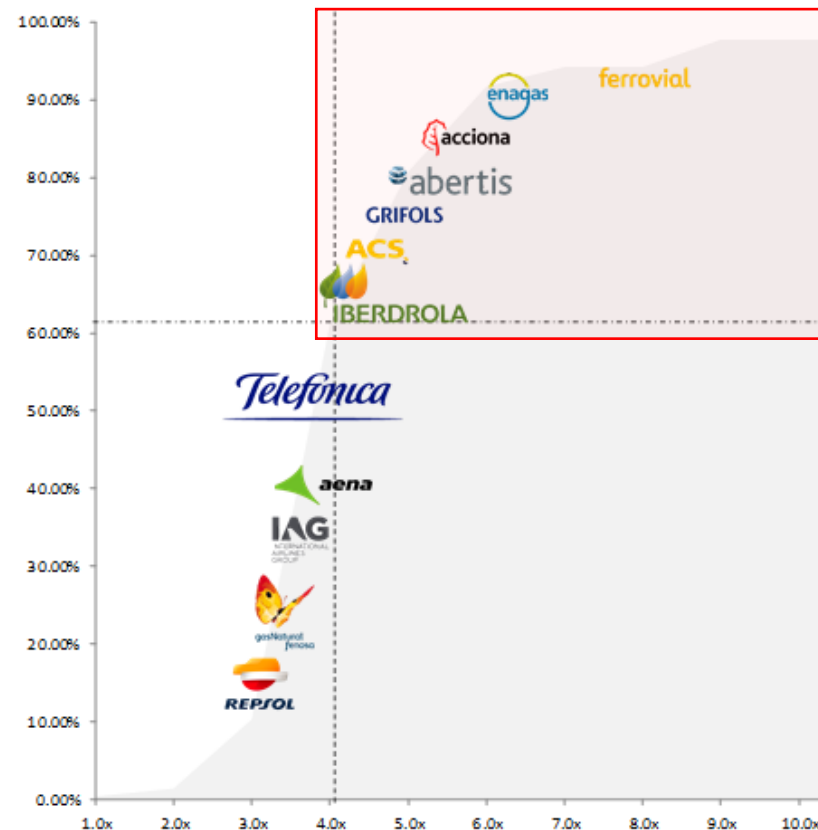
Why LT is important – Analysis and Benchmark

Distribution of indebtedness in IBEX 35 by Debt to EBITDA

Pie chart distribution



Cumulated distribution



- The companies listed in the IBEX 35 accounts for a total financial debt of €232,681 million
- 50% of the indebtedness is accumulated in the warning levels, while almost 40% is above the 4x Debt to EBITDA threshold
- For more detailed analysis check the methodological annex

Why LT is important – Analysis and Benchmark

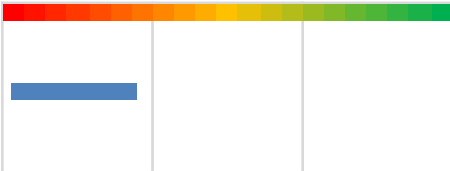
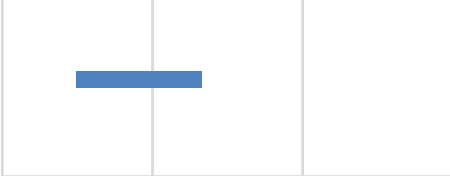
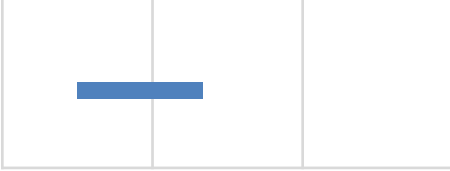
Top 10 leveraged firms in the IBEX 35 - Additional analysis

	Company name	BvD major sector	Leverage 2016	YTD Change	Peers (Sector)	Rating
Single Names	Merlin Properties Socimi, S.A.	Inmobiliarias	19.6x	-0.8%	9.1x	BBB
	Ferrovial, S.A.	Construction	8.7x	10.2%	7.4x	BBB
	Enagas, S.A.	Gas, Water, Electricity	6.7x	34.3%	3.9x	A-
	Cellnex Telecom, S.A.	Post & telecommunications	5.8x	40.3%	4.5x	x
	Acciona S.A.	Construction	5.7x	-38.7%	7.4x	x
	Indra Sistemas	Other services	5.2x	-379.2%	5.2x	x
	Abertis Infraestructuras, S.A.	Transport	5.2x	-4.9%	3.7x	BBB
	Grifols	Education, Health	4.3x	3.6%	1.6x	BB
	Acs Actividades De Construccion Y Servicios, S.A.	Construction	4.3x	-14.4%	7.4x	BBB
	Iberdrola S.A.	Gas, Water, Electricity	4.1x	0.0%	3.9x	BBB+
Telefonica S.A.	Post & telecommunications	4.0x	-12.1%	4.5x	BBB	

- The median Debt to EBITDA of the companies in the IBEX 35 is of 3.7x, slightly higher than the total listed companies (3.6x).
- Overall, companies within the IBEX 35 have reduced its indebtedness in 10%.
- The highest leveraged companies in the IBEX 35 accounts for 65% of total indebtedness.
- Most of these companies have investment grade ratings and thus excluded from the guidelines although should be on credit watch

Management Ideas: How A&M can help

The ECB is focusing on credit risk, a prove of that are latest guidance published on NPLs and Leveraged Transactions. At the same time Stress Testing has become a common tool for supervisors that needs to be included as BAU management tool for all areas of banks.

Top Features	Banks Gaps High Medium Low	Proposals
<p>1 LT Dashboards / RAF</p>		<ul style="list-style-type: none"> • Implementation of the guidance through improved reporting and governance around leveraged transactions • Measuring of size, performance and indebtedness of LT • Introducing LT into RAF. Bespoke to institution specificities
<p>2 Stress Testing / Scenario analysis</p>		<ul style="list-style-type: none"> • Stress test of the portfolio in scope. Early Warning System • Challenge of business plans and performance improvement • Potential impacts in capital and P&L and monitoring • Idiosyncratic events
<p>3 Credit risk under SREP</p>		<ul style="list-style-type: none"> • LT under SREP • A&M Tool for simulation of SREP rating with FINREP and COREP + qualitative considerations • Comprehensive assessment and advise on all credit issues

Management Ideas: Dashboard

Plan Status: ● Area of concern ● Area of attention ● No concern
 Forward Trend 1Q Out: ↗ Expected increase → Remains stable ↘ Expected decline











Executive summary: regular reporting to Managing Board. Status implies a RAF.

Group		%	Status	YTD Change	Forward Trend / ST	Peers	Key Messages
Size	L. F. Transactions / Total Assets		⦿		↗	4Q	<ul style="list-style-type: none"> - Covenants breaches - Private equity owned - Concentrations - Pipeline / Maturity
	L.F. Transactions / Total Credit		⦿		↗	2Q	
	L.F. Transactions / Own Funds		⦿		↗		
	Concentration (Herfindahl Index)		⦿				
Performance	Non-performing LF / Total L.F.		⦿				
	Provisions L.F. / Non-performing L.F.		⦿		↗	4Q	
	Yield (average)		⦿		↗	2Q	
Indebtedness	Debt / EBITDA		⦿		↗	4Q	
	Leverage ratio: Debt / Total Assets		⦿		↗	2Q	
	Rating (average)						

- Key metrics grouped by size, performance and indebtedness. Including status, change, forward trend, and peers. Concentration and the underwriting **pipeline** is also to be assessed when sizing the exposures. Investment in MIS expected.

Management Ideas: Dashboard

List of metrics per country when relevant

	Status	Size				Performance			Indebtedness		
		L. F. / Total Assets	L. F. / Total Credit	L.F. / Own Funds	Concentration Index	Non-perf. LT / Total L.T	Provisions / Non-perf. L.T.	Yield (average)	Debt / EBITDA	Leverage ratio	Rating
 SPA	🟡										
 BRA	🟡										
 UK	🟢										
 USA	🟢										
 MEX	🟢										
 GER	🟢										
 CHI	🟡										
 POL	🔴										
 POR	🟡										
 ARG	🟡										
SCF	🔴										
GBM	🟡										

Management Ideas: Dashboard

Plan Status: ● Area of concern ● Area of attention ● No concern
 Forward Trend 1Q Out: ↗ Expected increase → Remains stable ↘ Expected decline

List of metrics per single name / private equity

		Exposure	Debt / EBITDA (%)	Status	YTD Change	Forward Trend / ST	Peers (Sector)	Maturity	Rating	Yield	Interest coverage
Single names	Corporate 1			⊙							
	Corporate 2			⊙							
	(...)										

Key Messages

- Covenants breaches or near
- Private equity owned
- LTV of portfolio or other KPIs if SOCIMI
- Other: Cash to Debt
- Covenant-lite structure

		Exposure	Debt / EBITDA (%)	Status	YTD Change	Forward Trend / ST	Peers (Sector)	Maturity	Rating	Yield	Interest coverage
Private equity	Corporate 1			⊙							
	Corporate 2			⊙							
	(...)										
	Total										

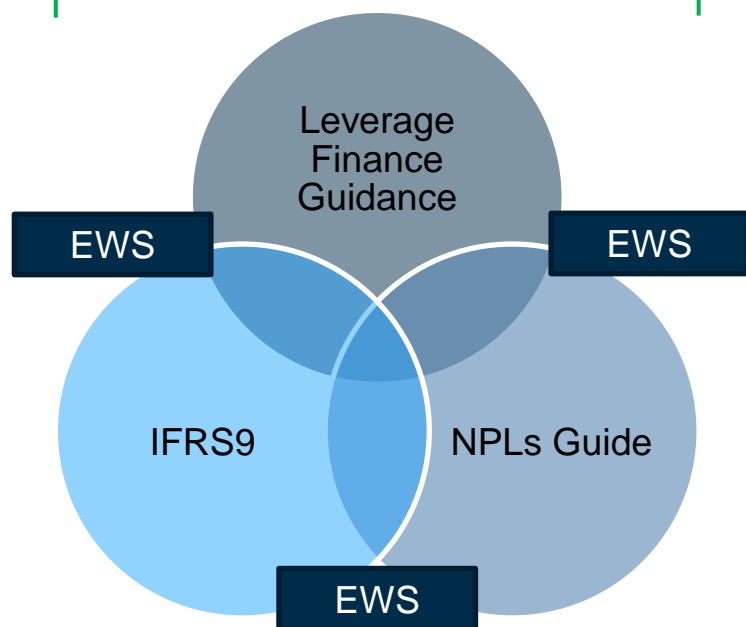
Key Messages

- Market concentrations comments
- Sponsor concentrations comments
- Exposure thresholds per counterparty / sponsors
- Recovery rates

Management Ideas: Stress Test / EWS

Focus of regulations, synergies between several regulations (LT, IFRS9 and NPLs): Early Warning Systems (EWS)

Translating changes in regulation into
BAU, RAF and strategy



Common impacts in the lending Business

- **RAF** needs to be updated and approved at board level, showing amber / red zones with different operational / financial implications
- Reinforced analysis and monitoring in origination especially for high risk clients. Monitoring trustee must be appointed
- **Stress tests**, scenario and what if analysis. Forward looking view
- **EWS** highlighting deviations and proposing operational remediation
- Close monitoring to prevent deterioration / migration (of Debt to EBITDA, non-performing category or stage 2-3)
- **Enhance communication** with significant clients at early stage to offer solutions like: operational measures, liquidity assistance, forbearance, update of financial information (data quality issues), renegotiation of price or collaterals,
- **Performance improvement** advise offered to significant clients to analyze the reasons of a potential rating downgrade under baseline and adverse scenarios offering operational alternatives to solve the situations. **Challenge of the business plan** and independent assessment of debt value
- Introduction of covenants in contracts to allow renegotiation of certain clauses when there is a solvency deterioration
- Upgrade of internal policies and procedures.
- Revisited incentives scheme according to the new RAF and ensuring accountability for deterioration of risks
- Enhanced monitoring of **guarantees** with up to date information

Management ideas: Stress Test / Perf. Improvement

It is on the best interest for debtor and lender to prevent deterioration of granted facilities. Thus EWS is important and an output should be a remediation plan: *Performance Improvement* advise offered by the bank to significant clients. A&M combines restructuring skills with ST capabilities to assist banks

Markets

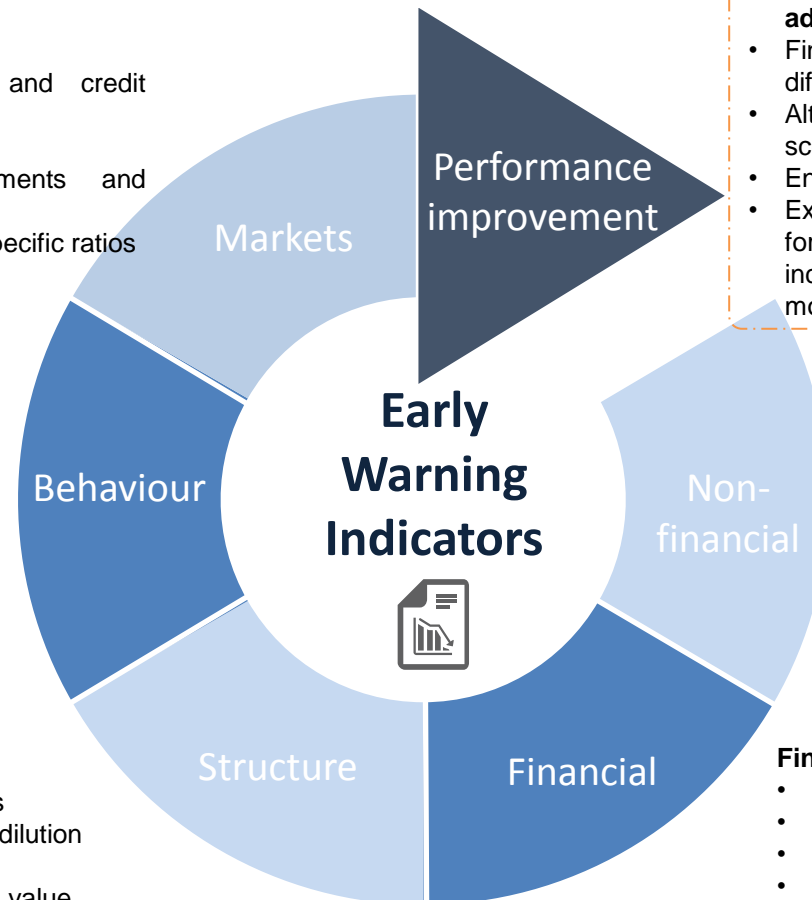
- Spreads AAA vs BBB
- Actual default rates
- Correlation volatility and credit spreads
- KMV
- Share price movements and relative performance
- External and market specific ratios

Behaviour

- Treasury and limits management
- Accounts
- Management

Structure

- Debt priority changes
- Collateral / recourse dilution
- Covenant-lite?
- Changes in collateral value
- LTV
- Leverage



Performance improvement advise

- Challenge of the business plan under **baseline** and **adverse** scenarios. Independent assessment
- Financial projections, trend and impact analysis in the different scenarios, stress testing, monitoring trustee
- Alternative operational measures to be taken if scenarios materialize to upgrade rating of facilities
- Enhanced communication with the client required
- Examples of measures: operational, liquidity measures, forbearance to adapt repayment with CF, collateral increase, covenant cure measures, price increase, new money, enforceability...

Non-Financials

- Sector
- Business
- Unique events
- Evolution, trend and peer comparisons needed

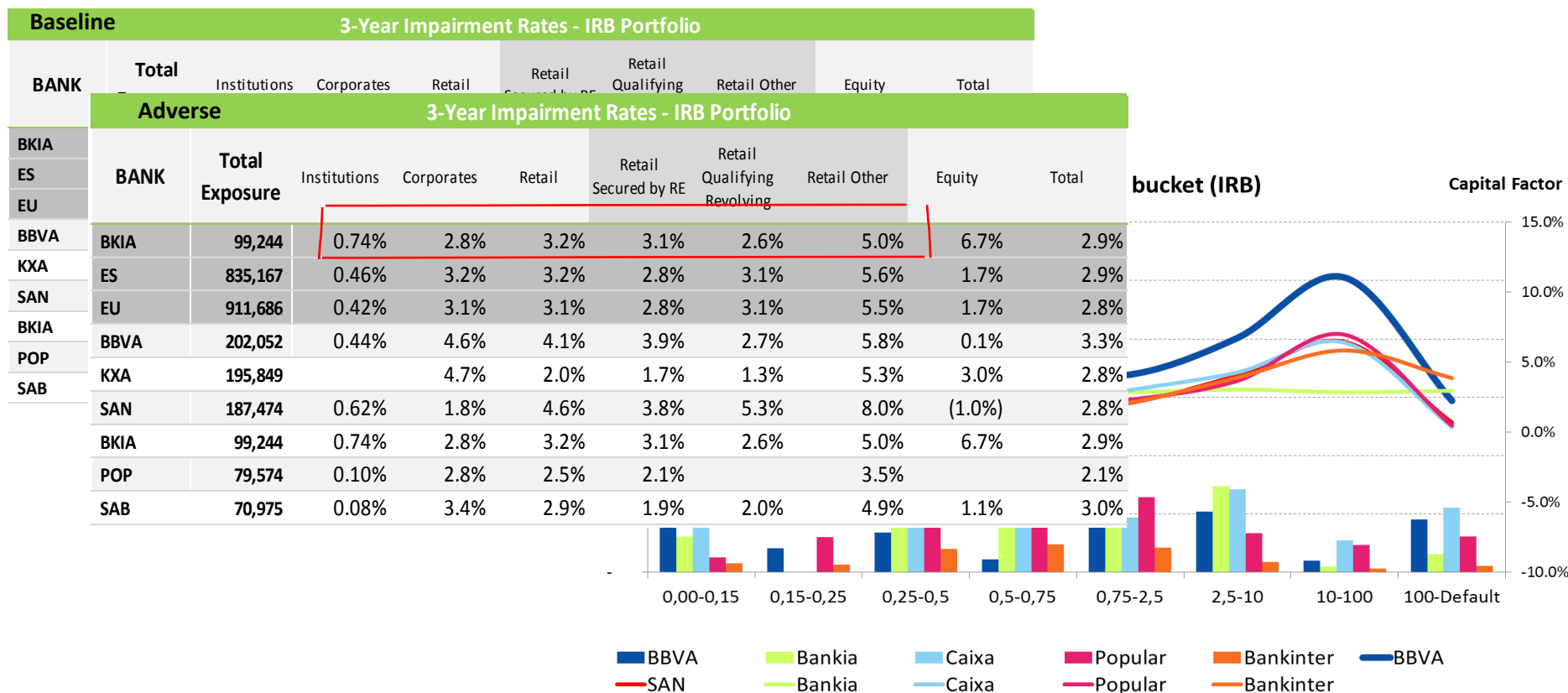
Financial

- Covenants non-compliance or near
- Working capital management (NOF vs FM)
- Performance: actuals vs forecasts
- Cash (3 C's: concern, crash, crisis)
- Cash to debt
- Interest coverage

Management Ideas: Stress Test

Stress test to analyze the impact of leveraged transactions in capital and P&L under different scenarios:

- Internal (ICAAP) and regulatory scenarios (EBA, PRA, CCAR)
- Sensitivity analysis of detailed portfolios, both retail/corporates and STAIRB
- Benchmark vs. peers



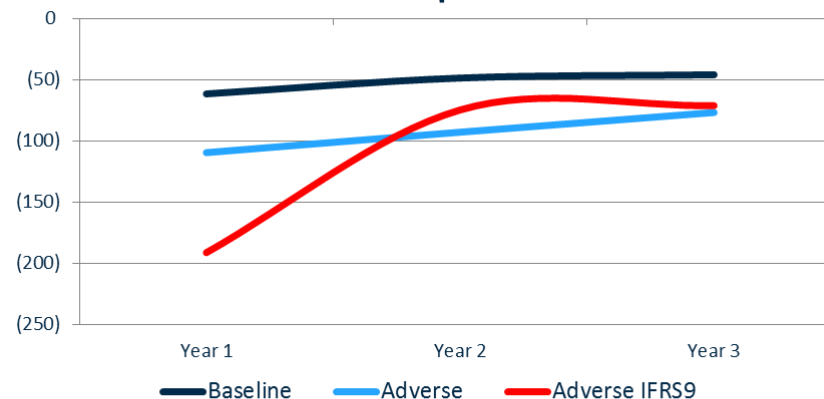
Management Ideas: Stress Test

Scenario and what-if impact analysis to better understand leveraged portfolios:

- Understanding of idiosyncratic event impacts (credit downgrades, large counterparty defaults, risk concentration in specific industry, etc.)
- Understanding of portfolio sensitiveness by different scenarios (plausible, more severe, benign, reverse...)
- Impacts on budget and strategic plan, risk appetite, limits and concentrations
- Impact analysis on IFRS9 implementation, impact in provisioning

SCENARIO	REAL GDP	HOUSE PRICES	MONETARY POLICY RATE	UNEMPLOYMENT
S1 Stronger Recovery	Growth of 2.8% in 2016, 3% in 2017	Growth of 7.3% in 2016, 4.7% in 2017	On hold at 0.5% until mid-2016	Falls to 4.5% in 2016
BL Baseline Current	Growth of 2.4% in 2016, 2.6% in 2017	Growth of 4.5% in 2016, 3.8% in 2017	On hold at 0.5% until late 2016	Falls to 5% in 2016
S2 Mild Recession	Growth of 0.7% in 2016, 2.5% in 2017	Decline 0.8% in 2016, Growth of 0.8% in 2017	On hold at 0.5% until mid-2017	Peaks around 5.8% in 2016
S3 Deep Recession	Decline 1.5% in 2016, Growth of 1% in 2017	Decline 6% in 2016, 5.6% in 2017	Lowered to 0.25% by mid-2016 and held there until mid-2018	Peaks around 8% in 2017
S4 Protracted Slump	Decline 2.6% in 2016, 1.3% in 2017	Decline 9% in 2016, 12% in 2017	Lowered to 0% by mid-2016 and held there until mid-2019	Peaks around 10% in 2018
PRA Stress Testing Scenario	Decline 0.2% in 2016, 1.8% in 2017	Decline 6.2% in 2016, 8.6% in 2017	Lowered to 0% by mid-2016 and held there until mid-2021	Peaks around 9.2% in 2018

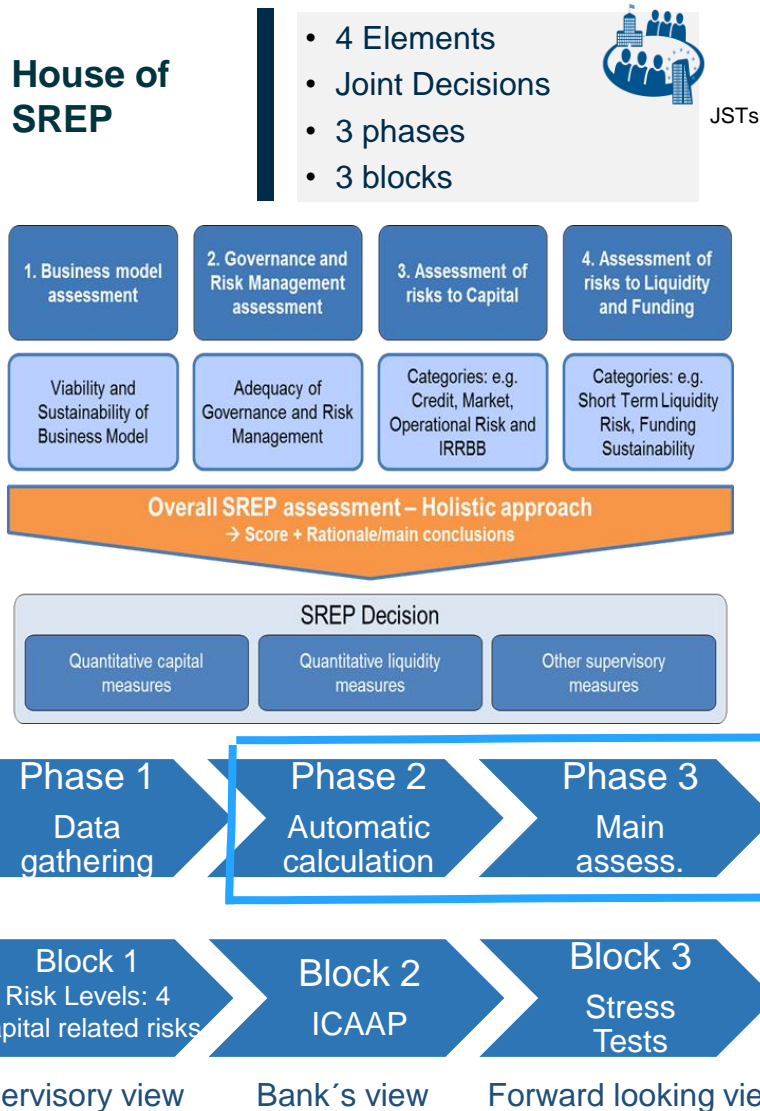
CET1 Impact



CET1 Impact	Baseline	Adverse	Adverse IFRS9	ST '16 vs ST IFRS9
Year 1	(62)	(109)	(191)	(82)
Year 2	(49)	(93)	(75)	18
Year 3	(46)	(77)	(71)	6
TOTAL	(156)	(279)	(337)	(58)

Management Ideas: Credit Risk under SREP

Phases
Blocks
Joint decisions
Elements description



Phase 2: Automatic calculation



Ratios aggregation		Ratio	Rating (1-4)
Size	NPLs over Total loans	30,9%	4
	NPLs adjusted with foreclosures over total loans (ex-interbank)	34,1%	4
Quality	Inflow of NPLs for the year over performing loans at prior year end	2,0%	3
	Coverage ratio. Specific allowances over NPLs	47,8%	2
Concentration	Large exposures ratio over total capital	0,0%	1
	Herfindahl index build on NACE	5,0%	1
Analysis provisions	Credit risk capital requirements under IRB approach	42,7%	0
	Provisions compared to EL over Total exposures	0,5%	3

Combined risk level and risk control

		RC			
		1	2	3	4
RL	1	1	1	1,5	2,5
	2	1,5	2	2,5	3,5
	3	2,5	3	3,5	4
	4	3,5	4	4	4

- Questionnaire for risk control

Phase 3: Main assessment



- Static and dynamic view
- Forward looking / Trend
- Peer comparison
- Concentration
- Counterparty
- Country risk
- Qualitative Assessment**
- Constrained judgement (+2/-1)
- Additional questionnaire for risk control

Risk Level (Weighted average)	Risk Control and Internal Governance	Combined	Qualitative assessment	Residual Risk
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Illustrative

3 3 3,5 0 3,5

Management Ideas: Credit Risk under SREP

LF is part of credit risk analysis, where other ratios are to be monitored under SREP in order to give an supervisory rating which is the basis for the P2 decision (together with ST). A&M has developed a tool to replicate the supervisory rating process

Phase 2-3			Ratio	Rating (1-4)	Risk Level (Weighted average)	Risk Control and Internal Governance*	Combined	Qualitative ass. - Constrained judgement**	Residual Risk
Size	NPLs adjusted with foreclosures over total loans (ex-interbank)		34,1%	4	4	3	4	0	4
	NPLs over Total loans		30,9%	4					
Quality	Coverage ratio. Specific allowances over NPLs		47,8%	2					
	Inflow of NPLs for the year over performing loans at prior year end		2,0%	3					
	Provisions compared to EL over Total exposures		0,5%	3					
Concentration	Large exposures ratio over total capital		0,0%	1					
	Herfindahl index build on NACE		5,0%	1					

Illustrative

- Some ratios weight more than others in the rating calculation, being size the most important (NPLs adjusted with foreclosure), and also within each category the first one is more relevant
- A&M has developed similar tools for the rest of risks to capital and SREP elements

* Risk Control phase 2 aims to check compliance with applicable regulation by using a questionnaire on 4 sub-areas: governance, risk appetite, risk management and internal control, and internal audit. In phase 3 it should be checked if governance and internal control works in practice.

** Constrained judgement approach (+2/-1). Other factors as trend, peer comparison and forward looking view are incorporated

Management Ideas: Credit Risk under SREP

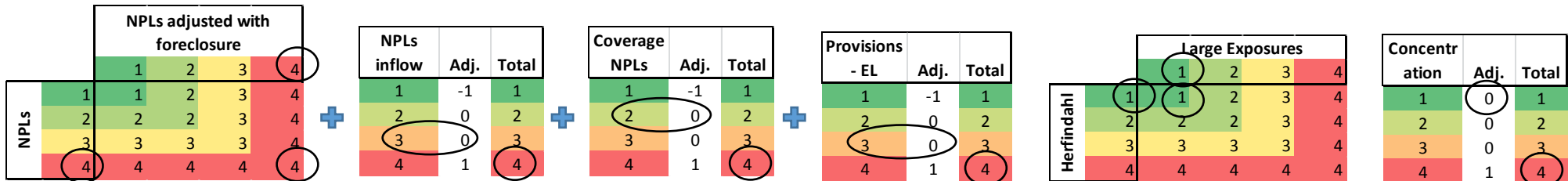
The process of automated credit risk scoring has several steps aggregating size, quality and concentration indicators. But the output is similar as a weighted average approach and the latter is much simpler

Phases 1-2: Data gathering and automated calculation

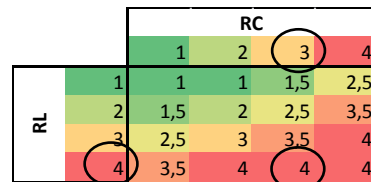
Size

Quality

Concentration



Risk control assessment (again 3 phases) and combined score



Phase 3: Main Assessment*

** Constrained judgement approach (+2/-1). Other factors as trend, peer comparison and forward looking view are incorporated

Appendix A – Analysis Detail and Methodology



Why LT is important – Analysis and Benchmark

Detailed Analysis and Methodology Annex

BvD major sector	min	p25	median	p75	max	mean
Post & telecommunications	0.5x	1.7x	4.5x	5.6x	24.9x	6.9x
Primary sector	0.1x	0.9x	1.6x	2.4x	3.1x	1.6x
Construction	2.0x	4.8x	7.4x	11.9x	34.0x	12.2x
Gas, Water, Electricity	2.9x	3.4x	3.9x	6.2x	7.2x	4.6x
Textiles, wearing apparel, leather	0.0x	0.8x	1.6x	2.3x	3.1x	1.6x
Other services	3.5x	4.4x	5.2x	6.1x	7.0x	5.3x
Wholesale & retail trade	0.5x	1.4x	2.3x	2.9x	3.4x	2.1x
Machinery, equipment, furniture, recycling	0.0x	0.7x	0.7x	2.3x	2.6x	1.3x
Metals & metal products	0.6x	2.2x	3.0x	3.7x	10.3x	4.0x
Transport	0.1x	2.7x	3.7x	4.1x	5.2x	3.2x
Food, beverages, tobacco	0.4x	0.8x	2.0x	5.2x	61.0x	12.0x
Wood, cork, paper	1.3x	2.9x	3.5x	4.4x	7.0x	3.8x
Chemicals, rubber, plastics, non-metallic	0.1x	0.7x	1.4x	2.1x	2.5x	1.3x
Education, Health	0.1x	0.9x	1.6x	3.0x	4.3x	2.0x
Hotels & restaurants & leisure	3.2x	3.5x	4.4x	5.3x	16.7x	6.3x
Inmobiliarias	3.3x	5.8x	9.1x	17.2x	26.6x	11.8x
IT	1.4x	1.4x	1.5x	1.5x	1.5x	1.5x
	0.0x	1.6x	3.5x	5.8x	61.0x	4.8x

- The sample considers 79 listed companies in Spain.
- Financial firms were excluded from the analysis.
- Data was gathered from consolidated annual reports of 2016.
- A&M used the leverage ratio suggested in the SSM guidance: Total Debt / EBITDA.

Why LT is important – Analysis and Benchmark

Detailed Analysis and Methodology Annex

IBEX 35	Gross Debt 2016 (€ Millions)	Corresponding Leverage	Rating
INDUSTRIA DE DISEÑO TEXTIL SA	€ 62.19	0.0x	x
VISCOFAN SA	€ 84.99	0.4x	x
MEDIASET ESPAÑA COMUNICACIÓN GAMESA	€ 237.67	0.5x	x
CORPORACION AMADEUS IT GROUP, S.A.	€ 544.56	0.7x	x
TECNINCAS REUNIDAS	€ 2,407.50	1.4x	BBB
ARCELORMITTAL	€ 428.79	2.0x	x
ARCELORMITTAL	€ 13,674.00	2.2x	BB
DISTRIBUIDORA INTERNACIONAL DE ENDESA, S.A.	€ 1,243.01	2.3x	BBB-
ENDESA, S.A.	€ 5,367.00	2.9x	BBB
REPSOL S.A.	€ 16,391.00	3.1x	BBB-
GAS NATURAL SDG, S.A.	€ 17,602.00	3.5x	BBB
INTERNATIONAL CONSOLIDAT. RED ELECTRICA CORPORACION, S.A.	€ 8,630.00	3.6x	BB
RED ELECTRICA CORPORACION, S.A.	€ 5,462.10	3.7x	A-
ACERINOX, S.A.	€ 1,218.42	3.7x	x
AENA, S.A.	€ 8,523.75	3.7x	Baa1
TELEFONICA SA	€ 60,361.00	4.0x	BBB
IBERDROLA SA	€ 32,025.75	4.1x	BBB+
ACS ACTIVIDADES DE CONSTRUCCION Y	€ 8,689.12	4.3x	BBB
GRIFOLS	€ 4,942.14	4.3x	BB
ABERTIS INFRAESTRUCTURAS,	€ 16,905.00	5.2x	BBB
INDRA SISTEMAS	€ 1,197.00	5.2x	x
ACCIONA S.A.	€ 5,656.15	5.7x	x
CELLNEX TELECOM, S.A.	€ 1,692.31	5.8x	x
ENAGAS, S.A.	€ 5,874.16	6.7x	A-
FERROVIAL, S.A.	€ 8,185.00	8.7x	BBB
MERLIN PROPERTIES SOCIMI, S.A.	€ 5,277.30	19.6x	BBB

- Data from IBEX 35 firms annual accounts
- Some names accumulate most of the debt: Telefónica, Iberdrola, Gas Natural, Abertis, Repsol...
- 40% of the debt is above the 4x Debt to EBITDA level
- Although most of it above investment grade levels



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