

## Building a new financial architecture

**New regulatory requirements** 

Ricardo Salgado, CEO

Lisbon, March 26, 2010

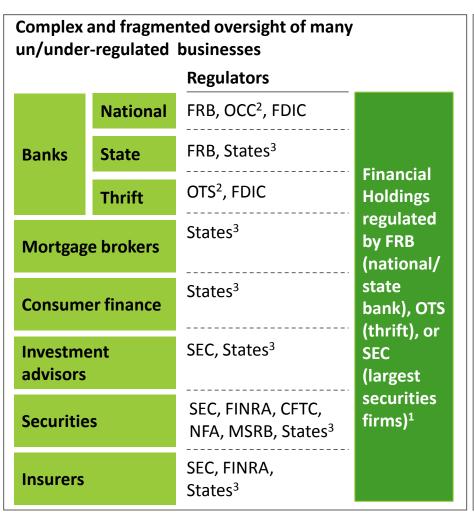
### **Agenda**

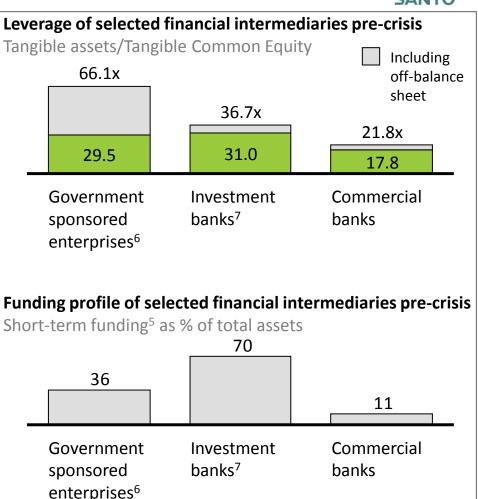


- 1. Drivers of the worst financial crisis in history
- 2. Role of governments and regulators in response to the crisis
- 3. A new wave of regulatory reform: perspectives on future regulation
- 4. Implications of future regulation for banks and the economy: How far can we go?

# Fragmented regulation in the US with near-banking institutions highly leveraged





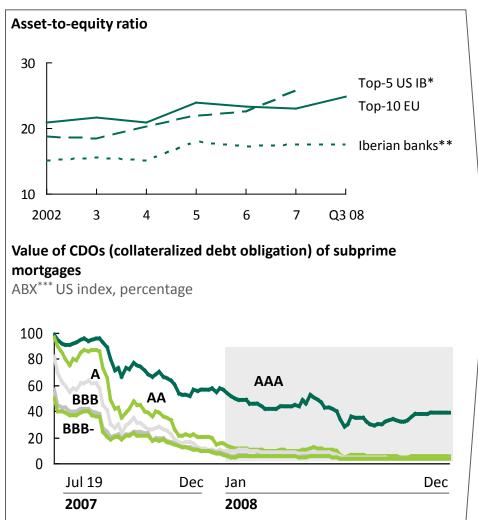


- 1 Until September 2008 when the last independent investment banks converted to Bank Holding Companies
- 2 Bank Regulators retain primary regulator responsibility for all products sold by banks and bank subsidiaries which include equity, futures, etc.)
- 3 Specific regulatory agencies and functions differ by stat. States maintain primary oversight for the insurance industry and generally maintain some version of a financial services regulator
- 4 Estimated based on size of relevant securitized asset-baked security (ABS) pools, private ABS pools allocated to private intermediaries by asset size
- 5 Includes repos, capital market funding, all other short-term borrowing (e.g., commercial paper) and current portion of long-term debt
- 6 Examples of GSE include: Freddie Mac, Fannie Mae, Federal Home Loan Bank
- 7 Weighted average for 5 large broker dealers: Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley
- Nota: FRB Federal Reserve Bank; OCC Office of the Comptroller of the Currency; OTS Office of Thrift Supervision; FDIC Federal Deposit Insurance Corporation; SEC Securities and Exchange Commission; FINRA Financial Industry Regulatory Authority;

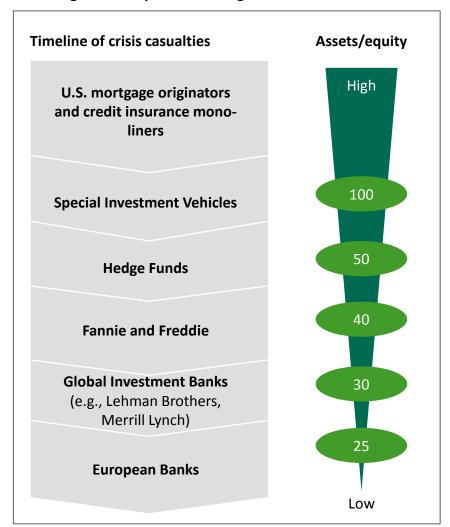
### Real estate bubble burst caught highly leveraged institutions off-guard



Banks had been increasing leverage whilst Real Estate bubble affected valuation of sub-prime backed securities...



... and financial institutions were hit by the crisis according to the respective leverage ratios



Source: Bloomberg: McKinsey Financial Institutions Practice

<sup>\*</sup> Two of the banks were acquired and lost data.

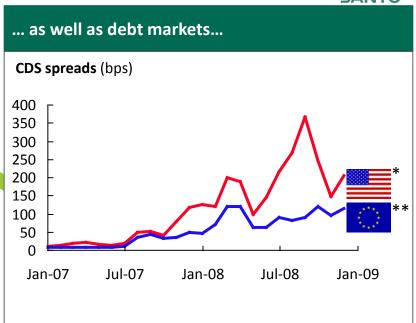
<sup>\*\*</sup> Top 5 Spanish banks and Top 5 Portuguese banks

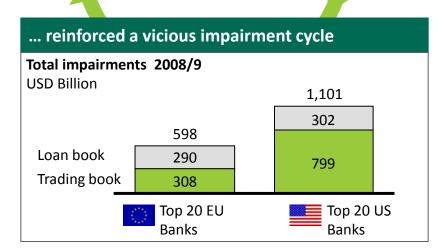
<sup>\*\*\*</sup> US synthetic tradable index referencing a basket of 20 subprime mortgage-backed securities

# Equity and debt markets reaction reinforced a vicious cycle that fuelled a "domino" effect









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<sup>\*</sup> US banks sector CDS index 5Y

<sup>\*\*</sup> iTraxx Europe Financials Senior 5Y Source: Bloomberg; Bank reports

### As a response to the crisis, governments took decisive measures



	Troubled Asset Relief Program (TARP)		EU program	
Main actions	a	<b>Total</b> I <b>mount</b> Sbn	Measures	<b>Total</b> <b>amount</b> €bn
Guarantee/ acquire debt	<ul> <li>Guarantee new senior unsecured debt issued by banks with up to 3 years of maturity</li> <li>Acquire high-quality 3-month commercial papers issued by businesses</li> <li>Guarantee money market mutual funds</li> </ul>	4,534	Guarantee newly issued debt of banks (e.g., France guarantees interbank loans of up to 5-year maturity and Germany guarantees interbank loans of up to 3-year maturity)	2,738
Recapitalize banks	Acquire nonvoting common or preferred shares in publicly traded banks or senior debt in non-publicly traded banks	664	Acquire stake in banks directly and through state-owned companies	231
Guarantee deposits	<ul> <li>Raise deposit insurance coverage to \$250,000</li> <li>Offer unlimited cover of non-interest-bearing accounts</li> </ul>	N/A*	<ul> <li>Raise minimum coverage to €100,000 per depositor (in 2008)</li> </ul>	N/A*
Purchase troubled assets	Acquire troubled assets from banks	332	Acquire troubled assets from banks	588**
Other initiatives	<ul> <li>Try to mitigate mortgage foreclosures</li> <li>Restrict executive compensation</li> <li>Try to recoup any losses incurred from the program within 5 years</li> </ul>	N/A*	Restrict executive compensation     Similar measures were taken in Portuge	N/A*

<sup>\*</sup> Not applicable

<sup>\*\*</sup> Includes all individual ad hoc measures not executed through direct intervention

# In addition to direct intervention, regulatory bodies developed specific proposals to address key crisis drivers



### Prevent incentives for off-balance sheet securitizations

- Shortcomings in the Basel capital framework were removed
- Accounting practices for offbalance sheet exposure improved (relationship with the Special purpose vehicle more transparent)
- Material improvement on disclosure of on and off balance sheet risk exposures

#### Regulation of non-bank entities

- New principles defined to oversee hedge funds
- Clear best practices for asset managers due diligence when investing in structured finance products
- Oversight over rating agencies

#### Increase control on trading books

- Higher capital requirements against risk in bank's trading activities
- New principles to counteract risks of abusive short-selling

#### Improve overall risk management

- New risk management standards
  - Governance
  - Liquidity risk
  - Compensation risk
  - Stress testing
- Introduction of central counterparts to credit default swaps

## Increase coordination between authorities

- Establishment of supervisor/colleges for all the large complex financial groups
- Contingency planning meetings among relevant authorities on major cross-border banks

#### **Review Executive compensation**

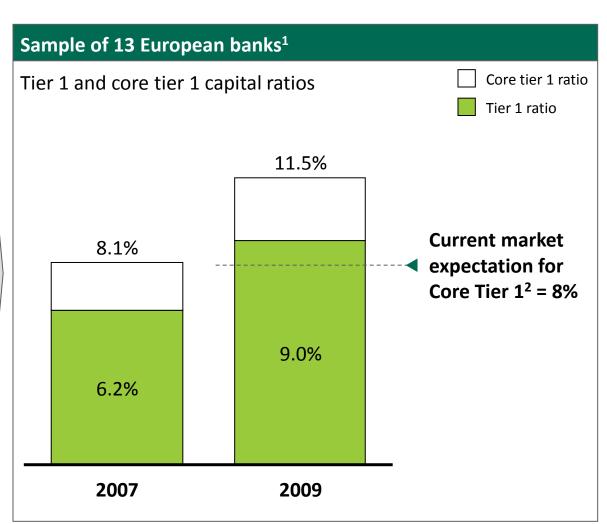
FSB (Financial Stability Board)
 principles on compensation
 practices integrated into the Basel
 capital framework

# Most banks have already raised their capital and are now above regulatory requirements



# Since January 2008, European banks have raised their capital base

- 178 billion euros from private sources
- 210 billion euros from governments and sovereign funds

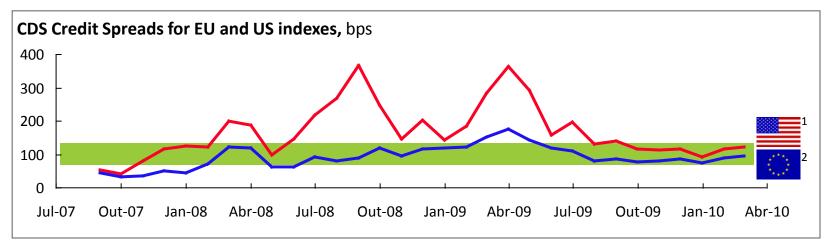


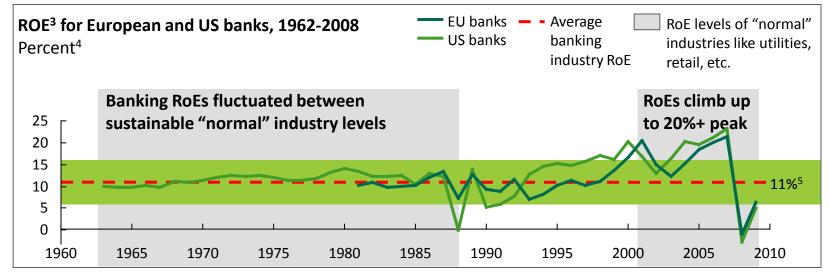
<sup>1</sup> Includes Credit Suisse, UBS, Deutsche Bank, Barclays, BNP Paribas, HSBC, Standard Chartered, Santander, Unicredit, BBVA, Societé Generele, RBS and Intesa SanPaolo

<sup>2</sup> Core tier 1, which is permanent, absorbs losses, and gives issuer freedom on dividend payment; must form at least 50% of tier 1

# CDS and banking returns are back in line with historical levels, following period of abnormal gains







<sup>1</sup> US banks sector CDS index 5Y

<sup>2</sup> iTraxx Europe Financials Senior 5Y

<sup>3</sup> Operating RoE, i.e. net income as percentage of equity excluding net goodwill

<sup>4</sup> Based on consolidated financials and valuation over time of 113 EU banks, of which 107 active, 957 US banks, of which 346 active

<sup>5</sup> Average historical cost of equity for developed market banks calculated using a market risk premium of 5%, the end of year risk free 10 year Eurozone government swap rate, and beta based on the 3 years average beta of the European banking index Source: Compustat; Datastream; Bloomberg; McKinsey & Company Financials Institutions Practice

### New wave of regulation will impact multiple dimensions



Detailed in the following pages

	Increased capital quality			
Capital	Deductions			
require- ments	Higher weighting of assets			
	Higher target ratios			
Introduction of leverage ratio				
Mitigation of pro-cyclicality				
Stricter liquidity management				
More transparent accounting				
Too big to fail				
Supervisory bodies				
Consumer protection				

### All elements of the capital framework will change according to "Basel III" consultation documents



_	Major changes	Most affected areas
Capital	<ul> <li>Common equity to form predominant part of Tier 1</li> <li>Remainder of Tier 1 with restricted inclusion rules</li> </ul>	<ul><li>Hybrid capital</li><li>Potentially silent participations</li></ul>
Deductions	<ul> <li>E.g., deductions for minorities, deferred tax assets, pension funds, unrealized losses</li> <li>Substantial deductions proposed</li> </ul>	<ul> <li>Minority interests</li> <li>Investments in insurance companies (and other financial institutions)</li> <li>Pension funds</li> <li>Deferred tax assets, unrealized losses, etc.</li> </ul>
RWA	<ul> <li>Trading book RWA to increase x 2 - x 3.5</li> <li>Increase of correlation of exposures to financial firms to 25-30% leading to a ~5% increase in financial institutions RWA</li> </ul>	<ul> <li>Re-securitizations, correlation book</li> <li>Exposures to financial institutions</li> <li>OTC derivatives</li> </ul>
(Core) Tier 1 ratio	<ul> <li>All above measures will cause reduction in Tier 1 ratio</li> <li>At the same time, higher target (Core) Tier 1 ratio expected</li> </ul>	<ul> <li>Uncertainty remains but a minimum of 8% core tier 1 ratio is emerging as a target</li> </ul>

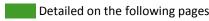
\* From 6.5% 2006/07 average before changes in the framework Source: BCBS

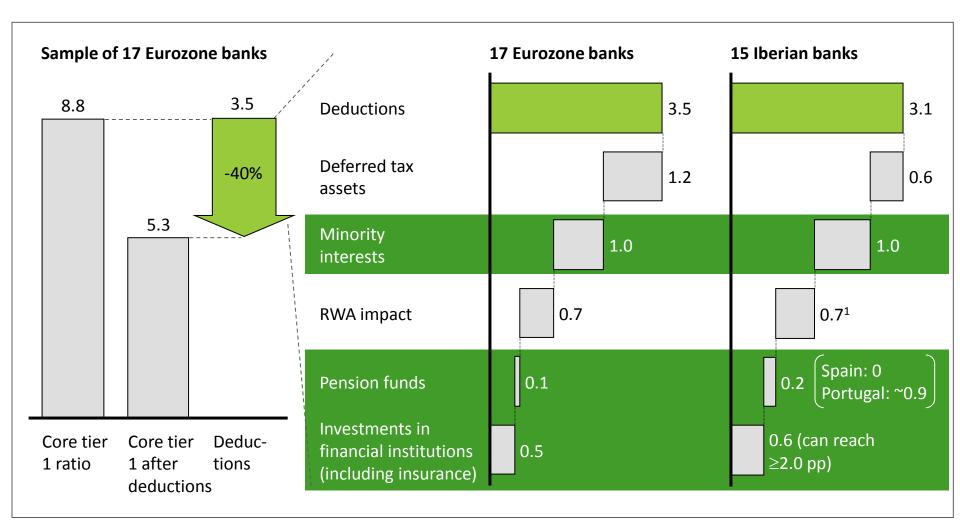
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### New regulation will hinder banks' current strong capital position

2009

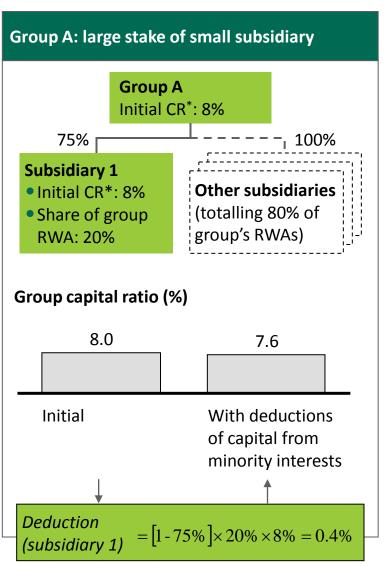


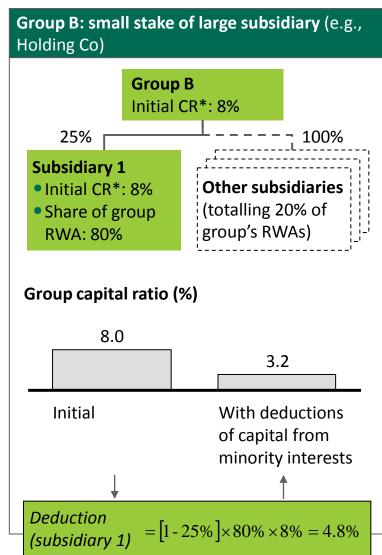




# The approach to deduct capital from minority interests may favour the riskier situations it tries to prevent





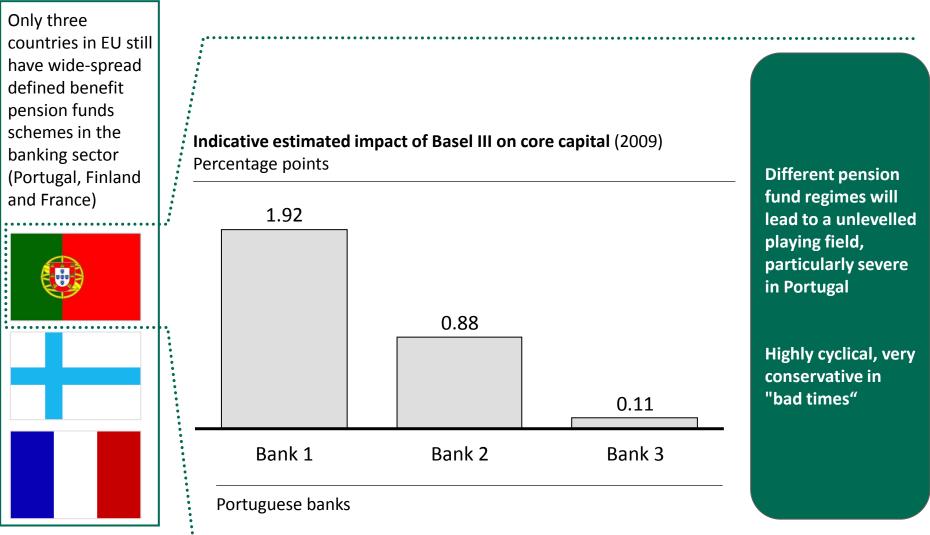


Under new proposals minority interests will not be eligible for Tier 1 because they can only support risk in the subsidiary

However, in the example group B is more penalized despite common equity being more available to support risks (group distress)

# Defined benefit pension fund in Portugal, among the only 3 EU countries with such a program, will severely affect capital requirements





# The strategically sound bancassurance model will be penalized with proposed regulation



Regulatory proposals will decrease attractiveness of investments in insurance companies ...

#### Basel III

#### Description

Capital deductions (Basel III)

 Equity discounts for non-consolidated equity investments to be fully deducted from core tier 1 (vs. 50% tier 1 and 50% tier 2 in Basel II)

**Exposure** limited

- Insurance investments will be limited for holding companies
- Excess investments will increase holding capital requirements (50% tier 1 and 50% tier 2)

Solvency II – Increased capital requirements

- More volatile capital with dynamic market-based approach
- More differentiated requirements, affecting specially traditional life and "long tail" P&C¹ business²
- Strong penalties for investments in equity and corporate bonds (45% and 3% respectively)

... despite clear strategic and risk benefits of bancassurance model

#### **Advantages of bancassurance**

Noncorrelated risks  Anti-cyclical stabilization factor, since banking and insurance risks are largely uncorrelated

Complementary Balance Sheets

 Complementary business cycles improves maturity-match, as insurance liabilities are of long duration (specially in Life), whereas banks have short-term liabilities

Increased customer loyalty

 Increased loyalty of bank's customers that hold insurance policies contributes to deposit stabilization and better risk management (increased customer information)

<sup>1</sup> Property & Casualty

<sup>2</sup> E.g., increase in SCR (Solvency Capital Requirements) for Fire&Property of +200% and +70% for Motor

<sup>3</sup> Solvency Capital Requirements

### Large capital needs foreseen, specially for commercial banks, up to 400

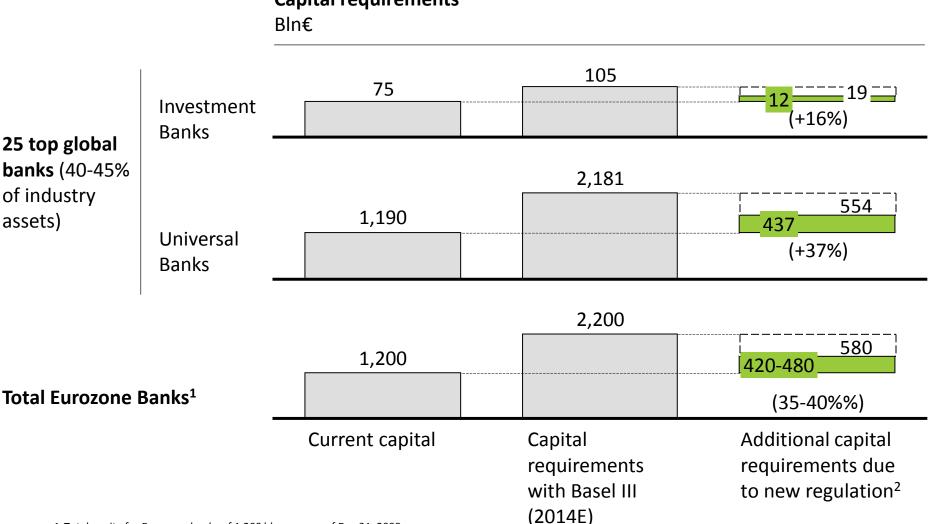
bln€ for Eurozone banks

Retained earnings (2014E)

) Percent of current capital base



### **Capital requirements**



<sup>1</sup> Total equity for Eurozone banks of 1,200 bln euros as of Dec 31, 2008

Note: Considering the higher flexibility of investment banks to "off-load" assets from balance sheet vis-à-vis universal banks (mainly credit)

Source: JPMorgan; ECB; McKinsey & Company Financial Institutions Practice

<sup>2</sup> After accounting for expected retained earnings and needs of capital to fund growth

# Excessive discrimination among EU states in access to liquidity further impacting cost of debt, constraining the real economy



New liquidity ratios imply more stringent control over short and medium-term outlook<sup>1</sup>

#### 30-day liquidity coverage ratio

Stock of high quality liquid assets

≥100%

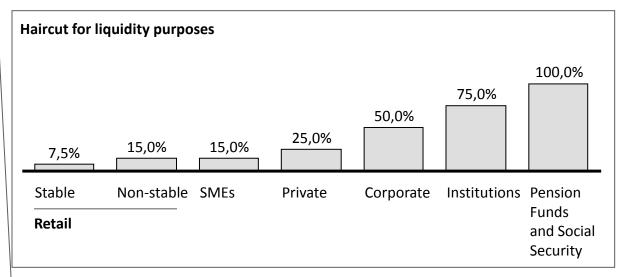
Net cash outflow over a 30-day period

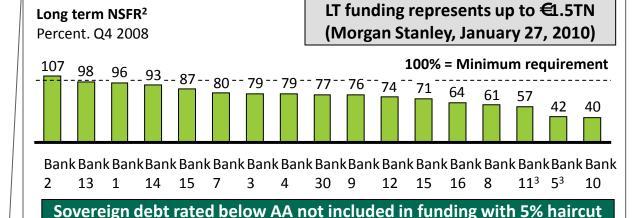
Longer-term net stable funding ratio (NSFR)

Available amount of stable funding

> 100%

Required amount of stable funding





(significant increase in haircut, 4x to 10x)

<sup>1</sup> Implementation only after consultation period – substantial changes possible

<sup>2</sup> Net Stable Funding Ratio (NSFR): (available amount of stable funding)/(required amount of stable funding) >100%

<sup>3</sup> Based on 2008 data, conservative assumptions in case of bad data quality

Note: Key input factors for 30-day coverage ratio: liquid positions (cash, government bonds, etc.); B/S stress test (worse if significant size trading book)

Source: McKinsey, Morgan Stanley; BCBS December 2009; Analyst reports

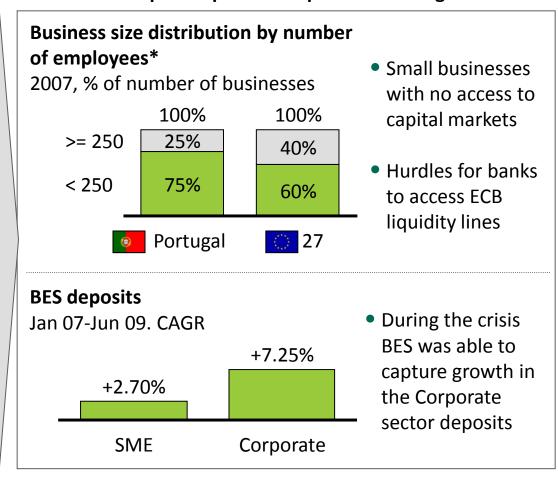
# In all, liquidity regulation is not adapted nor to current economic challenges, nor to recent market evidence



Liquidity rules might induce a fundamental shift in banking business...

- Run-off rates are very demanding for Corporate and Institutional deposits
  - 15% for unsecured funding by SME
  - 25% for unsecured funding by Sovereign, Central Banks and Public Sector
  - 75% for unsecured funding by Corporate
- Link between lending and deposits will result in a fundamental shift in banking business forcing a reduction on exposure to Corporate businesses

... which will impact markets with a concentration of small businesses in spite of positive experience during crisis



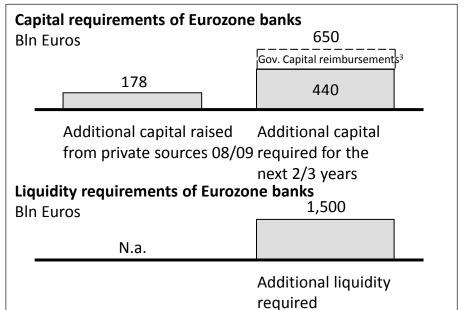
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<sup>\*</sup> Classes defined in terms of the number of employees Source: INE; EIM on the basis of Eurostat

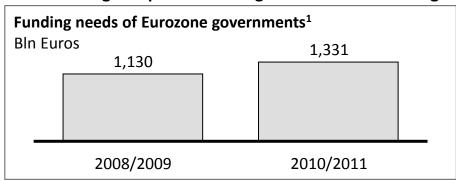
### Unavailability of funds will force banks to reduce their loan books, with negative impact on the economy



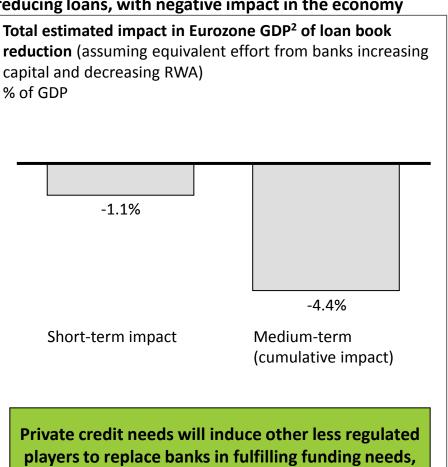
#### Banks will be challenged to meet Basel III requirements...



#### ...while facing competition from governments in funding...



... instilling significant changes to balance sheets, namely reducing loans, with negative impact in the economy



promoting a "shadow banking system"

<sup>1</sup> Net actual and expected increase in nominal public debt 2007-2011 (EIU viewswire)

<sup>2</sup> Assumes banks only raise 50% of the required amount of capital, which implies a ~13% simultaneous reduction in RWA; impact on GDP based on ECB elasticity estimates (10% decrease in loans implies a short-term GDP reduction of ~0.8% and long-term correlative GDP reduction of 3.25%)

<sup>3</sup> Government capital injected in banks in 2008 and 2009

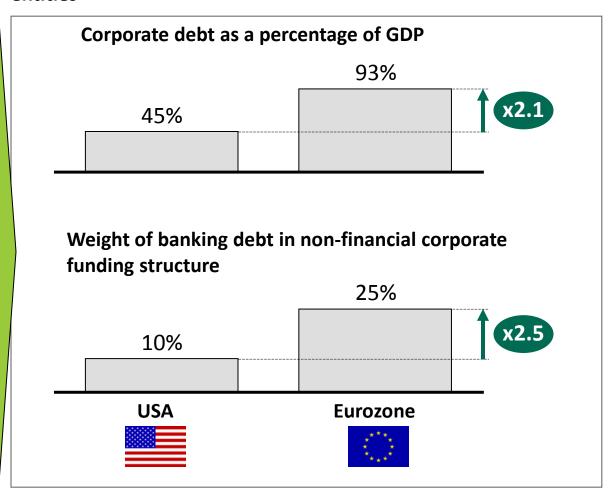
### New regulation will impact US and Europe asymmetrically



## New regulation with limited impact in US...

- Supervision is still in political discussion with intervention of different areas and experts
- Implementation of Basel II more advanced in Europe than in the US (only "core banks" in Basel II)
- Based III not expected in the short-term in the US considering the actual roll-out status of Basel II
- US economy much less dependent on banking credit given liquidity of capital markets

... reflecting different leverage and funding structure of corporate entities



#### In summary...



- Burst of real estate bubble in US and selected European markets caught off-guard a set of highly leveraged near-banking institutions and investment & wholesale banks. Decisive action by governments, regulators and banks was effective in containing the contagion on the financial sector
- New regulatory wave with profound impact on industry profitability through stringent capital,
   leverage, liquidity requirements, stricter scrutiny of risk management practices and compensation
- Effects on the economy will be stronger in Europe where
  - (i) commercial banks are much more relevant to fulfil Corporate funding needs and
  - (ii) competition, between US and EU, is further distorted as US Banks have access to a larger base of investors through hybrid capital as Tier 1 prevails in the US vs. Core Tier 1 in Europe. Therefore, it is important to establish regulatory changes simultaneously in the US and EU.
- In particular, Southern European economies will be more penalized given a more fragmented business fabric (with a smaller average turnover) that has fewer financing alternatives
- Economic funding needs will, given capital scarcity from banks, be fulfilled in the market by less regulated entities/markets further jeopardizing objectives
- Paradoxically, Basel Committee new proposals will induce a severe credit and capital scarcity, strongly impacting an already fragile economy further contributing to economic recession and unemployment