

L'impatto di Basilea 3 sulle politiche creditizie e di pricing

Programma

- Principali sfide per le piccole e medie banche
- Alcuni casi concreti
- Conclusioni

Moody's Analytics

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Leading global provider of credit rating opinions, insight, and tools for credit risk measurement and management

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Independent provider of credit rating opinions and related information for nearly 100 years

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Una storia che inizia dai migliori operatori di settore

1914

2002

2005

2006

2008

2010

2011

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**Credit
Research**

**Quantitative
Credit Analysis**

**Economic
Analysis**

**Structured Debt
Instruments**

**Risk Management
Software**

**Financial
Education**

**Knowledge
Process
Outsourcing**

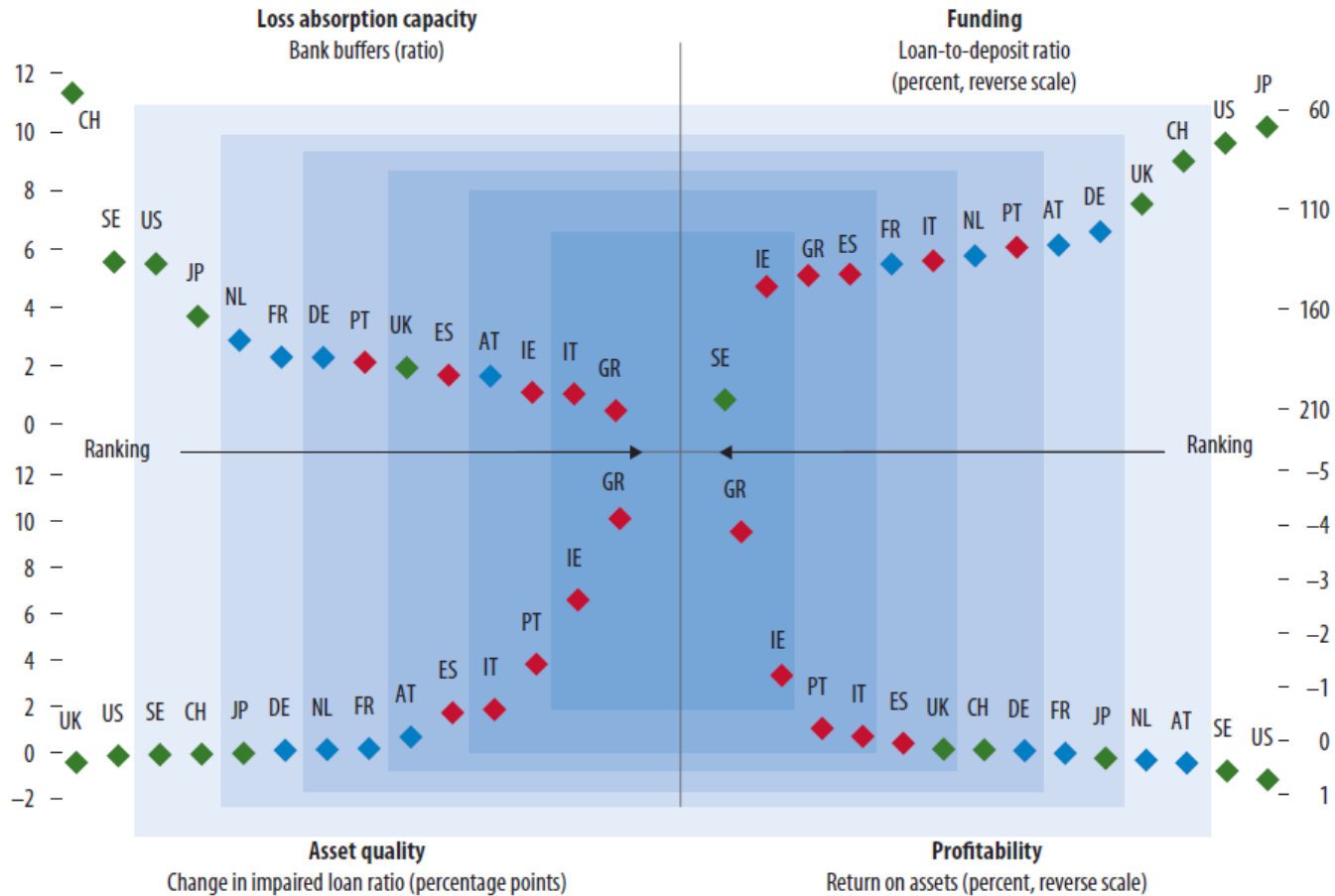
**Insurance
Information**

Principali sfide per le piccole e medie banche

- Scenario Competitivo: come crescere in un mercato caratterizzato da *deleveraging*
- Le sfide legate al capitale
- Come fare buon uso (gestionale) dei sistemi di rating
- Come selezionare clienti a basso rischio ed alta potenzialità
- Come rendere efficaci le politiche di credito e di *pricing*
- Soluzioni «*low cost – high effectiveness*»

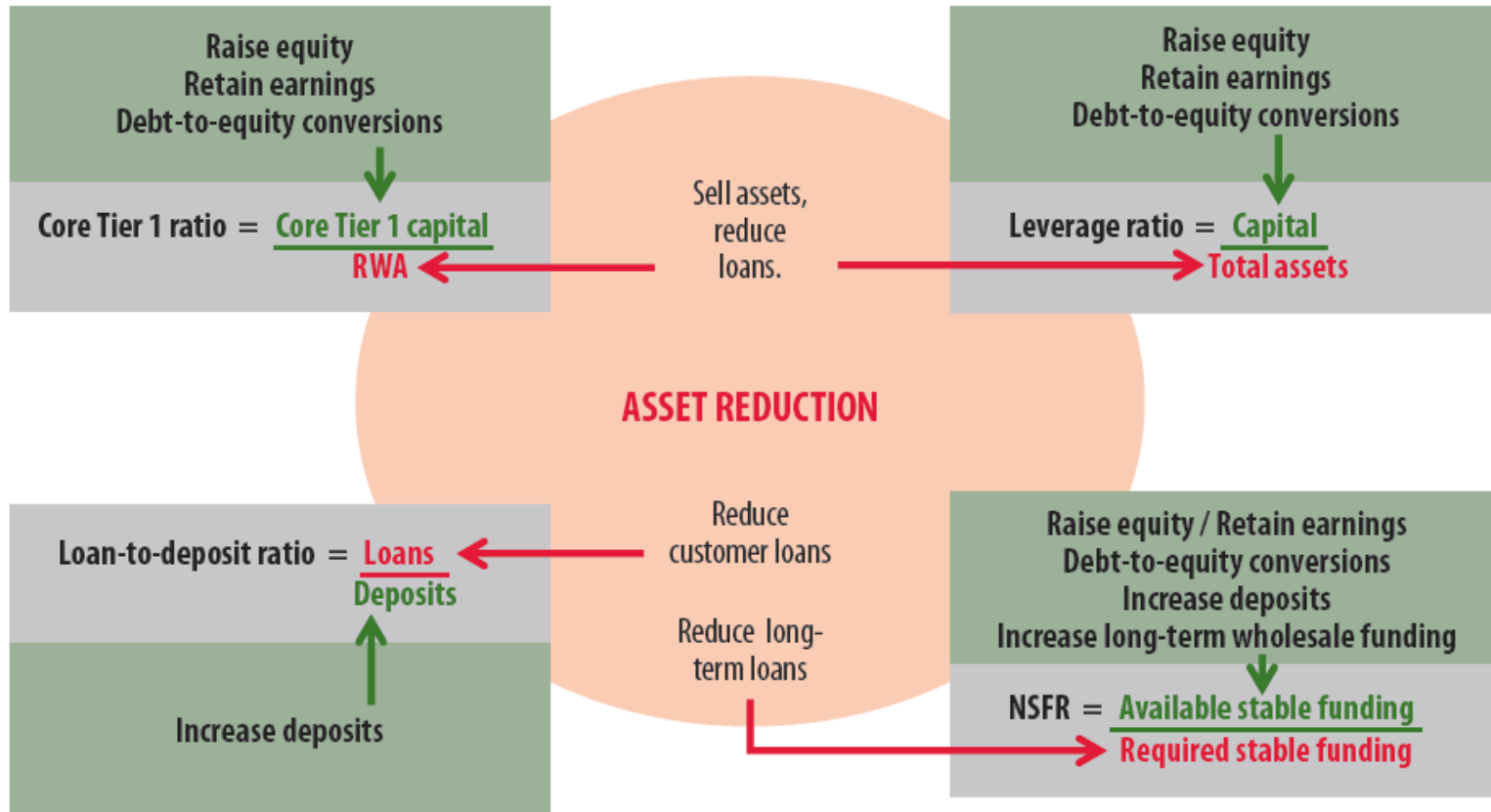
Scenario competitivo

Figure 1.34. Ranking of Banking Systems Based on Banks' Balance Sheet Indicators, 2012:Q3



Sources: Bloomberg L.P.; SNL Financial; and IMF staff estimates.

Come migliorare *capital and liquidity ratios*?



... **DELEVERAGING** : 1.7% – 4.4%

Source: IMF.

Note: NSFR = net stable funding ratio.

IMF, Global Stability Report, April 2012

Business plans delle banche europee

Banche Europee che hanno dichiarato di cambiare la loro strategia di business

Identified for reduction
 Major reduction
 Some reduction
 Maintain presence

Country and bank	Banking Activities			Assets					Global Reach				
	Investment	Corporate ¹	Retail	Bank subsidiaries or branches	Insurance	Asset management	Securities companies	Shadow banks ²	Eastern Europe ³	Asia	Latin America	European Union	North America
Austria													
Erste													
Raiffeisen													
Belgium													
Dexia ⁴													
KBC Bank ⁴													
Germany													
DB													
Commerzbank ⁴													
HSH Nordbank ⁴													
Ldb BW ⁴													
WestLB ⁴													
France													
BNP Paribas													
BPCE													
Crédit Agricole													
Société Générale													
Italy													
UniCredit													
Banco Popolare													
Ireland													
Allied Irish ⁴													
Bank of Ireland ⁴													
Netherlands													
ING													
SNS													
United Kingdom													
RBS ⁴													
HSBC													
Lloyds ⁴													
Spain													
Banco Santander													

Source: Company websites; and IMF staff estimates.

¹Includes interbank lending and commercial real estate loans; and working capital, project, and specialized finance, including leasing, equipment, trade, and commodities finance.

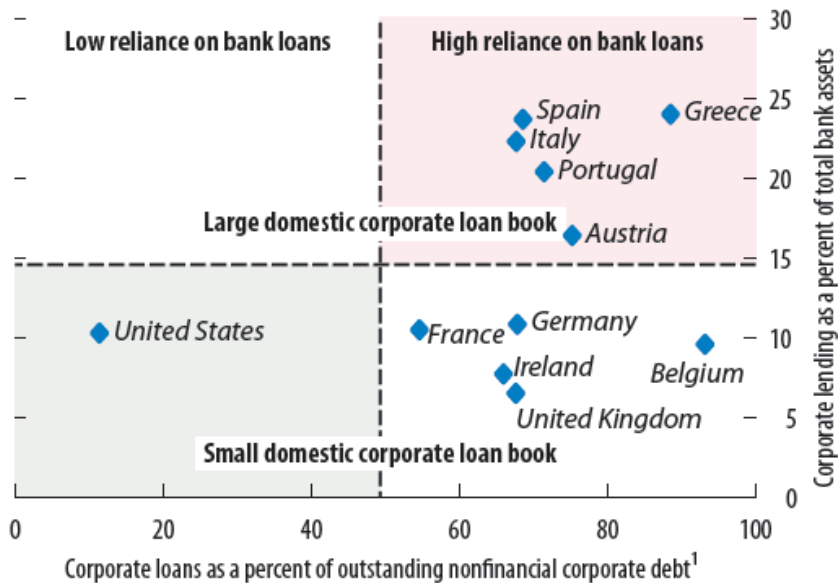
²Includes companies that specialize in car, aircraft, shipping, leasing, project, and structured finance; investment banks; and municipal bond agencies.

³All EU and non-EU countries in eastern Europe, including Poland, Russia, and Turkey.

⁴Has received government financial support.

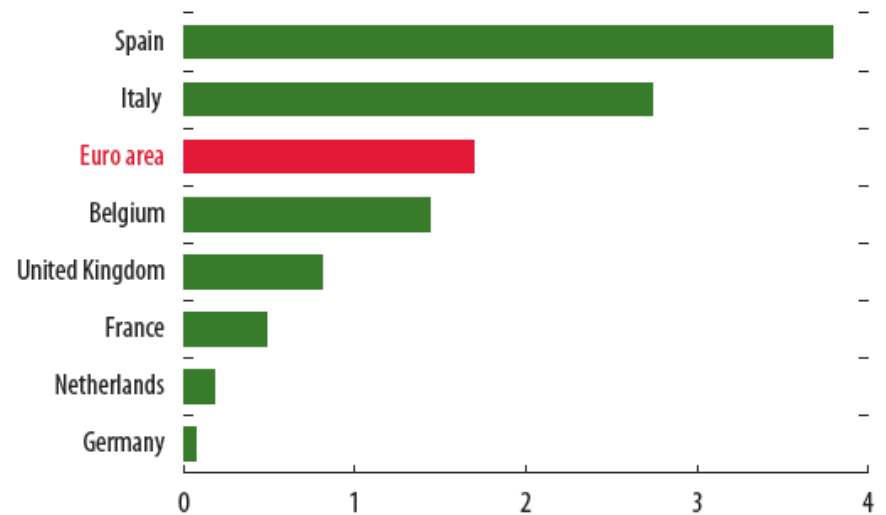
Come migliorare capital e liquidity ratios?

Reliance on Bank Financing by Nonfinancial Corporations (In percent)



Sources: European Central Bank; Eurostat; Federal Reserve; Haver analytics; and IMF staff estimates.

Reduction in Supply of Credit, by Banking System, Current Policies Scenario (In percent of total bank credit)

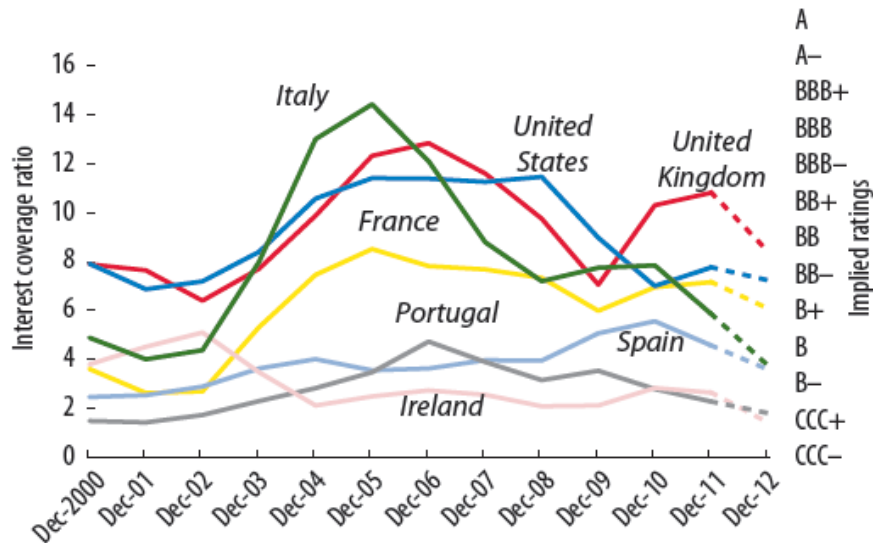


Source: IMF staff estimates.

Note: Data are an extrapolation of results from a sample of banks to the entire banking system. Total bank credit includes domestic and direct cross-border credit supplied by banks in each country.

IMF Credit Quality con modelli di Moody's Analytics

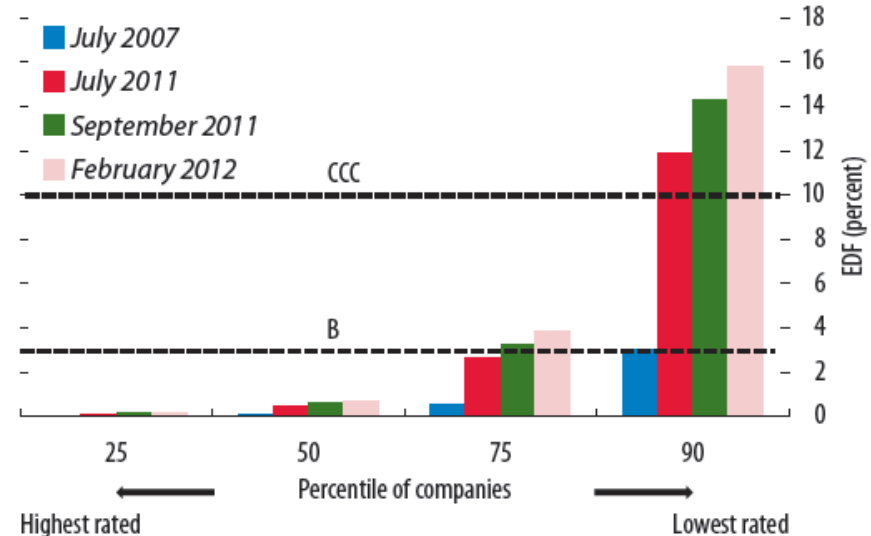
Nonfinancial Corporations: Interest Coverage Ratio and Implied Ratings (Ratio, left scale, in percent)



Sources: Bloomberg L.P.; and IMF staff estimates.

Note: Dashed lines are projections. Interest coverage ratio is earnings before interest and taxes divided by interest expense. The implied ratings are from a sample of more than 800 U.S. firms that constitute the benchmark high-grade and high-yield corporate bond indices.

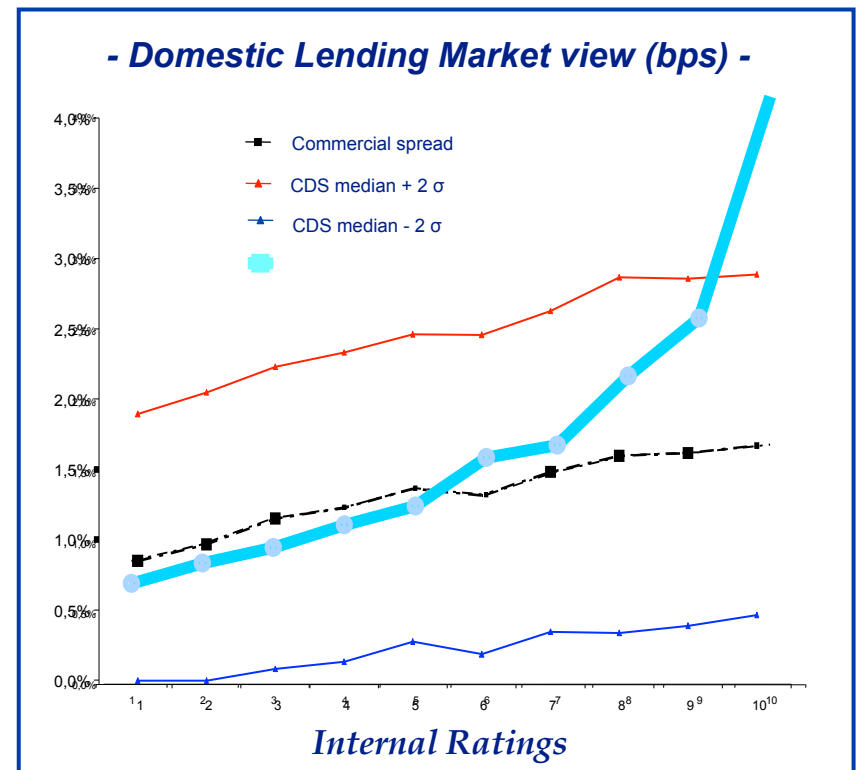
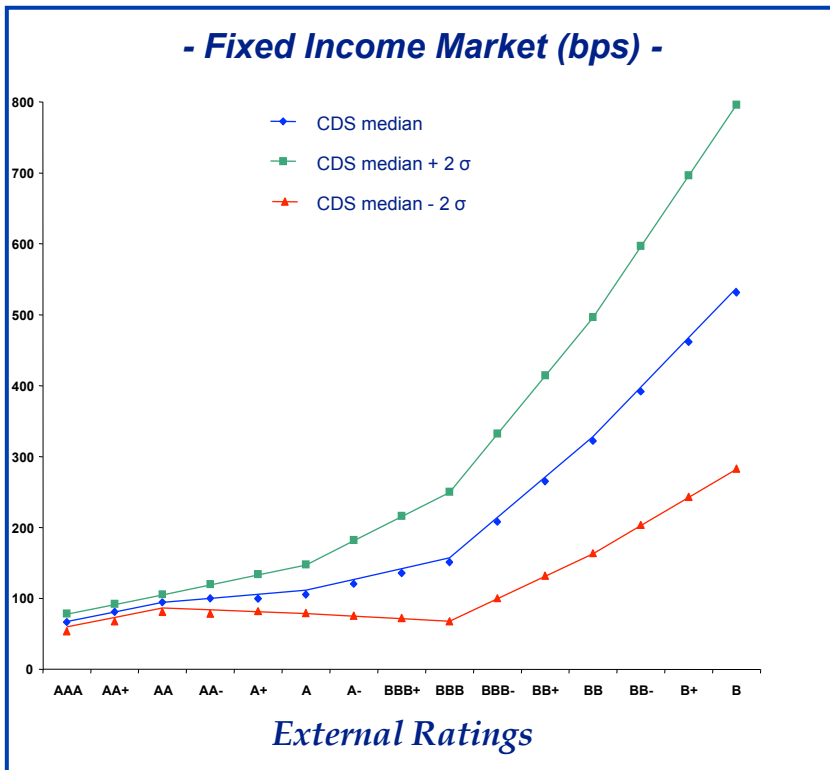
Corporate Credit Quality in Western Europe, 2007-12 (In percent)



Source: Moody's KMV.

Note: EDF = expected default frequency. EDF is a market-based credit measure that represents the probability that a firm will default within one year. The dotted lines show implied credit ratings associated with particular EDFs. Western Europe comprises the euro area, Denmark, Norway, Sweden, Switzerland, and the United Kingdom.

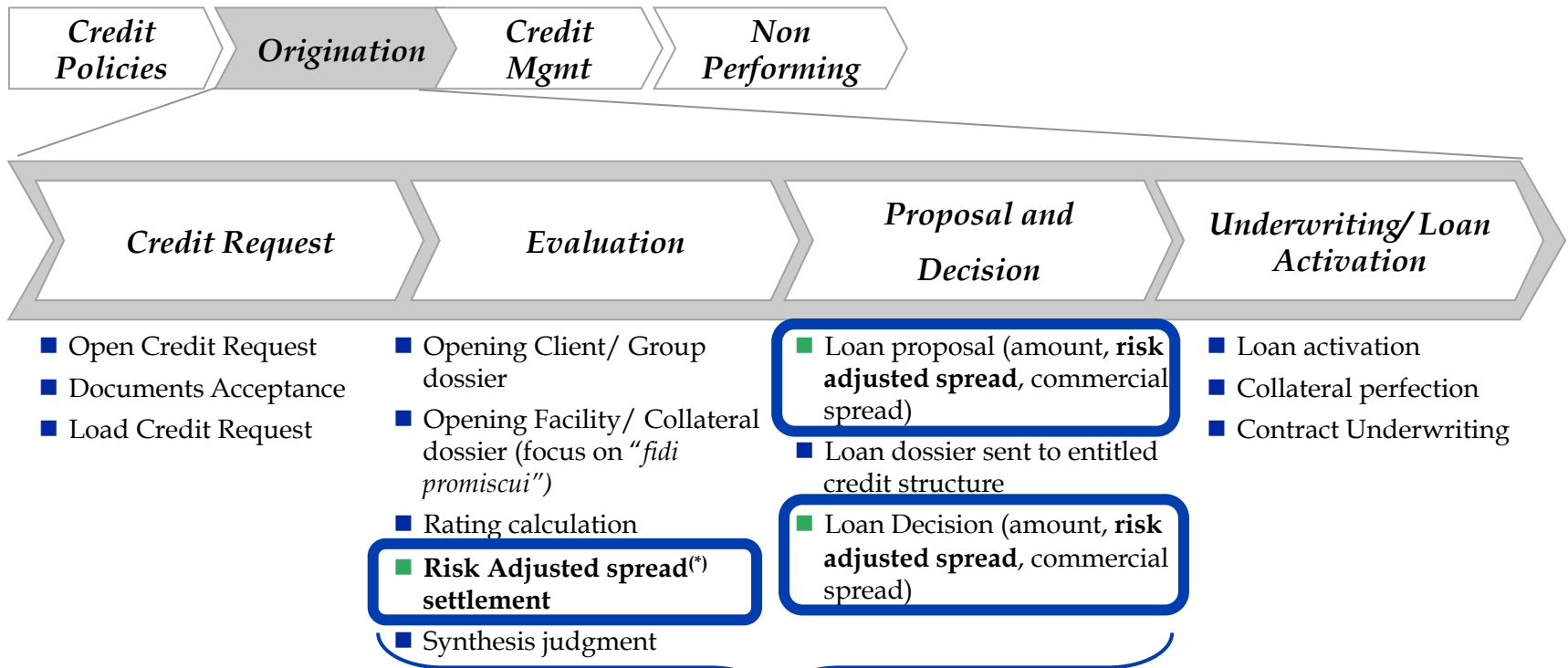
Importanza del pricing in origination



Pricing e Credit Process

Risk adjusted spread settlement will impact on Origination phase of the Credit Process; real time calculation makes RMs aware of the credit risk impact

- Impacts on Credit Process -



Impact on Relationship Manager MBO

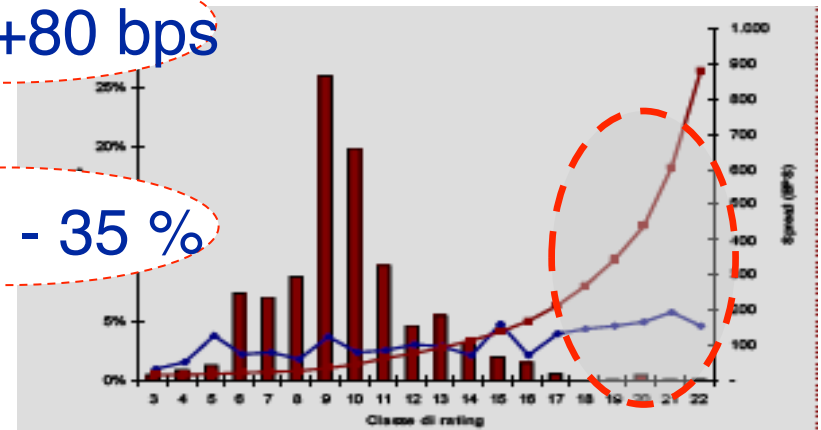
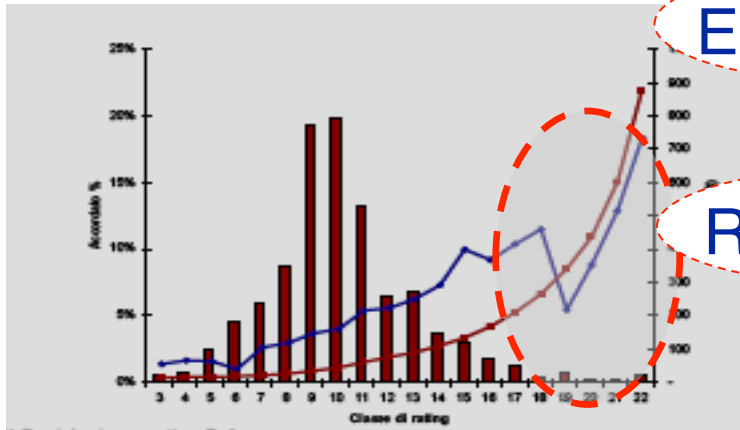
- As Is
- Pricing discipline

(*) Risk Adjusted Spread = insurance spread + cost of funding = Transfer spread

Pricing e new loan origination

Short term loans

M/L term loans



- **Positive correlation** between risk (rating classes) and return (interest margin on average volume) for clients with new short term loan **until class 19**
- **Positive margins** between commercial spread and risk adjusted spread, **on exception of high risk classes**

- **Spreads** are applied basically irrespective of counterparty risk for new mid to long-term issues
- The **commercial spread/ insurance spread differential** is **negative** above risk class 14

Case study 1

Chi → Banca media presente in alcune regioni italiane

Esigenza → Supporto nella valutazione del segmento SME in *origination* e relative scelte di *pricing*

Caratteristiche e benefici del progetto

- Utilizzo di un modello disponibile immediatamente
- Advisory nel fine-tuning delle proprie politiche creditizie
- Valorizzazione del patrimonio di conoscenza della banca
- Maggior velocità ed efficacia in *origination*
- Maggior coerenza tra visione del *risk management* e dell'area commerciale
- Ottimizzazione campagne nuovi clienti.

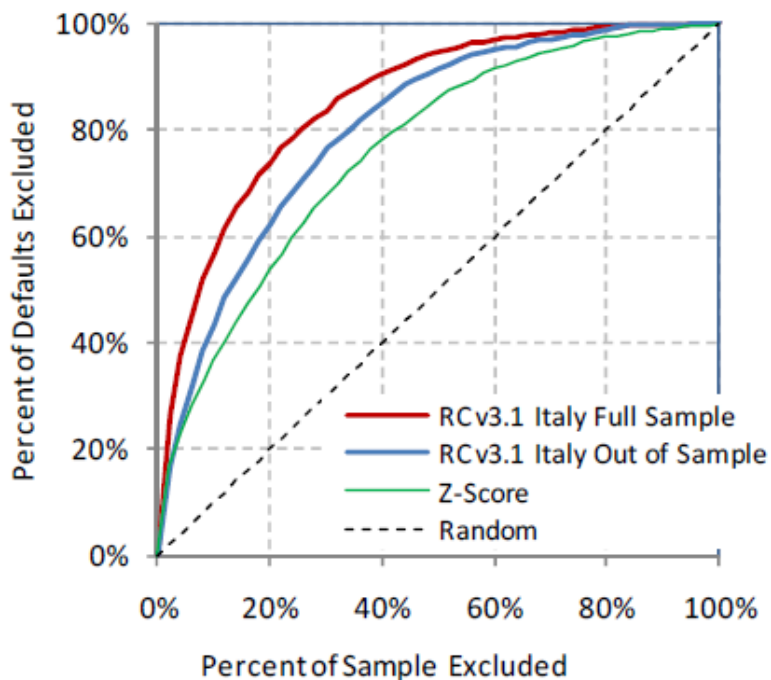
Componente Quantitativa: EDF

	A 1-anno	A 5-anni
Frequenza Attesa d'Inadempienza (EDF)	0.35%	2.09%
Rilevazione della percentuale di obbligazioni insolute	Baa2.edf	Baa2.edf
Percentile	22.53%	22.60%
Organizational Rating	4	D

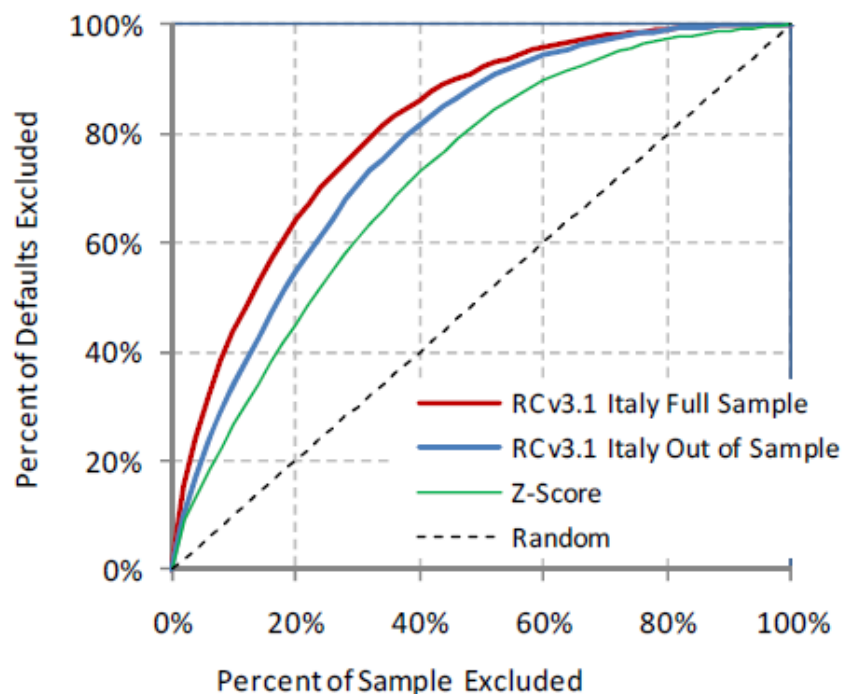
	A 1-anno	A 2-anni	A 3-anni	A 4-anni	A 5-anni
Totale	0.35%	0.76%	1.19%	1.63%	2.09%
Differita	0.35%	0.41%	0.43%	0.45%	0.46%
Annualizzata	0.35%	0.38%	0.40%	0.41%	0.42%

Performance del modello

1 Year Cumulative Accuracy Profile



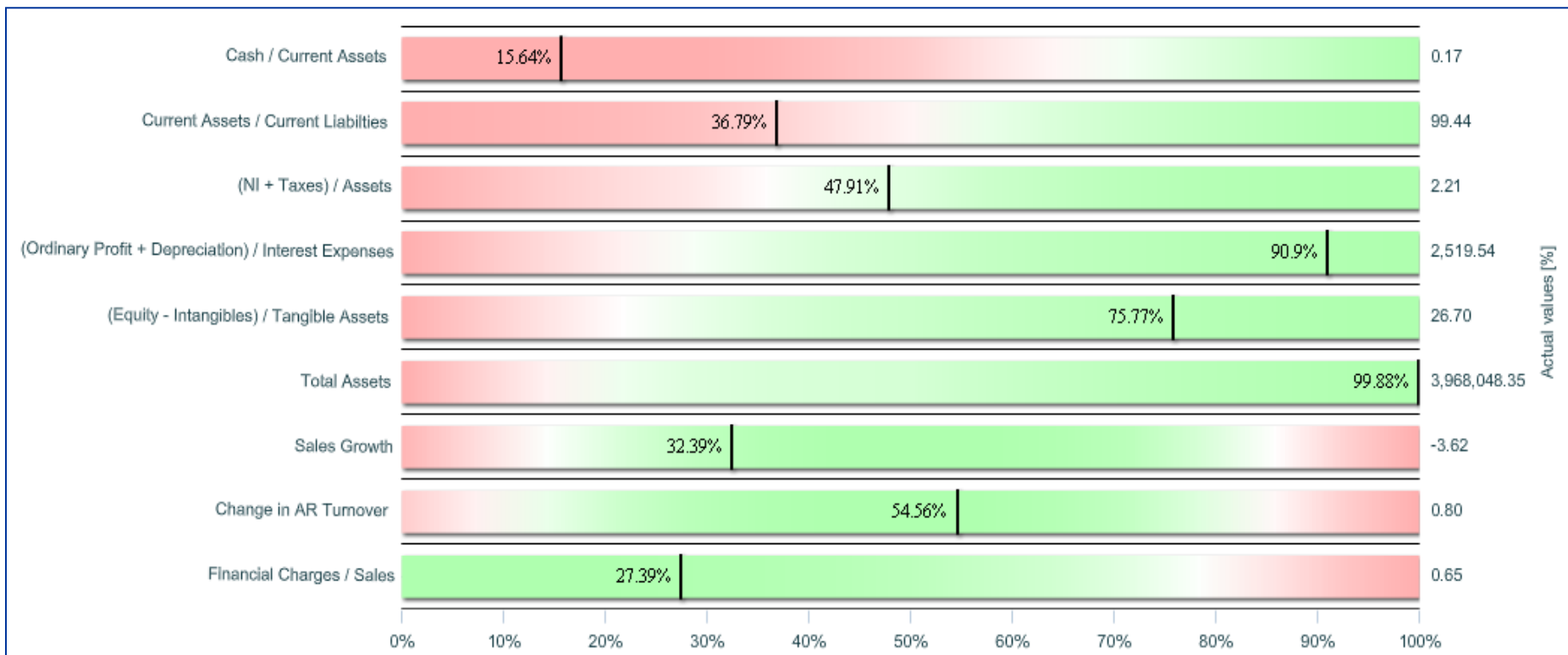
5 Year Cumulative Accuracy Profile



Accuracy Ratio	One-year Model		Five-year Model	
	Full Sample (1993–2008)	Out-of-sample (2003–2008)	Full Sample (1993–2008)	Out-of-sample (2003–2008)
RiskCalc v3.1 Model - FSO	73.19%	63.88%	61.83%	53.89%
Z-score	54.85%	44.89%	43.32%	39.78%

Grafico dei Percentili

Modello quantitativo



I colori dipendono dalla relazione esistente fra ogni indice e i tassi di default osservati:

- **ROSSO**: Alti tassi di default
- **GRIGIO**: Tassi di default medi
- **VERDE**: Bassi tassi di default




Componente Qualitativa

Question	Weight	Answer	Score		
Industry / Market	25		100		
Customer Power	40	Weak	100		
Diversification of Products	60	Few Products, Broad Market	100		
Company	25		98.1		
Year in Relationship	30	> 2 Year	66.7		
Supplier Power	30	Weak	100		
Conduct of Account	40	Good	110		
Management	25		100		
Year in Relationship	20	> 2 Year	66.7		
Supplier Power	15	Weak	100		
Conduct of Account	45	Good	110		
Conduct of Account	20	Good	110		
Balance Sheet Factors	25		100		
Audit Method	10	Unqualified	66.7		
Debtor Risk/Accounts Receivable Risk	70	Good spread/ Good quality	100		
Pro-forma Liquidity	10	Improving Credit Risk Significantly	110		
Pro-forma interest coverage	10	Improving Credit Risk Significantly	110		
▼ Final Score Summary					
	Score	Score(Standardized)	Moodys Rating	Organization Rating	
Quantitative					
EDF	0.70%	-0.32	Ba1	Ba1	
Qualitative					
Industry/Market	100.00				
Company	98.06				
Management	92.50				
Balance Sheet Factors	75.00				
Qualitative Score	89.77	-2.90	Aa3	Aa3	
	PD	Score(Standardized)	Moodys Rating	Organization Rating	Percentile
Combined Measure	0.25%	-1.48	Baa1	Baa1	6.98%

Personalizzazione della componente qualitativa

Qualitative Overlay

Qualitative Overlay 1 [Manage Overlays](#)

   [Tuning Parameters](#)

<input type="checkbox"/>	Category	Category Weight	Question	Weight
<input type="checkbox"/>	Industry/Market	25%		100%
<input type="checkbox"/>			Customer Power	68%
<input type="checkbox"/>			Diversification of Products	32%
<input type="checkbox"/>	Company	25%		100%
<input type="checkbox"/>			Years in Relationship	62%
<input type="checkbox"/>			Supplier Power	38%
<input type="checkbox"/>			Conduct of Account	
<input type="checkbox"/>	Management	25%		100%
<input type="checkbox"/>			Experience in Industry	43%
<input type="checkbox"/>			Financial Reporting and Formal Planning	25%
<input type="checkbox"/>			Risk Appetite	50%
<input type="checkbox"/>	Balance Sheet Factors	25%		
<input type="checkbox"/>			Audit Method	25%
<input type="checkbox"/>			Debtor Risk/Accounts Receivable Risk	24%
<input type="checkbox"/>			Pro-forma Liquidity	13%
<input type="checkbox"/>			Pro-forma interest coverage	32%

Come valutare le altre Banche?

Modello ad hoc per la valutazione di banche quotate e non quotate

Category	Ratio	Weight 1-yr	Weight 5-yr
Profitability	ROA	25%	17%
Asset Quality	Non-Performing Assets/(Equity +ALLL)	23%	9%
Asset Quality	Provision/Loans	6%	1%
Liquidity	Loans/Deposits	16%	24%
Leverage	Equity/Assets	15%	12%
Growth	Change in ROA	15%	9%
Portfolio Risk	Equity/Unexpected Loss (5-year Model Only)		19%

Case study 2

Chi → Banca medio-grande

Esigenza → Sviluppo di un modello interno per la valutazione SME e corporate, razionalizzazione strumenti in uso, efficacia nella realizzazione

Caratteristiche e benefici del progetto

- Sviluppo di “unico” modello di *origination* per tutta la banca
- Approccio *Risk Based Pricing*
- Valutazioni di stress testing
- Automatizzazione delle politiche e dei processi (unico *workflow*)
- Qualità e coerenza dati (unico DWH)

Supporto nello sviluppo di un modello interno

Model
Development



Model Rollout

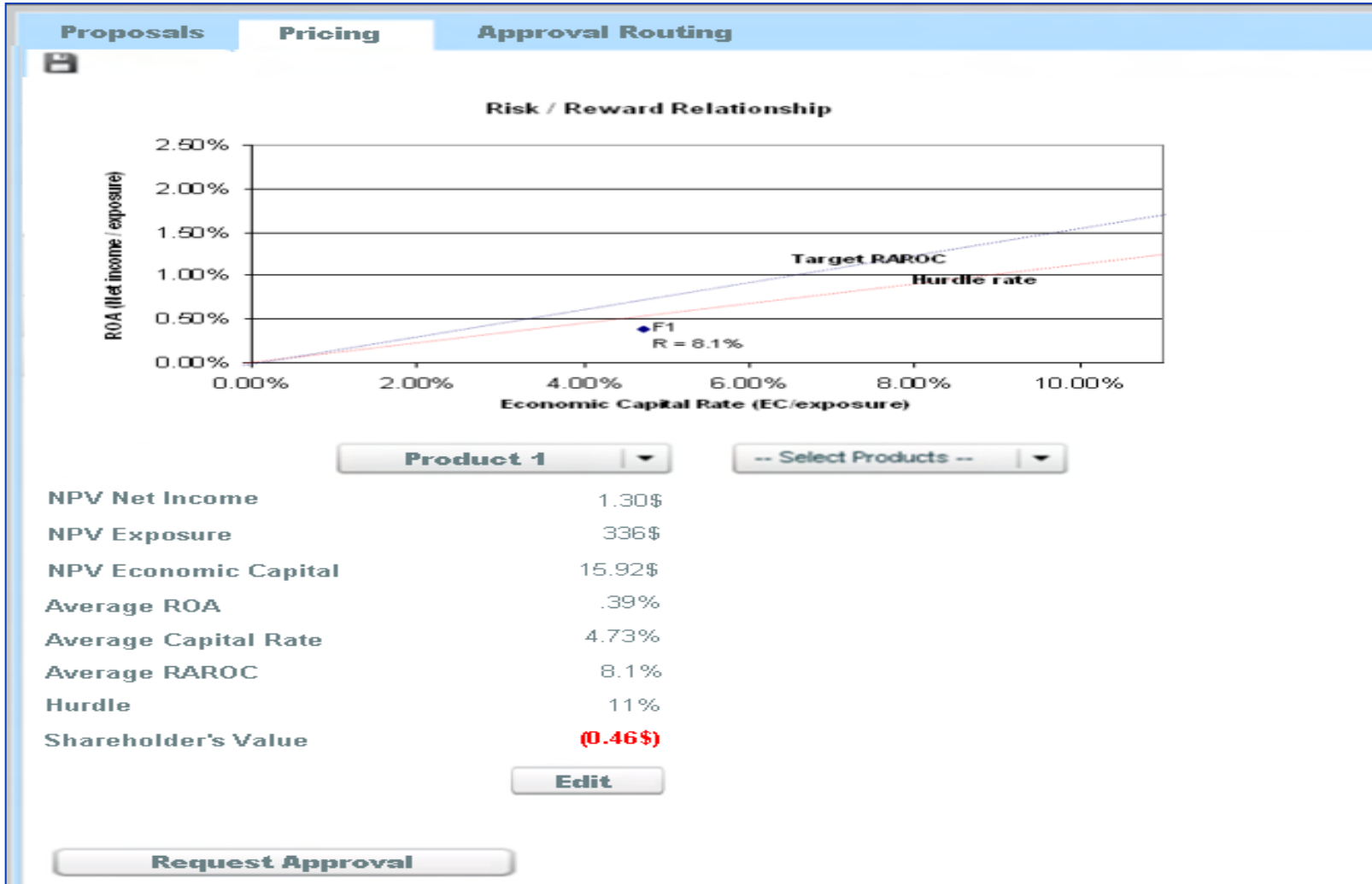


Model
Validation &
Calibration

- Aggregating & cleaning data
- Matching loan performance data to financial & expert risk drivers
- Determining appropriate risk drivers
- Determining accurate factor weightings
- Connecting external data feeds
- Standardizing collection and use of financial statement information & other risk drivers Writing model computation module
- Developing User Interface, reports, and data storage
- Roll out for testing and training
- Assessing population appropriateness
- Testing rank ordering ability and for statistical significance
- Determining appropriate mapping to risk grades or PDs

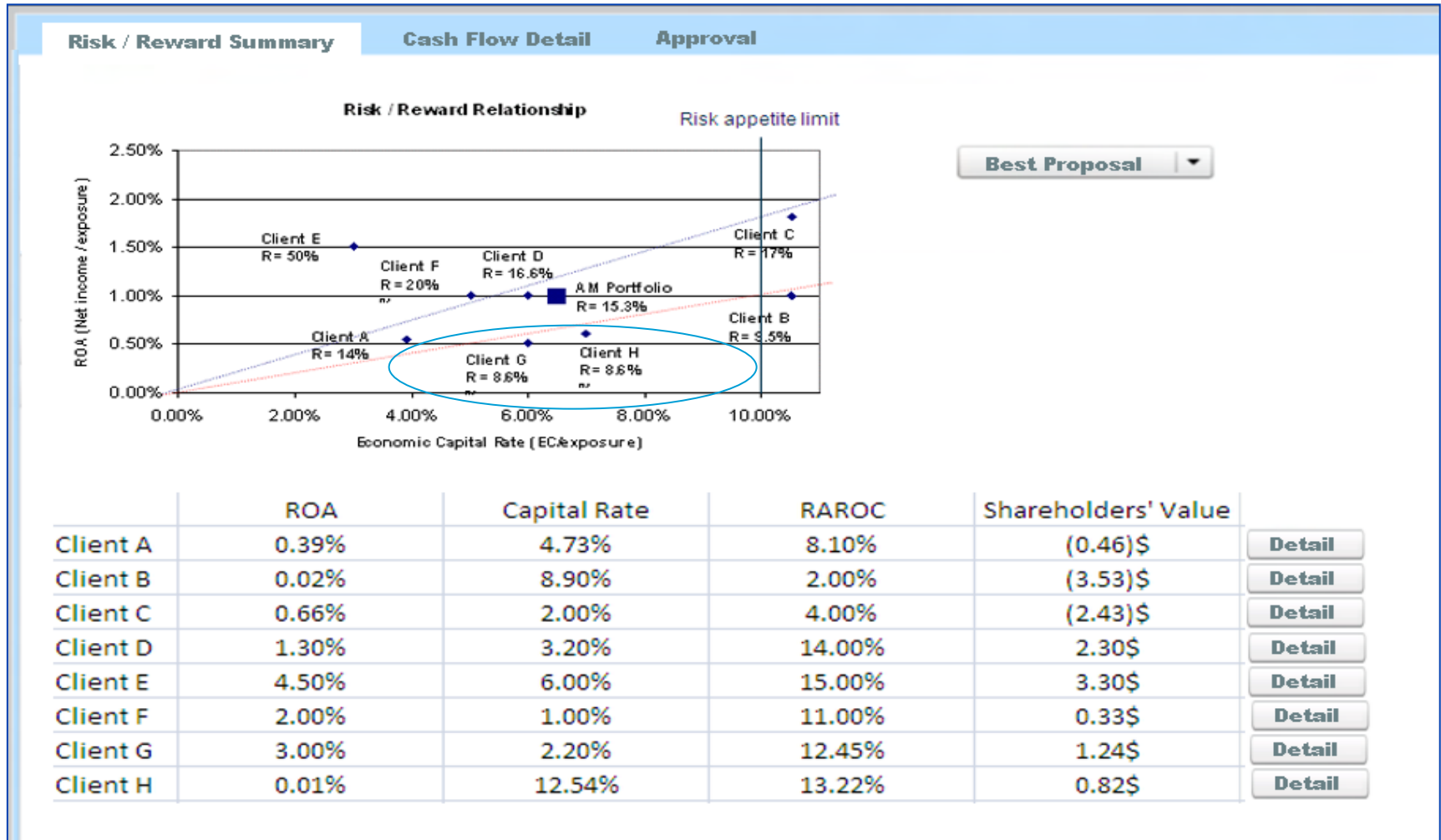
Risk Based Pricing

Per “prezzare” adeguatamente il singolo finanziamento



Risk Based Pricing

Per una visione strategica del portafoglio



Stress Testing

Per prevedere cosa potrebbe accadere al portafoglio

SAE Home - Scenario list
Scenario Definition

List of Scenarios

Manage Portfolio
Manage Template

Scenario Name ▲	Description	Portfolio	Template	Snapshot Date	Status	Action
1. Optimistic - GDP Growth	GDP is expected to start grow	Hughs US portfolio		2011_Audited (Final)_02/25/:	Available	
2. Baseline - Status Quo	Economic follows the 2010 tren	portfolio in US	Quantitative Assessments	2011_Mixed_01/24/2011 17:	Computed	
3. Double Dip	The correction actions are no	North America	Quantitative Assessments	2011_Audited (Final)_02/25/:	Available	

Scenario Properties:
Created By: HUGH **Date of Creation:** 01/25/2011 07:21:30 **Last Modified By:** **Date of Last Modification:** 03/01/2011 11:57:58

Scenario Summary

Baseline Counterparties	123
Affected Counterparties	123

Primary M	Baseline	New Value	Change (%)
Average PC	0.07	0.05	-25.30
LGD	0.00		
EAD	0.00		
A R Days	49.44	36.00	-27.19
A P Days	124.46	35.00	-71.88

Baseline

Scenario Rating

Conclusioni

- Cambia il mercato, per crescere bisogna sapersi adeguare
- E' importante avere soluzioni veloci ed efficaci, che valorizzino l'esperienza della banca sul mercato
- E' determinante la capacità di realizzare e automatizzare le politiche e il *pricing*

Contatti

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