

Un approccio integrato e coerente oltre la compliance

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ABI Associazione
Bancaria
Italiana

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MOODY'S

Leader mondiale di rating creditizi, ricerca fondamentale e strumenti per misurare e monitorare il rischio

MOODY'S INVESTORS SERVICE

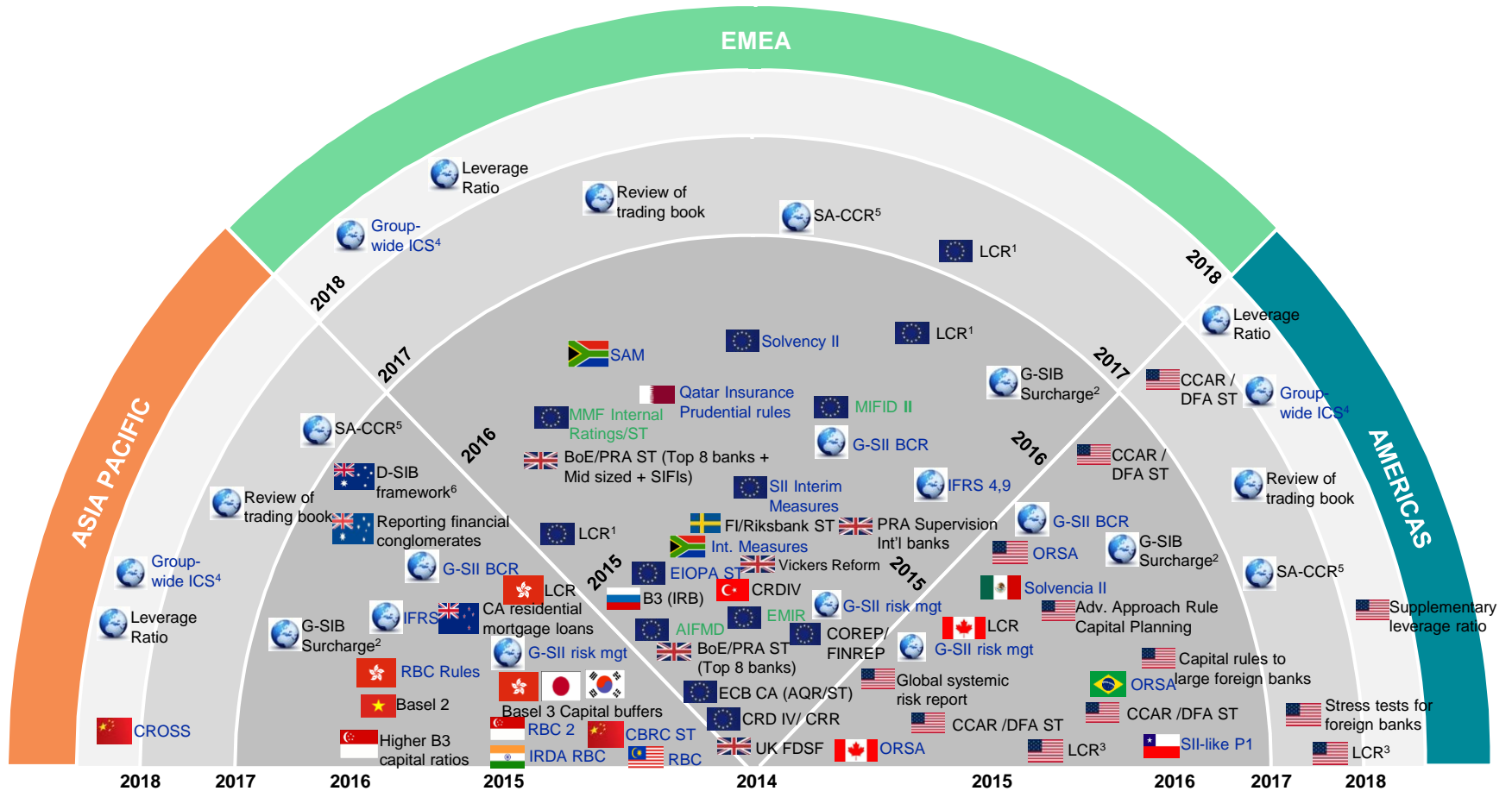
Società indipendente di rating creditizi e relative informazioni da oltre 100 anni

MOODY'S ANALYTICS

Ricerca, dati, software, modelli, consulenza, e soluzioni a supporto della gestione del rischio

Moody's Analytics opera in completa indipendenza dalle attività di rating di Moody's Investors Service. In questa presentazione non sarà fatto alcun commento su rating o potenziali cambiamenti di rating. Nessuna analisi o opinione espressa in questa presentazione riflette quelle dell'agenzia di rating.

Contesto regolamentare



Banche - Assicurazioni - Altre istituzioni

Stress Testing: un fenomeno mondiale. Quali trends ?

	Eurozone	United Kingdom	United States
Regulatory Body	EBA / ECB / NCA ¹	BoE / PRA ¹	Federal Reserve
Coverage	Largest Eurozone/Significant Banks (approx. 128 banks)	Largest UK Banks & Building Societies	BHC&FBO ⁶ ; assets > than \$10bn (DFAST), \$50bn (CCAR)
Data Requirements / Reporting	Historical/AQR Data – Core (ADC, TR, CSV) & Additional (CSV) Templates ^{2,3}	FDSF ⁴ – Historical, Year-End Data & P/L Projections	FRY Reports – A/Q/M Data; P/L Projections
Modeling Approach	Bottom-Up & Challenger/Top-Down; Firms' Own Models	Bottom-Up /Granular; Firms' Own Models	Bottom-Up; Firms' Own Models; Dynamic Projections
Scenarios	Regulatory Baseline, Stress Scenario	Common Stress, Bespoke Firm Stress, Common Baseline	Baseline, Adverse, Severely Adverse; Firms' Scenarios
Disclosure	Public Disclosure of Results (Bottom-Up)	Public Disclosure of Results	Public Disclosure of Results
Frequency	Annual (2009-2011 EBA); 2014 (ECB)	Annual	Annual (regulator-led); semiannual (bank-led)
Corrective Measures / Use of Outputs	Recapitalization Plan	Input Capital Adequacy CRDIV & firms' PRA buffer; FPC Tool ⁵	Input Capital Plan, Approval by Fed; Dividend Planning,...,etc.

“Moody's Analytics Stress Testing Survey” - Aprile 2015

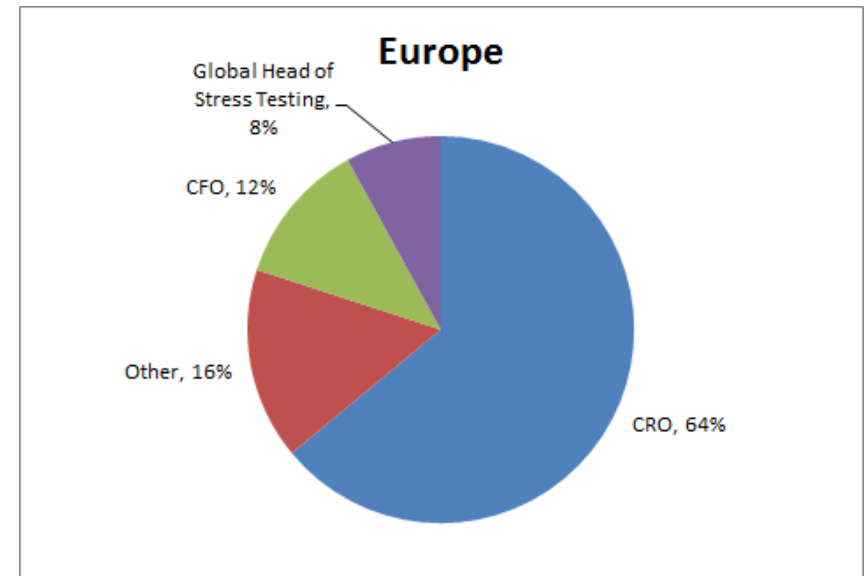
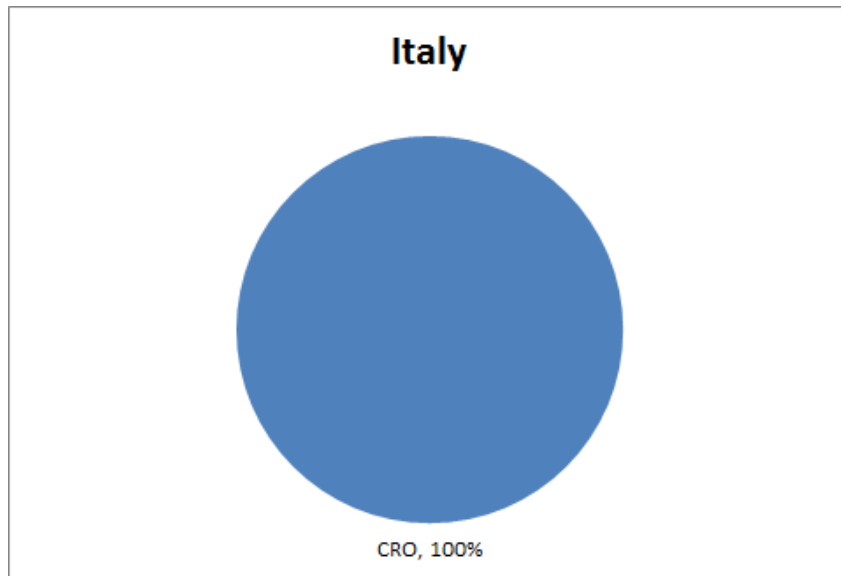


- CRO & CFO di 13 banche Italiane coinvolte nello Stress Test;
- Benchmark con banche EU / US;
- Focus su sfide affrontate, responsabilità e piani per il futuro.








- Stress testing è responsabilità di un (piccolo) team di Risk Management, con il coinvolgimento di molte altre funzioni;
- Sfide principali sono legate ai dati, all'orchestrazione del processo, e alla piena comprensione delle richieste del regolatore;
- Sono stati pianificati interventi per migliorare l'infrastruttura, automatizzare il processo, e rivedere la governance;
- Forti analogie con le altre banche EU/US ma molte di loro stanno già implementando frameworks e processi migliorati.

Chi nella banca ha la responsabilità dello Stress Testing ?

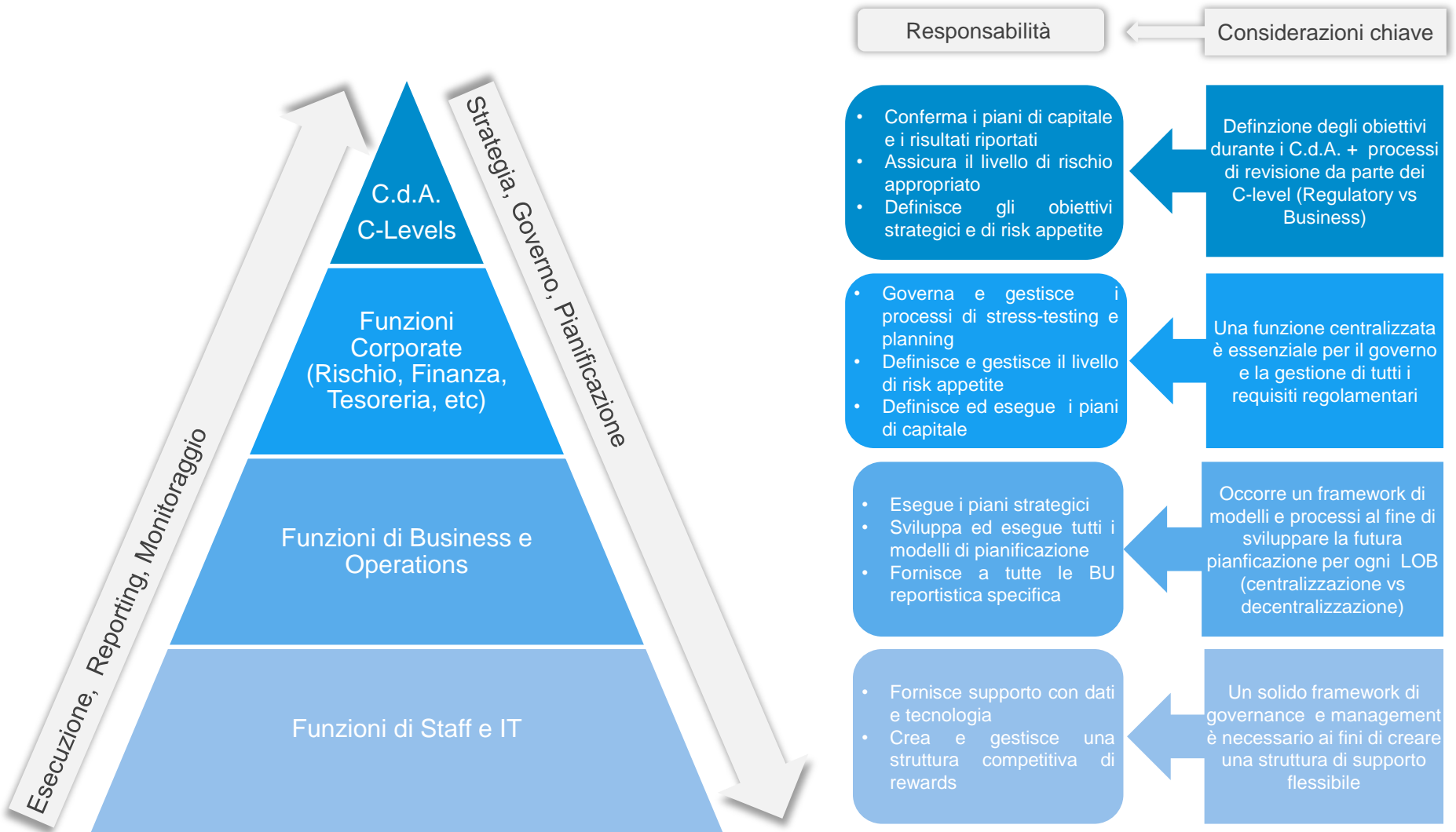


- Lo Stress Testing rimane tema di Risk Management, sotto la responsabilità del CRO;
- La pressione continua del regulator richiede un coordinamento reale tra funzioni e dipartimenti;
- Un framework robusto di governance è diventato indispensabile.

Quali funzioni partecipano al programma di Stress Testing ?

	Takes Lead	Very Involved	Marginally Involved	Not involved
 Risk Management	100.00% 13	0.00% 0	0.00% 0	0.00% 0
 Capital management / Capital planning	15.40% 2	53.80% 7	7.70% 1	23.10% 3
Portfolio management	0.00% 0	15.40% 2	23.10% 3	61.50% 8
 Finance / Accounting / Regulatory Reporting	7.70% 1	23.10% 3	53.80% 7	15.40% 2
 Treasury /ALM	0.00% 0	23.10% 3	46.20% 6	30.80% 4
 Financial Planning / forecasting	7.70% 1	76.90% 10	7.70% 1	7.70% 1
Information Technology	7.70% 1	23.10% 3	53.80% 7	15.40% 2
Legal/Compliance	0.00% 0	0.00% 0	38.50% 5	61.50% 8

Struttura di Governance con chiari ruoli e responsabilità



Quali sono le principali sfide affrontate ?

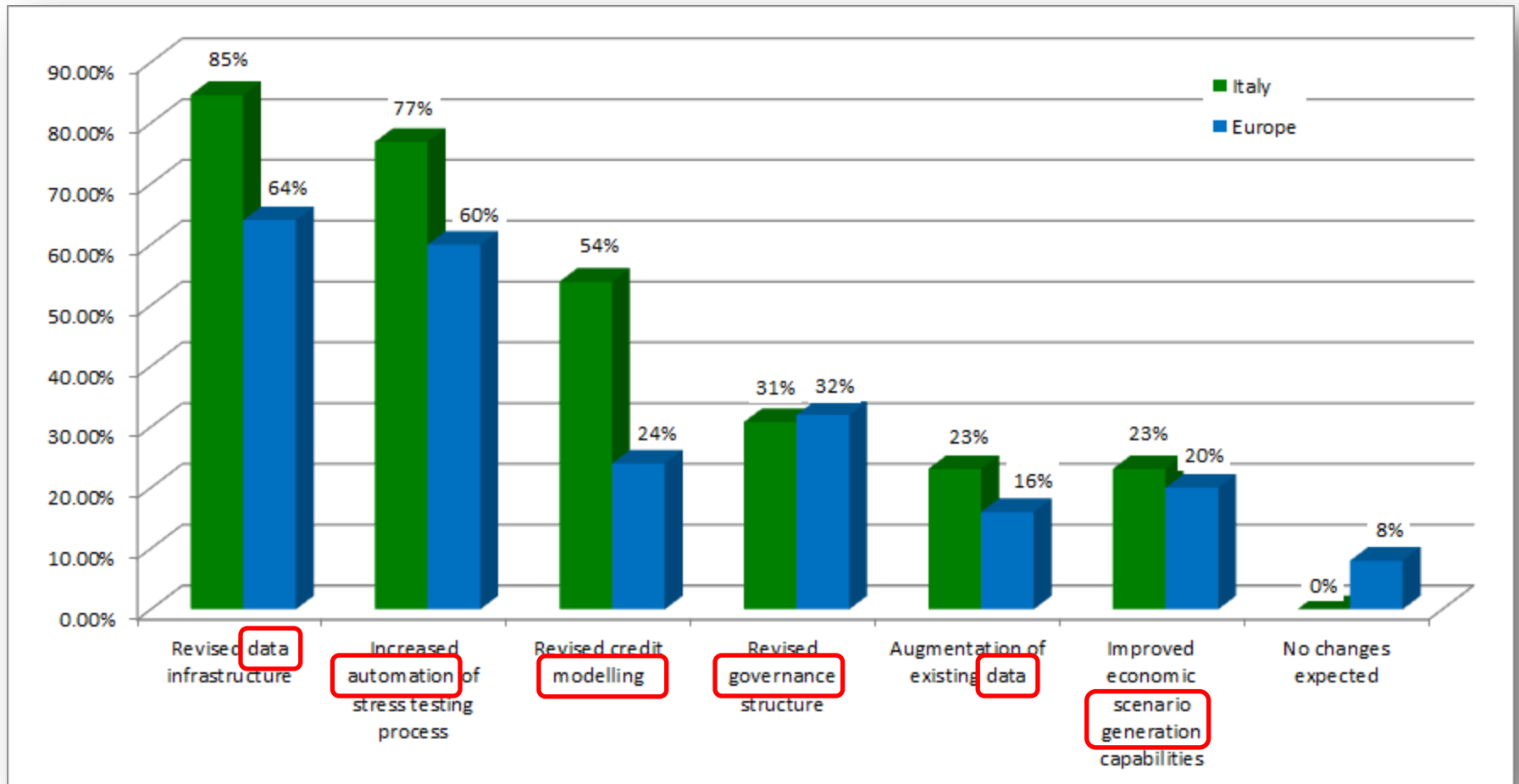


Item	Rank
Collecting the necessary data in the given time	1
Data Quality Management	2
Understanding scope and definitions around the stress test (e.g. NPL definition)	3
Orchestration & streamlining of the stress testing process	4
Modeling the impact of scenarios on risk drivers and capital ratios	5
Understanding and translating scenarios to own business risks	6
Forecasting RWA under stress conditions	7
Documentation and reporting to regulator and/or management	8



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Quali sono i conseguenti interventi programmati ?



Stress Testing: la visione di Moody's Analytics



Dati

- Centralizzazione dati Risk e Finance;
- Data quality e data management;
- Elevata granularità;



Modelli

- Sviluppo e manutenzione periodica di un ampio numero di modelli;
- Assumptions coerenti per scenari e modelli in tutto il bilancio;
- Documentazione e validazione;
- Nuove metodologie;



Reporting

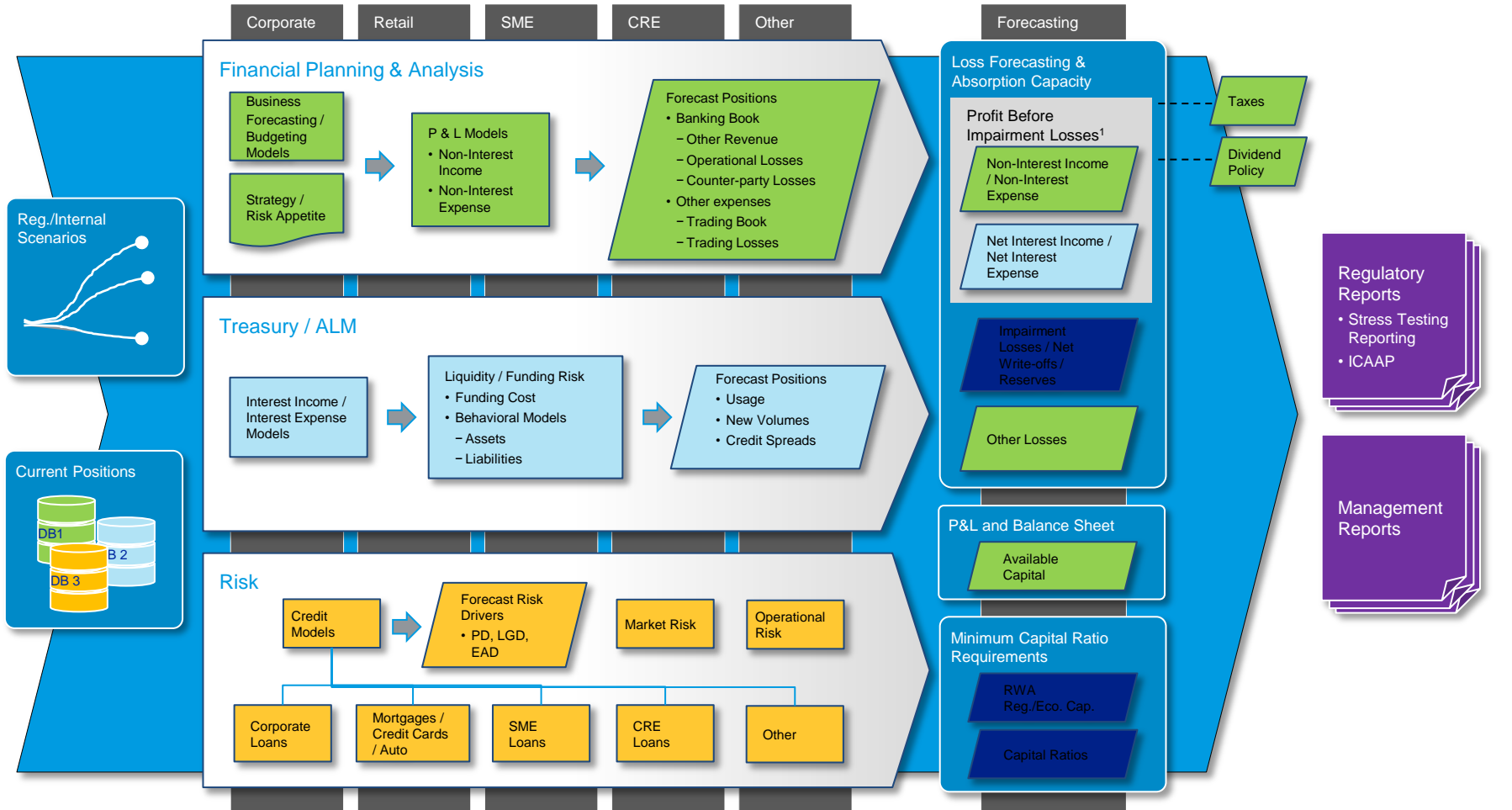
- Reportistica regolamentare annuale, trimestrale e mensile;
- Frequente manutenzione regolamentare;
- Riconciliazione dei molteplici reports regolamentari;
- Dashboards interni personalizzati per ogni gruppo di utenti;



Automazione

- Maggiore frequenza nei processi di stress testing;
- Integrazione di una molteplicità di sistemi;
- «Auditabilità» dei risultati;
- Coordinamento tra funzioni (Finance, Treasury e Risk);
- Priorità contrastanti tra scadenze di breve periodo e obiettivi strategici di lungo periodo.

... una necessaria visione d'insieme

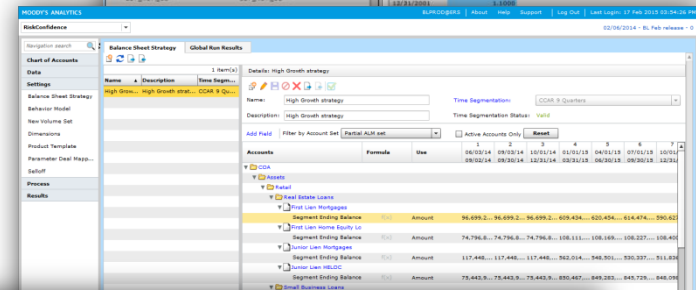
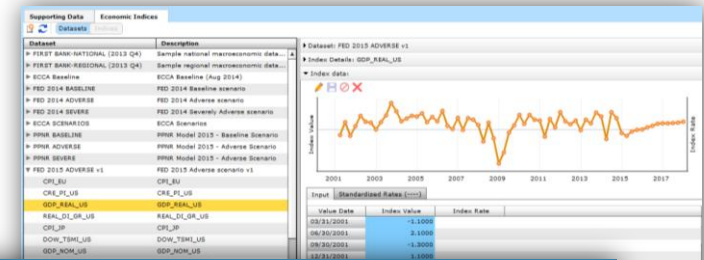


¹ Also called Pre-Provision Profit

■ Financial Planning & Analysis
 ■ Treasury/ALM
 ■ Risk
 [Data]
 [Document]
 [Process]
 [Database]

Data management nello Stress Testing

- **Centralizzare i dati Risk e Finance** al fine di alimentare coerentemente un'ampia gamma di modelli e reports
- **Evitare duplicazione di dati**
- Valutare la **qualità dei dati** e la loro **riconciliazione**
- Consentire la **raccolta dati con massima granularità** e al contempo la possibilità di **aggregare dati** dove richiesto dai modelli di alto livello

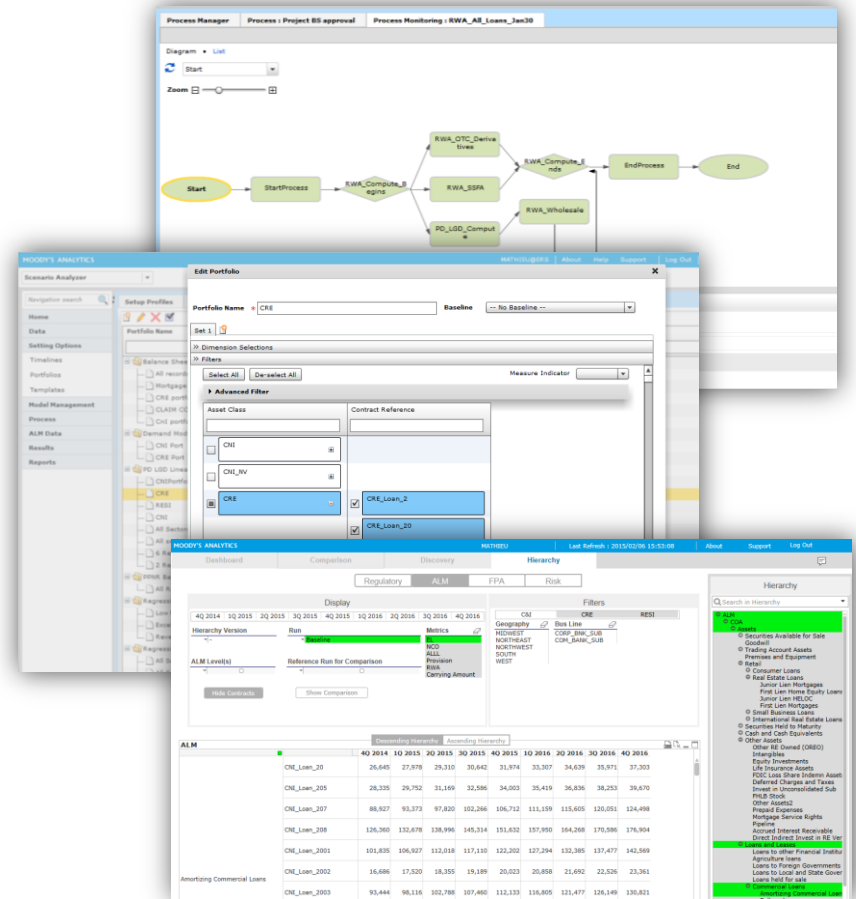


The screenshot displays a detailed table of account results. The table has columns for 'Company', 'Account Type', 'Calculated Amount', 'Threshold', 'Result', 'Variance Amount', 'Variance Percentage', and 'Exceeded Amount'. The data is organized by account type and includes various financial metrics.

Company	Account Type	Calculated Amount	Threshold	Result	Variance Amount	Variance Percentage	Exceeded Amount
Consumer Real Mktg. Domestic First Lien Hgtg.	ASB	4,264,004,281	32,928,793.27	>	1,000,000,000.00	4,264,004,281.00	3,264,004,281.00
1000009	ASB	4,064,004,280	32,928,793.27	>	1,000,000,000.00	4,031,495,485.77	3,031,495,485.77
Consumer Banking	ASB	8,263,913,700	223,493,149.48	>	6,000,000,000.00	8,000,800,910.32	2,263,112,790.32
1000010	ASB	1,449,039,390	43,443,238.12	>	1,000,000,000.00	1,405,596,151.88	448,543,238.88
Consumer Real Mktg. Domestic Junior Lien Closed	ASB	1,242,038,400	42,993,099.23	>	1,000,000,000.00	1,200,045,300.77	241,993,300.77
1000011	ASB	1,242,038,400	42,993,099.23	>	1,000,000,000.00	1,200,045,300.77	241,993,300.77
Pvt Wealth Real Mktg. Domestic First Lien Hgtg.	ASB	718,027,750	26,026,760.4	>	1,000,000,000.00	688,997,989.6	688,997,989.6
1000022	ASB	718,027,750	26,026,760.4	>	1,000,000,000.00	688,997,989.6	688,997,989.6
Consumer Real Mktg. Domestic First Lien Hgtg.	ASB	681,077,100	38,420,842.24	>	1,000,000,000.00	597,156,257.76	597,156,257.76
1000023	ASB	681,077,100	38,420,842.24	>	1,000,000,000.00	597,156,257.76	597,156,257.76
Consumer Real Mktg. International First Lien	ASB	641,404,000	74,310,714.05	>	1,000,000,000.00	607,143,285.95	607,143,285.95
1000024	ASB	641,404,000	74,310,714.05	>	1,000,000,000.00	607,143,285.95	607,143,285.95
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000025	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000026	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000027	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000028	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000029	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000030	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000031	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000032	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000033	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000034	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000035	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000036	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000037	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000038	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000039	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000040	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000041	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000042	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000043	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000044	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000045	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000046	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000047	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000048	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000049	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
1000050	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65
Consumer Real Mktg. International Junior Lien	ASB	253,634,400	16,961,071.35	>	1,000,000,000.00	216,673,328.65	216,673,328.65

Automatizzazione e industrializzazione = efficienza

- **Workflow Management**
- **Integrazione** tra diversi sistemi
- **“Auditabilità”** dei risultati per una migliore interpretazione
- **Tracciabilità** degli interi processi
- **Coordinamento** tra direzione Rischi, Finanza, e Tesoreria
- **Monitoraggio dei task** per la **sincronizzazione** di molteplici utenti

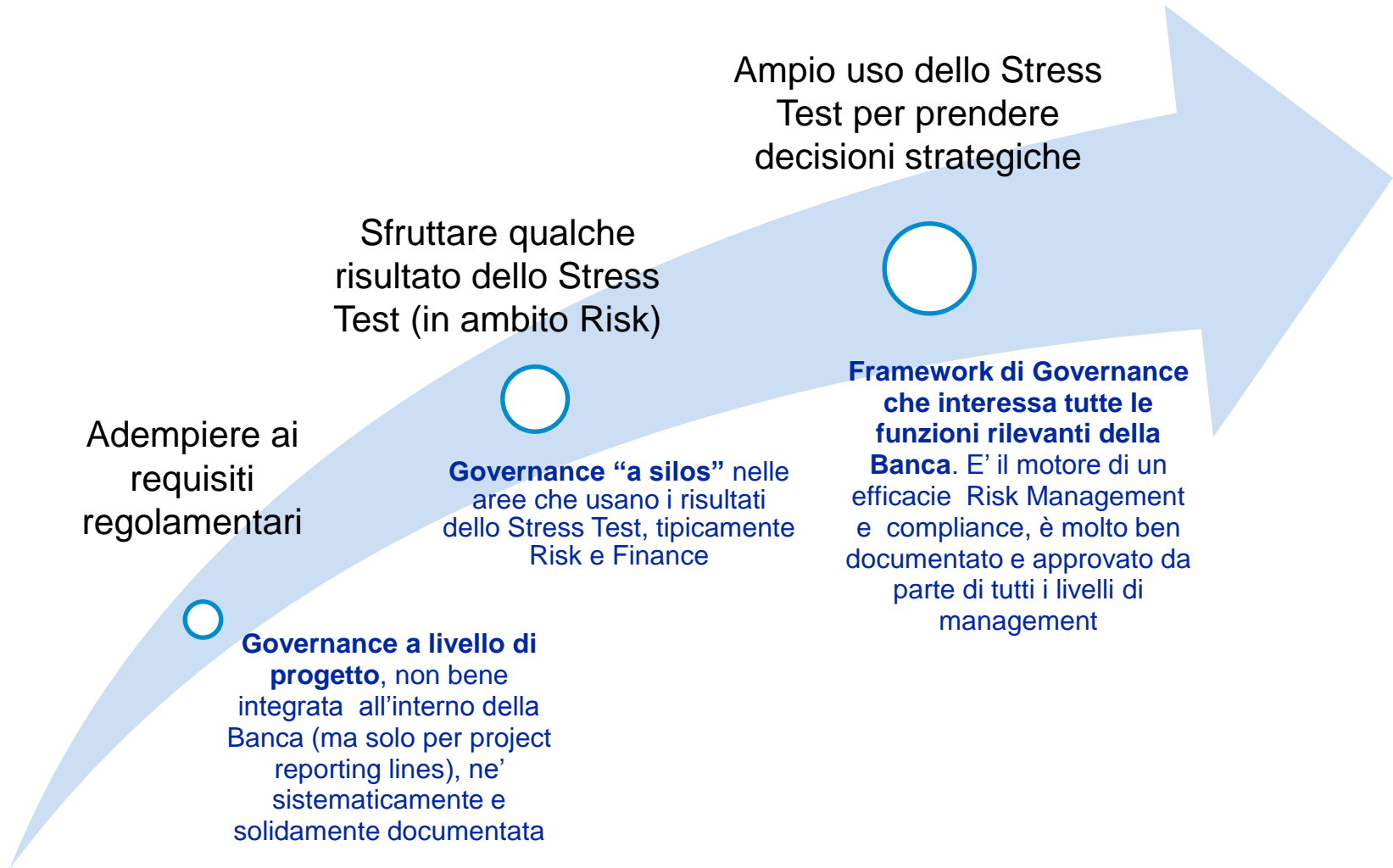


Integrare i risultati nei processi decisionali

- Comprendere i rischi del business e integrarli nel **piano strategico** (es.: ciclo economico, fusioni e acquisizioni, future regolamentazioni, ...)
- Consentire al CdA di essere proattivo nel creare **contingency plans, recovery & resolution plans** e prendere **decisioni strategiche**
- Agevola **capital planning, capital allocation, e forecasting**
- Consente un appropriato **pricing del rischio** e aiuta a fissare adeguati **limiti di rischio**
- Facilita una più accurata **gestione di portafoglio** della banca
- Aumenta la fiducia di azionisti e del mercato



Oltre la compliance: Stress Testing come tool strategico



Considerazioni conclusive



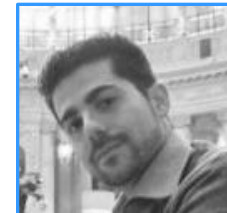
- Possibili trends per i prossimi esercizi di Stress Testing:
 - Ricorrenti;
 - Maggiore granularità;
 - Crescente sofisticazione di approccio;
 - Maggiore importanza liquidity stress test;
 - Importanti impatti organizzativi e di governance.



- Attenzione delle banche Italiane e Internazionali è su:
 - Gestione dati, reporting e infrastruttura;
 - Automazione di processo;
 - Miglioramento della governance.



- Abbiamo iniziato un percorso evolutivo (obbligato ...) per andare oltre la compliance.



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