Risk Management & Decision Making
A Chief Risk Officer’s Perspective

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12:00 – 13:00
Agenda

- Culture
- An expanding world of information
- Decision-making approaches
- Chief Risk Officer role
- Risk Management responsibilities
- Conclusion
Culture

- Tone set at the top
- Transparency
- Joint risk ownership between business & risk units
- CRO leads risk debate
"A desk is a dangerous place from which to watch the world"

John Le Carre, ‘The Honorable Schoolboy’

Multiple information sources
- Databases, subscription research, websites/blogs, media
- Analysts, companies, research firms, government agencies
- Consultants, expert witnesses, lawyers, academic studies

Diverse independent perspectives in analysis
Decision Making

- Uncertainty of long term outcomes
- Benefits of group decisions
- Risk Committee guidelines
- Feedback mechanisms, periodic review of decision process
The Chief Risk Officer’s Role

Management
- Risk appetite & strategy
- Risk infrastructure of exposure systems
- Framework of qualitative/quantitative assessment
- Manage & mitigate risk

Leadership
- Fiduciary
- Risk spokesperson
- Independent + Partner
- Tough calls
- Hire and train right staff
Management Responsibilities

- Governance
- Assessing and measuring risk
- Managing firm-wide risks
- Reporting and Monitoring
Governance

- Board oversight
  - Risk tolerance approval
- Management committees
- Formal policies, criteria and procedures
- Coordination with compliance, internal audit, reporting, disclosure
### Assessing Credit Risk -- Qualitative Approaches

#### Strategy Risk
- Evaluate context, market players, competitive variables
- Does strategy fit risk tolerance?
- What additional risk management is needed?
- Eg. Entry to an emerging market

#### Deal Risk
- Economic & legal environment, assets, counterparties, deal structure, variability of cash flows
- How remediate problems?
- Eg. Infrastructure financings
Measuring Risk -- Necessary but Imperfect Models

- Models provide key indicators, use with caution
  - Estimates of potential risk exposure
  - Depend on past data to predict unknown future, insufficient data for rare but extreme events
  - Test assumptions and model structure, periodic independent model review/backtesting
  - Don’t rely on single model -- consider results from several
  - Probability analysis is only first step -- possibility analysis explores consequences

- Benefits expand qualitative analysis
  - Common language compares risk across products/businesses
  - Risk-adjusted economic capital returns used in strategy, pricing, link to ROE
Typical Credit Models

- Deals
  - Monte Carlo simulation & scenario cash flows
  - Derivative valuation models

- Credit Portfolios
  - Credit value at risk economic capital model

- Investment assets
  - Mark to market pricing, valuation models
  - Interest rate, credit spread shocks
  - Liquidity modelling of asset/liabilities, gap exposure, counterparty, settlement risk

- Enterprise wide
  - Catastrophic firm-wide scenario testing of credit, market, liquidity risk on firm and markets
Managing Risk Firm-wide

- Enterprise risk review
  - Aggregate exposures
  - Vulnerabilities, emerging risks
  - Operational, legal, reputation risk

- Stress testing for resilience in crisis
  - Funding flexibility = capital, liquidity, market confidence

- Concentrations can kill -- aggregate exposure limits set by quantitative results and judgment
  - Asset, counterparty, geography, cross-asset factors (e.g. liquidity, vintage)

- Risk Transfer
  - Insurance/reinsurance, securitization, credit derivatives
Reporting and Monitoring

- **Transparency**
  - Potential severity
  - Early warning signals, real-time alerts
  - No surprises!

- **Board**
  - Succinct dashboard w/consistent, analytic view of firm’s risk profile
  - Strategic review on major risk issues
  - Compliance

- **Management**
  - Dashboard, formal reviews

- **Business/risk units**
  - Dashboard preparation/analysis, daily/weekly reports

- **Stakeholders**
  - Disclosure, non-jargon, key risks
Conclusion

- Effective risk management requires versatility
  - Technical/analytical skills & skeptical exploration
  - Governance for transparency, consistency, controls
  - Influence, communication

- Post crisis scrutiny
  - Model assumptions and interpretations
  - Inter-linkages across risks
  - Vulnerabilities, emerging risks
  - Resilience buffer for extreme stress

- Culture is critical to firm-wide risk awareness and management