



MANAGING OPERATIONAL RISKS UNDER STRUCTURED TRADE FINANCE FRAMEWORK: CHALLENGES AND SOLUTIONS

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OUTLINE

- Section I: Operational Risk (“OR”)- Definition, categories and effect
- Section II: Structured Trade Finance (“STR”) – Definition , Scope and Peculiarities
- Section III: STR and OR: Risk Categories, Drivers and Examples
- Section IV: Operational Risk Management
- Section V: Summary of key points and wrap up

SECTION I:
OPERATIONAL RISK:
DEFINITION
CATEGORIES
EFFECT

WHAT IS OPERATIONAL RISKS?

- “The risk of loss resulting from inadequate or failed internal processes, people, or systems, or from external events”. *Basel Committee*
- Also described as all risks other than Credit and Market risks that banks incur in their operations.

OPERATIONAL RISKS

- Most of the losses that have taken place over the past 20 years have significant leanings towards operational failures:
 - Enron
 - Worldcom
 - Barring's Bank
 - The recent unauthorized trading incident at Societe Generale Bank
 - Failed Cocoa deals in SSA

OPERATIONAL RISK CATEGORIES AND DRIVERS

Risk Categories	Human Factors	Systems	Internal Processes	External Events
Risk Drivers	<ul style="list-style-type: none"> •Employee error •Employee fraud •Employee act conflicting with employment laws •Loss or lack of key personnel 	<ul style="list-style-type: none"> •Technology and Investment Risk •System Development and Orientation •Lack of capacity •System security problems 	<ul style="list-style-type: none"> •Insufficient Internal Control •Documentation risk •Modeling risk •Lack of internal or external reporting 	<ul style="list-style-type: none"> •Legal and political risks •Criminal activities •Outsourcing risks •Losses from disasters

OPERATIONAL RISK EVENT EFFECT

- Operational Risk Event Effect refers to losses recognized in the resolution of an Event.
- It includes write-offs, the cost of compensation and/or penalty payment made to third parties, adjustments and refunds or revenues otherwise due, and incremental expenses relating to the resolution of an Event.

SECTION II:
STRUCTURED TRADE FINANCE (“STF”):
DEFINITION
SCOPE
PECULIARITIES

STRUCTURED TRADE FINANCE (“STF”)

- Structured trade finance is the art of transferring risks in trade financing from parties less able to bear those risks to those more equipped to bear them in a manner that ensures automatic reimbursement of advances from the underlying assets.

www.unctad.org/commodities

STF

In STF, inventory and/ or flow of commodities are isolated from its owners and used as collateral for security and for repayment.

This arrangement gives lenders greater control over the commodities being used as security. The repayment structure is usually based on the sale of commodities so that the financing becomes self liquidating.

STF seeks to mitigate risks associated with transactions through the incorporation of predictable cash flows in the transaction structure.

STF AND OPERATIONAL RISKS

- Transactions are usually not standardized and are customized to meet each client's peculiar needs.
- Unlike traditional trade finance, where banks deals in documents and not goods; banks are involved in the management of the underlying assets. This potentially, increases operational risks.
- Documentation are usually not standardized and may not be subject to UCP, URR etc. Documentation are usually drawn to cater to all risk elements involved in the transactions, a possible avenue for increased operational risk.

BROAD CATEGORIES OF STF TRANSACTIONS

- Pre-export financing (including contract prepayment)
- Syndicated Medium and Long Term Trade Related Loans
- Warehouse Receipts and Inventory financing
- Receivables Finance & Invoice discounting
- Payment guarantees and undertakings (Silent or disclosed)
- Forfeiting, factoring and leasing
- Import and export financing
- Bilateral, multilateral and Private Sector Insurance backed financing

SECTION III:
STF & OPERATIONAL RISKS:
REVIEW OF RISK CATEGORIES
DRIVERS
EXAMPLES

OPERATIONAL RISK CATEGORIES AND DRIVERS

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1. HUMAN FACTOR RISK: ETHICAL OR LEGAL MISCONDUCT.

Employee Error	Employee Fraud	Employee act in conflict with employment laws	Loss or lack of key personnel
<ul style="list-style-type: none">•Loses resulting from inappropriate actions of employees.•Unauthorized activities	<ul style="list-style-type: none">•Losses due to act of a type intended to defraud, misappropriate property or circumvent regulations, laws or bank policy.	<ul style="list-style-type: none">•Losses arising from acts inconsistent with employment, health or safety laws or agreements .	<ul style="list-style-type: none">•Loss of key personnel may lead to loss of deal structuring capability, customer dissatisfaction and eventually loss of clients.

HUMAN FACTOR RISK: EXAMPLES

- Failure to implement customer's liquidation instruction in an inventory finance transaction leading to a loss as a result of market event.
- Fraudulent activity by an employee and internal theft.
- \$7.2billion unauthorized trading loss at Societe Generale.
- Payments of claims resulting from contravention of employment laws: In 2002 Amex paid \$31mm to settle class action suit brought by over 4000 employees, Merrill Lynch paid \$250mm in 1999 to settle a gender discrimination suit by 900 employees.
- Inexperienced staff structuring loss making deals.

HUMAN FACTOR RISK: CHALLENGES AND SOLUTION

○ Challenges:

- Hiring, motivating and retaining competent personnel.
- Providing necessary training and knowledge support for employees.

○ Solution:

- Adequate staff training (especially on new products and services), exposure and supervision.
- Well defined transaction acceptance parameters and Operational policies.
- Involvement of back office and middle office personnel in transaction structuring and execution.
- Implement Risk Control Self Assessment (RCSA) and maintain strong internal control and auditing policies.
- Comprehensive compliance framework to ensure adherence to employment laws.

SYSTEMS RISK

- System Risk is defined as loss the bank incur as a result of virus attacks, systems breakdown, capacity problem and lack of security.

2. SYSTEM RISKS

Technology & Investment Risk	System Development	Lack of Capacity	System Security
Losses incurred from investment in unqualified software and systems.	Losses resulting from inefficient use of software due to improper design.	Losses resulting from network errors, insufficient memory and database problems.	Losses from unauthorized access of banking data.

SYSTEMS RISK: EXAMPLES

- IT system failure leading to loss of data.
- Loss of customer sensitive information.
- Inefficient system integration.
Different applications are used for trade operations, client delivery, trade risk management and internal/external reporting.

SYSTEM RISK: CHALLENGES AND SOLUTIONS

Challenges

- Having a comprehensive technology platform to handle Structured Trade Transactions from end-to-end.
- Preventing unauthorized system access and abuse.

Solutions

- Building and integrating a robust technology platform for STF transaction processing that can handle entire process of reporting, query, monitoring and operational risk management.
- Enhanced systems control procedures.

INTERNAL PROCESSES RISK

Insufficient Internal Control	Documentation Risk	Modeling Risk	Lack of Internal or External Reporting
<ul style="list-style-type: none"> •Absence of dual control •Non-implementation of maker/checker policy. •Errors in transaction capture, execution and maintenance . 	<ul style="list-style-type: none"> •Losses incurred resulting from wrong or inadequate contract terms. •Missing documentations •Disputes over discrepancies and wrongful interpretation of agreements. 	<ul style="list-style-type: none"> •Misleading clients with inappropriate consultancy and advisory solutions. •Product design and structuring. 	<ul style="list-style-type: none"> •Inadequate exception reporting. •Accounting failures. •Inadequate risk management reporting. •Inadequate regulatory reporting.

INTERNAL PROCESSES RISKS: EXAMPLES

- Ashanti Goldfields/ Modeling Risk- Company advised to hedge value of its gold reserves using strategy that led to unanticipated significant cash flow requirement. Ashanti could not come up with cash flows to sustain the hedge. The solution was not properly dimensioned.
- Errors or incomplete due diligence/ KYC. The Solo Metal Case where bank made insufficient effort to check the validity of Solo's declared business. International Maritime Bureau subsequently checked a sample of 432 bills of lading and found that only 12 were related to genuine transactions.
- Collateral issues resulting from complacency and control compromise in collateral management.
- Absence of check and balances, unclear reporting lines including compromise of multiple checks and sign-offs in transaction approval and processing.

INTERNAL PROCESSES RISKS: CHALLENGES AND SOLUTIONS

Challenges:

- Weak processes, policies and procedures.
- Absence of formal transaction risk assessment parameters.
- Multi-departmental deal review mechanism.

Solutions:

- Establish strong internal controls, processes, policies and procedures.
- Define target market risk acceptance criteria.
- Institute deal review threshold and mechanism that is separate from obligor credit approval. Involvement of operations, legal, compliance, credit, product and origination in the deal review mechanism.

EXTERNAL EVENTS RISKS

Legal and Political	Criminal Activities	Outsourcing	Losses from disasters
<p>Breach of environmental management regulations.</p> <p>Contravention of government regulations leading to possible sanctions and injunctions.</p>	<p>Losses resulting from external fraud, blackmail, robbery, money laundering, terrorism and physical damage to property.</p>	<p>Bankruptcy of suppliers, collateral managers and warehousing agents.</p> <p>Breach of service level agreements</p>	<p>Flood, energy failure, earthquakes etc.</p>

EXTERNAL EVENTS RISKS: EXAMPLES

- Collateral manager, credit support agency and warehousing agents misdeed and fraud.
- Customer fraud e.g. Rastogi Brothers/ Allied Deals- Used receivables from fraudulent transactions as collateral for loans from banks- obtained over \$600million in credits.
- Willful damage and terrorism
- Arson, cargo theft, charter party & insurance frauds
- Damage to a property and goods due to natural disaster such as fraud and earthquake.

EXTERNAL EVENTS RISK: CHALLENGES & SOLUTION

Challenges:

- Trustworthy and professional outsourced services provides like Collateral Managers.
- Technology driven warehouse services providing real time information.
- Continuation of Business Plan.

Solution:

- Insurance against fire, floods and other external damages to good in warehouse and insurance against frauds by individuals working for the collateral managers.
- Political Risk Insurance to cover some of the country risks.
- Extensive due diligence on outsourced counterparties.
- Properly drawn up agreements defining roles and responsibilities, applicable laws and arbitration procedures.
- Well defined and tested Business Continuity Plan.

SECTION IV: OPERATIONAL RISK MANAGEMENT

OPERATIONAL RISK MANAGEMENT (ORM)

- Operational Risk Management is a strategic function that should be built into the Enterprise Risk Management framework of the institution.
- Operational Risk is more than operations risk. Operations risk is limited to execution errors and process failures.
- Operational Risk Management involves the development of robust and systematic process for incorporating risk-reward and risk-control information into business/transaction decision.

ORM: CHALLENGES

- Many financial firms believe that operational risk is not a material risk.
- There is a misconception that Operational Risks is limited to back-office operations and ORM is about managing control weaknesses at tactical level. This affects resource allocation to ORM.
- The paucity of internal loss data and biases in external loss data makes Operational Risk modeling a daunting task. The methodologies and approaches of data collection are still evolving and still remains a challenge.

SOME OPERATIONAL LOSS STATISTICS

- The Basel Committee 2002 Loss Event per Business lines report (based on survey of 89 International Banks) shows that:
 - 7.22% of the loss events occurred in Commercial Banking (vs. 61.1% in retail banking and 10.1% in Trading and Sales). STF is grouped in Commercial Banking and it ranks 3rd in terms of number of events.
 - Of the 7.22% loss events in Commercial Banking:
 - External fraud represents 3.81%
 - Execution delivery, Process Management represents 2.14%
 - Client Products and Business Practices represents 0.65%.

OPERATIONAL LOSS STATISTICS CONTD.

- In the same report, Total Gross Loss Amount by Business Line:
 - Commercial Banking represents 28.95%
 - Retail Banking with 29.36%
 - Sales and Trading 2.92%.
- Note that while Operational Loss Events for Commercial Banking was only 7.22% (Retail Banking 61.1%), Total Gross Loss Amount for Commercial Banking represents 28.95% (Retail Banking 29.36%)
- Total loss reported by the 89 banks amounted to Euro7.8Billion from 47,269 events.

SETTING CAPITAL CHARGE FOR OPERATIONAL RISK

- Basel Committee identified three approaches for setting capital charges for operational Risks:
 - Basic Indicator Approach:
 - Bases capital charge for Operational Risk on a fixed percentage (alpha) of an exposure indicator.
 - The exposure indicator is the average gross income over the previous three years and alpha is charged at 15%.
 - Operational Risk Capital= Exposure Indicator X alpha
 - Standardized Approach:
 - Differentiates capital charge based on eight business lines and charges between 12-18% depending on the business line.
 - Operational Risk Capital= Gross Revenue per business line X Beta (Beta is a percentage set by the regulator, currently ranges from 12-18% depending on the line of the business). STF is 15% and it is classified under Commercial banking.

SETTING CAPITAL CHARGE FOR OPERATIONAL RISK CONTD:

- Advanced Measurement Approach:
 - While Basic Indicator and Standard approach base the amount of Operational Risk capital charge as a factor of gross income, Advance Measurement approach factors in transaction volume of banks.
 - The challenge is in the implementation of Advanced Measurement Approach as banks needs to develop and maintain a detailed operational loss database concerning loss time, loss details, loss amounts and percentage of loss recovered and not recovered. Only few banks have such loss capturing system.
 - Operational Risk Capital= Risk measure generated by the banks own operational risk measurement systems.

STF OPERATIONAL RISK MANAGEMENT

- This should be an integral component of the Bank's Operational Risk Management Strategy.
 - Dimension the part of STF operations that can lead to operational risks. Determine which of the risk factors the banks incur in their operations
 - Measure the risks adequately and record operational risk loss events.
 - Build strategies to minimize the effects of operational risk factors.

OPERATIONAL RISK IN STF: POSSIBLE APPROACH

1. Set-up
Operational
Risk
Framework

2. Define
Operational
Key Risk
Indicators

3. Establish
Risk and
Control Self
Assessment
System

4. Implement
loss capture
and
management
System

5.
Operational
Risk failure
modeling
system

6. Determine
Capital
Charge
allocation

SECTION IV:
SUMMARY OF KEY POINTS
WRAP UP

OPERATIONAL RISK & STF: THE END POINT

- The case for Operational Risk Management
 - ORM is an important component of Enterprise Risk Management: Governance, Risk Management, Compliance and Control Systems
 - To meet Basle II requirement
 - Meet best practice control requirements (e.g. Sarbanes Oxley in US and requirements of regulators in different jurisdictions)

WHERE WE ARE

- Previously, focus have been primarily on credit and market risks. Now there is additional focus on Operational Risks and the impact it could have on earnings.
- There is a requirement to allocate capital to cover Operational Risks.
- As banks are going down the value chain to provide solutions to their customers needs, they are probably getting more exposed to Operational Risk Events.
- Banks uses different insurance products to mitigate some of the commercial and country operational risks. Examples include the use of different insurance products such as Contract Frustration Insurance (CFI) and Political Risk Insurance (PRI) to protect against political and economic upheaval.

WAY FORWARD.....

- Our proposed solution to managing Operational Risk under Structured Trade Finance will be considered under three headings:
 - Deal Structuring, Review and Approval
 - Process Integrity
 - Controls

DEAL STRUCTURING, REVIEW AND APPROVAL

- Product Programs that defines Target Market and Risk Acceptance Criteria and Return on Risk Capital (RORC) expectations.
- Transaction structuring and documentation should show comprehensive transaction and customer due diligence including KYC and KYCC where relevant.
- In addition to approval of obligor credit limits, multifunctional deal review process should be put in place to approve utilizations above determined levels for example, transactions above \$5million.

PROCESS INTEGRITY

- Establishment of sound policies, practices and procedures that should be readily available to all personnel. A process of ascertaining adequate knowledge and understanding should be put in place. E.g. Transactor certification.
- Segregation of duties: The deal origination and structuring teams should be separate from the deal approvers. In operations, the maker/checker principle should be maintained
- Provide appropriate level of supervision consistent with business size and complexity. Management/ supervisor's attention to details will assist in identification and acting on red flags.

PROCESS INTEGRITY CONTD.

- External counsel opinion and review should be obtained as necessary to ascertain that there is legally valid pledge over the assets supporting the transactions.
- Set up a monitoring system to control the flow of goods to and from the warehouse. If activities are outsourced to credit support agencies and warehousing agents, occasional unannounced visits should form part of the credit monitoring process.
- Environmental Risk of non-compliance with laws and regulations regarding health, safety and social issues can be taken care of by having an Environmental and Social Risk management policy.
- The business should have a Continuity of Business Plan that can be activated in the event of man made or natural disaster. There should be a process of reviewing the existence and adequacy of insurance covers.

CONTROLS

- Documented pre-disbursement and post-transaction self assessment of compliance with all approval conditions, policies and processes is recommended.
- Product program audits and transaction audits should be carried by independent control units. Exceptions should be promptly addressed and documented.
- It is recommended that a record of internal loss data should be kept. This is one of the components for building and sustaining the operational management framework.

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THANK YOU

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