Insuring operational risk under Basel II and the CRD

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- Why insurance matters in Basel II
- What do banks want from insurers?
- Issues from Basel II
- Implications for insurers:
  - Products
  - The FI market
  - Capacity
- Bank reactions to insurance within Basel II

Insurance in Basel II

- Available as a mitigant to a bank's operational risk capital calculation, provided they are on the Advanced Measurement Approach (AMA)
- Subject to a maximum of 20% of bank's capital for operational risk
- If operational risk capital = approximately 12% - 15% of total regulatory capital, insurance can be worth 2.4% - 3%.

What do banks want from insurers?

- Certainty of payment i.e. coverage
- Speed of payment

Coverage

“ The risk mitigation calculations must reflect the bank’s insurance coverage in a manner that is consistent with the actual likelihood and impact of loss used in the bank’s overall determination of its operational risk capital” [Basel II para 678 and CRD]

Risk mapping

Category (Level 1)	***Sub-category (Level 2)***	***Sub-category (Level 3)***	***Explanation / Example***	***Insurance Type and comment***
People	Employee Fraud/Malice	Collusion	Involves more than one person, at least one of whom is an employee	BBB, ECC (if computer-related) Must be manifest intent to cause loss, or to receive gain Malicious acts not covered unless employee dishonest / fraudulent act
		Embezzlement	Obtaining money by deception; employee effectively steals from a client/customer e.g. raising false loans, altering cheques	BBB, ECC (if computer-related) Must be manifest intent to cause loss, or to receive gain
		(Deliberate) sabotage (including of a bank's reputation)		BBB, ECC (if computer-related) Must be tangible, provable damage
		(Deliberate) money laundering		*Standard exclusion across all coverage sections*
		Theft - physical	e.g. computer equipment, cash, artwork	BBB – *Tangible assets only*
		Theft - intellectual property	e.g. deliberate theft of software	FG – not covered under definition of property. PI- possible if legal liability to 3rd party
		Programming fraud	e.g. deliberate introduction of a computer virus, by an employee	ECC - *loss of Data caused by any party; normal to have inner limit*

Category (Level 1)	Sub-category (Level 2)	Sub-category (Level 3)	Explanation / Example	Insurance Type and comment
People	Unauthorised Activity/ “Rogue” Trading/ Employee Misdeed	Misuse of privileged information	e.g. insider trading, front running	*UT – not covered* *PI – covered if legal liability to 3rd party*
		Churning	Falsely inflating a deal for commission purposes	*UT – not covered* *PI – standard exclusion*
		Market manipulation	False/misleading statements; price manipulation	*PI – covered if legal liability to 3rd party*
		Activity leading to deliberate mis-pricing	Unauthorised or other irregular activity which affects internal portfolio pricing	*UT – not covered* *PI possible if 3rd party who the insured has a legal relationship with suffers a loss*
		Activity with unauthorised counterparty		*UT – covered subject to there being a deliberate act and deliberate concealment*
		Activity in unauthorised product		
		Limit breach	Deliberate breach by employee	
		Incorrect models (intentional)	Deliberately manipulating model; unauthorised changes to parameters	*UT – not covered*
		Activity outside exchange rules		*UT – not covered* *PI – possible if civil liability coverage is provided*
		Illegal/aggressive selling tactics	Deliberately or negligently selling inappropriate product or dispensing incorrect advice	*UT – not covered* *PI – Covered if legal liability at law*
		Ignoring/short-circuiting procedures (deliberate) Other		*UT – not covered*

Category (Level 1)	*Sub-category (Level 2)*	*Sub-category (Level 3)*	*Explanation / Example*	*Insurance Type and comment*
People	Employment law	Wrongful termination		*EPL – covered* *EPL – covered* *EPL – covered*
		Discrimination/equal opportunity		*EPL – only covered if results in claim from insuring clauses* *PI – Possible if civil liability coverage is provided*
		Harassment		No
		Non-adherence to other Employment law		*EPL*
		Non-adherence to Health and Safety Regulations		No
		Other	*Retaliation Claims*	
	Workforce disruption	Industrial action	By firm's employees	No
	Loss or lack of key personnel	Lack of suitable employees	Suitable employees not available internally or in market place when needed	No
		Loss of key personnel Other	This may result in a loss of clients/business or the loss of a product line	*PA policy o* Could be modification of "Key Person"

Policy glossary

BBB	Banker’s blanket bond
BI	Business interruption
D&O	Directors’ and officers’ liability
ECC	Electronic and computer crime
EPL	Employment practices liability
FG	Fidelity Guarantee
PA	Personal accident
PI	Professional indemnity
Property	Property
UT	Unauthorised trading

Mapping and coverage issues

- Mapping to:
  - Bank risk classifications of risk events and losses
    - Basel 56 cell matrix
  - Business units versus legal entities
  - Scenario-based assessments
- Valuing a policy
  - Firms assess and prioritise risks differently
  - Core terms such as exclusions, deductibles and limits will be different for each policy
- Cause (insurance) → Event (banks) → Effect (or cost impact)

Insurance is not a panacea for all losses:

Prevalence of Recovery Type

Table 17

Prevalence of Recovery Type
Sample 1 (89 Banks)

	Percentage of Total Recoveries Resulting from 'Other' Recoveries	Percentage of Total Recoveries Resulting from Non-Zero Insurance Recoveries
Business Line		
Corporate Finance	89.6%	10.4%
Trading & Sales	91.8%	9.1%
Retail Banking	87.7%	12.8%
Commercial Banking	89.7%	10.6%
Payment & Settlement	79.8%	22.0%
Agency Services	77.5%	23.6%
Asset Management	88.3%	11.7%
Retail Brokerage	96.9%	3.1%
All Business Lines	88.7%	11.8%
Event Type		
Internal Fraud	86.0%	16.7%
External Fraud	92.0%	8.5%
Employment Practices & Workplace Safety	25.4%	74.6%
Clients, Products & Business Practices	90.5%	9.8%
Damage to Physical Assets	9.4%	91.1%
Business Disruptions & System Failures	49.1%	50.9%
Execution, Delivery & Process Management	96.1%	4.0%
All Event Types	88.7%	11.8%

Note: Total Recoveries is equal to non-zero insurance recoveries and 'other' recoveries

Note: Because 30 events have recoveries of both types, the sum of the percentages in the two columns can sum to greater than 100%.

But when insurance pays, it pays reasonably well…..

Table 19

Recovery Rates by Gross Loss Amount

Panel A: Sample 1 (89 Banks)

Gross Loss Amount (Euros 1000s)	Recovery Amount as a % of Loss Amount for all Insurance Claims (Includes Zero Recoveries)	Recovery Amount as a % of Loss Amount for all Insurance Claims (Excludes Zero Recoveries)	Non-Insurance Recovery Amount as a % of Loss Amount	Total Recovery Amount, Including Insurance and 'Other' Recoveries, as % of Loss Amount
0-10	79.4%	82.7%	83.3%	83.2%
10-50	58.2%	75.3%	57.0%	58.8%
50-100	57.7%	73.0%	56.2%	58.8%
100-500	62.7%	73.7%	61.2%	64.0%
500-1000	46.7%	52.9%	58.6%	66.2%
Greater than 1000	54.0%	66.0%	65.1%	67.6%
All Loss Events	58.4%	73.3%	58.6%	60.6%

Panel B: Sample 2 (63 Banks)

Gross Loss Amount (Euros 1000s)	Recovery Amount as a % of Loss Amount for all Insurance Claims (Includes Zero Recoveries)	Recovery Amount as a % of Loss Amount for all Insurance Claims (Excludes Zero Recoveries)	Non-Insurance Recovery Amount as a % of Loss Amount	Total Recovery Amount, Including Insurance and 'Other' Recoveries, as % of Loss Amount
10-50	57.6%	72.3%	58.4%	59.2%
50-100	52.5%	67.6%	56.8%	58.2%
100-500	57.3%	72.0%	60.8%	62.8%
500-1000	42.0%	49.1%	59.1%	66.6%
Greater than 1000	41.0%	54.3%	71.4%	68.9%
All Loss Events	54.6%	68.8%	58.7%	59.7%

Issues for insurers in the Basel II / CRD requirements

Eligibility criteria – Claims paying ability

Insurers (third-party entities) must hold a minimum claims paying ability rating

"of A (or equivalent)" [Basel II]

"by an eligible ECAI . . . associated with credit quality step 3 or above" [CRD]

- Credit quality effectively = financial strength, not claims paying ability
- Step 3 = BBB-
- AM Best not yet a recognised ECAI
- What happens if ratings differ between agencies? Or ratings differ between co-insurers?
- What happens in the event of a downgrade during the policy term?

- Captives/affiliates? - "must be laid off to an independent third-party, for example through re-insurance"

Policy term

- Initial term of no less than 12 months.
- Haircuts to be applied to a residual term less than 12 months down to a full 100% haircut (i.e. nil value) for residual term of 90 days or less.
- Minimum notice period of 90 days

- Regulators' issues
  - 12 months' certainty of capital – insurance as a 'capital substitute'
  - Time between loss occurring and insurance payment
- Insurers' issues
  - History of multi-year policies
  - Policies valid in full up to day 365

Legal certainty and exclusions

- Supervisory actions (except for fines, penalties etc)
- Appointment of receiver or liquidator, (except for events occurring after initiation of receivership or liquidation)

Implications of Basel for insurers – the traditional product

- Claims-paying ability – needs to be revised by regulators
- Policy term and haircuts
  - Multi-year?
  - 12 month evergreen/rolling?
  - 15 month?
- Notice period
- Coverage and meeting Basel criteria

A possible model for a ‘compliant’ Integrated Insurance Policy:

Master policy incorporating
General definitions
common terms, conditions & exclusions

Insuring clause schedules:

BBB/ ECC/ UT incorporates cover limits & excess Risk specific definitions & exclusions	**PI/ D&O/ EPI** incorporates cover limits & excess Risk specific definitions & exclusions	**Property** incorporates cover limits & excess Risk specific definitions & exclusions	**Business Interruption** incorporates cover limits & excess. Risk specific definitions & exclusions

Implications of Basel for insurers – the FI market

- AMA banks will expect the insurance industry to understand Basel and offer solutions
- AMA banks will much better understand their risks and be able to assess better the value of insurance and premiums
- Insurers must overcome the increasing asymmetry of information between banks and them
- Other banks, given they will not benefit from Basel on insurance, may give insurance a low priority

Implications of Basel for insurers – capacity

- Insurance as ‘contingent’ capital
- Captives – captive of captives?
- Mutual?

Bank reactions to insurance

“**None of the firms** appeared to have explored in detail how they might use insurance (or other risk transfer mechanisms) in their models; perhaps because it would not be included in firms’ initial models. For insurance to be a credible mitigant, firms will need to demonstrate – amongst other things – how their insurance coverage matches the risk exposures identified in their models.”

[FSA Thematic Review of AMA, March 2006]

Is this unreasonable?

Given the need to:

- Have Basel compliant insurance
- Assess operational risk exposure to 99.9% confidence
- Map coverage to exposure
- Assess the certainty and speed of claims payment
- Assess the value of the insurance as a mitigant to the capital requirement – and then
- Persuade the regulators!

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