

Loss data – does it improve risk management? And what role might ORIC play?

Presentation for Insurance Internal Audit Group, May 2011, by Rebecca Driver, Director of Research & Chief Economist, ABI, and Director of ORIC

www.abioric.com

Why capture loss data for operational risk events?

- ◆ **Solvency II and capital adequacy:** Regulators require you to hold capital against operational risks
- ◆ Capturing data provides better management information on risks to the business
- ◆ Offers an opportunity to identify issues where process changes could reduce costs to the business

Why share loss data for operational risk events?

- ◆ Operational risk events often occur infrequently. Accessing risks others have faced can help you improve the resilience of your business
- ◆ More (relevant) data can inform scenario analysis
- ◆ More (relevant) data will improving modelling

Sources of historical loss data

Less reliable
modelling

- **Purely internal losses**

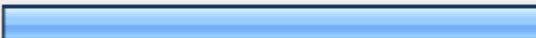



- **Publicly available (and some proprietary) losses**

More reliable
modelling

- **Consortium-based loss events**
(quality assurance, fit-for-purpose and consistent event classification, standards setting)

Institute of Risk Management's survey on Solvency II

7. Are you a member of any external databases or do you access external data sources? If so which? (Please tick all that apply)

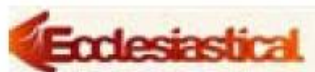
		Response Percent	Response Count
ORIC		72.7%	8
OpBase		9.1%	1
ORX		18.2%	2
SAS		9.1%	1
Other (please specify)			9
		<i>answered question</i>	11
		<i>skipped question</i>	42

- Most (80%) skipped question, are not members
- Three quarters of the 20% who use an external database are member of ORIC

The purpose of ORIC

- ORIC exists to help members manage operational risk by providing high quality loss event data that will allow them to understand the potential scale and source of losses.
- ORIC collects, standardises and reports on operational risk loss data for the insurance industry.
- It works with members to ensure data are helpful for regulatory purposes and to improve the tools available to analyse these data.

ORIC membership (26 insurers)



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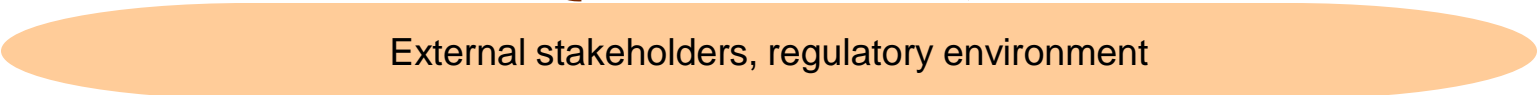
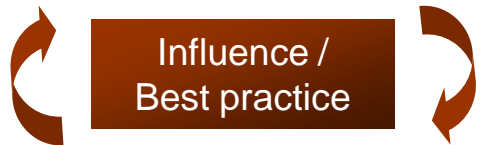
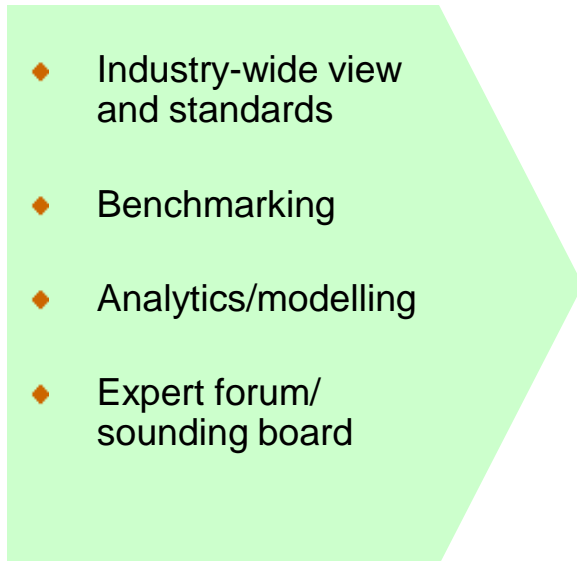
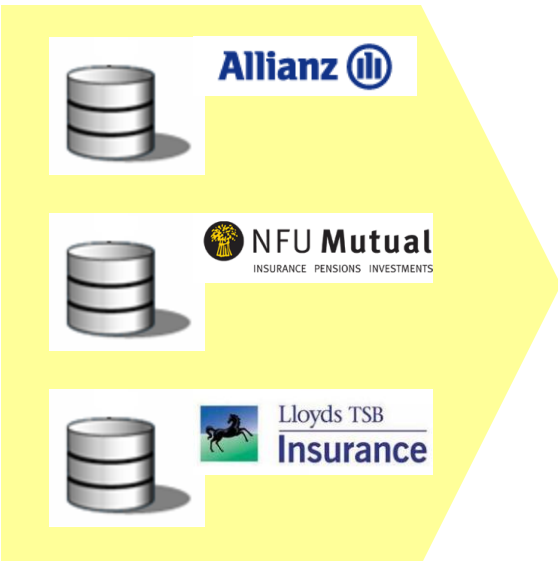


ORIC's loss database: insurance specific

Loss collection/reporting
Actual & near miss

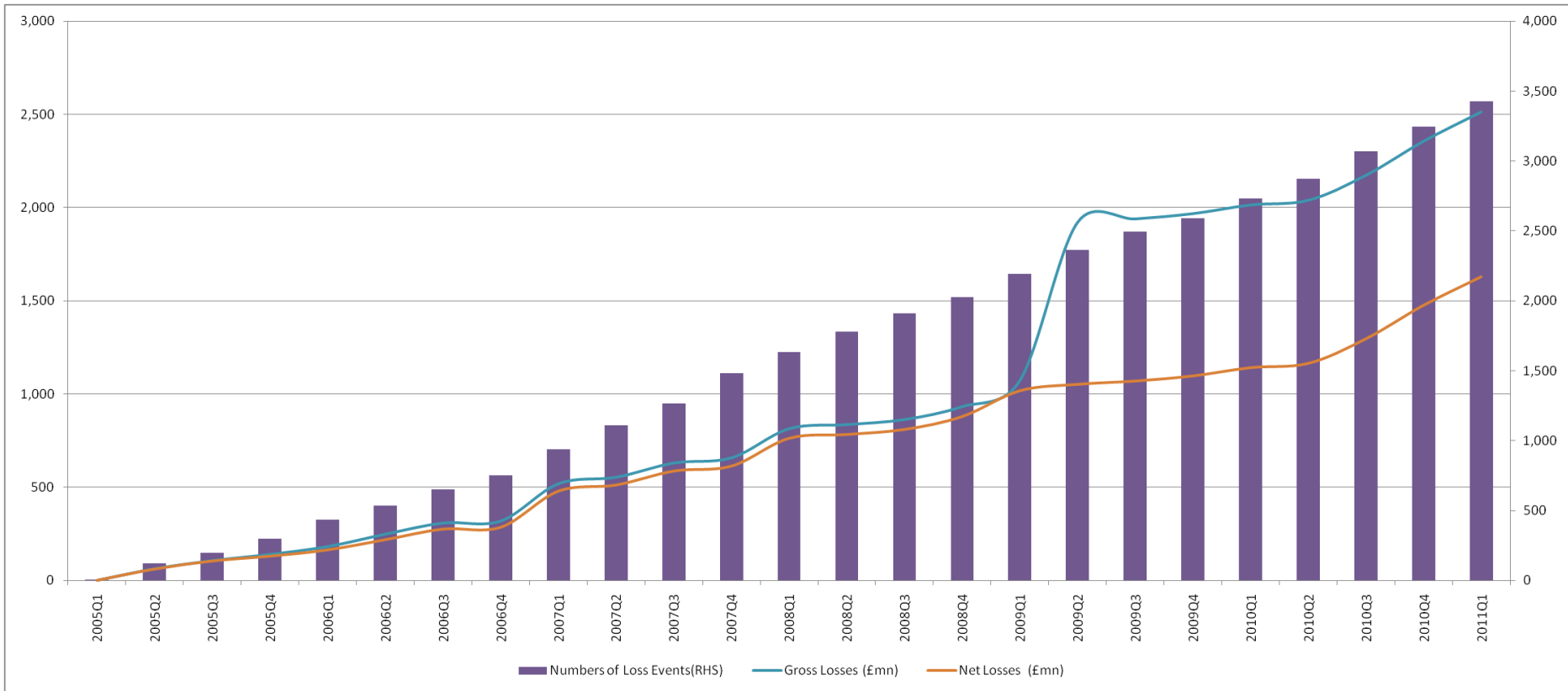
Cleansing
Validation & integration

Comparable data
Ideas and solutions

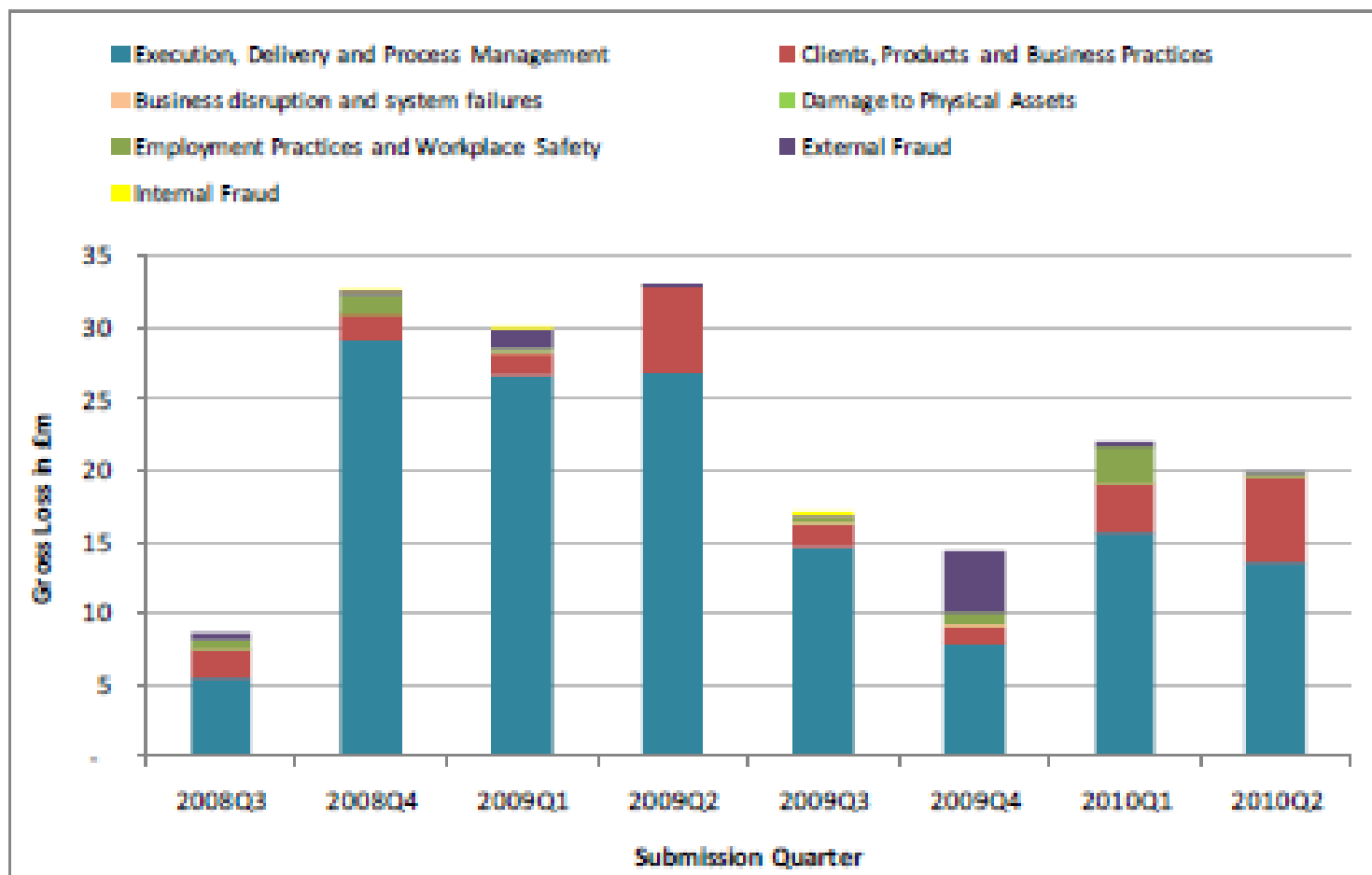


ORIC's database

Evolution of ORIC's loss data to 2011Q1, excluding misselling (endowments)



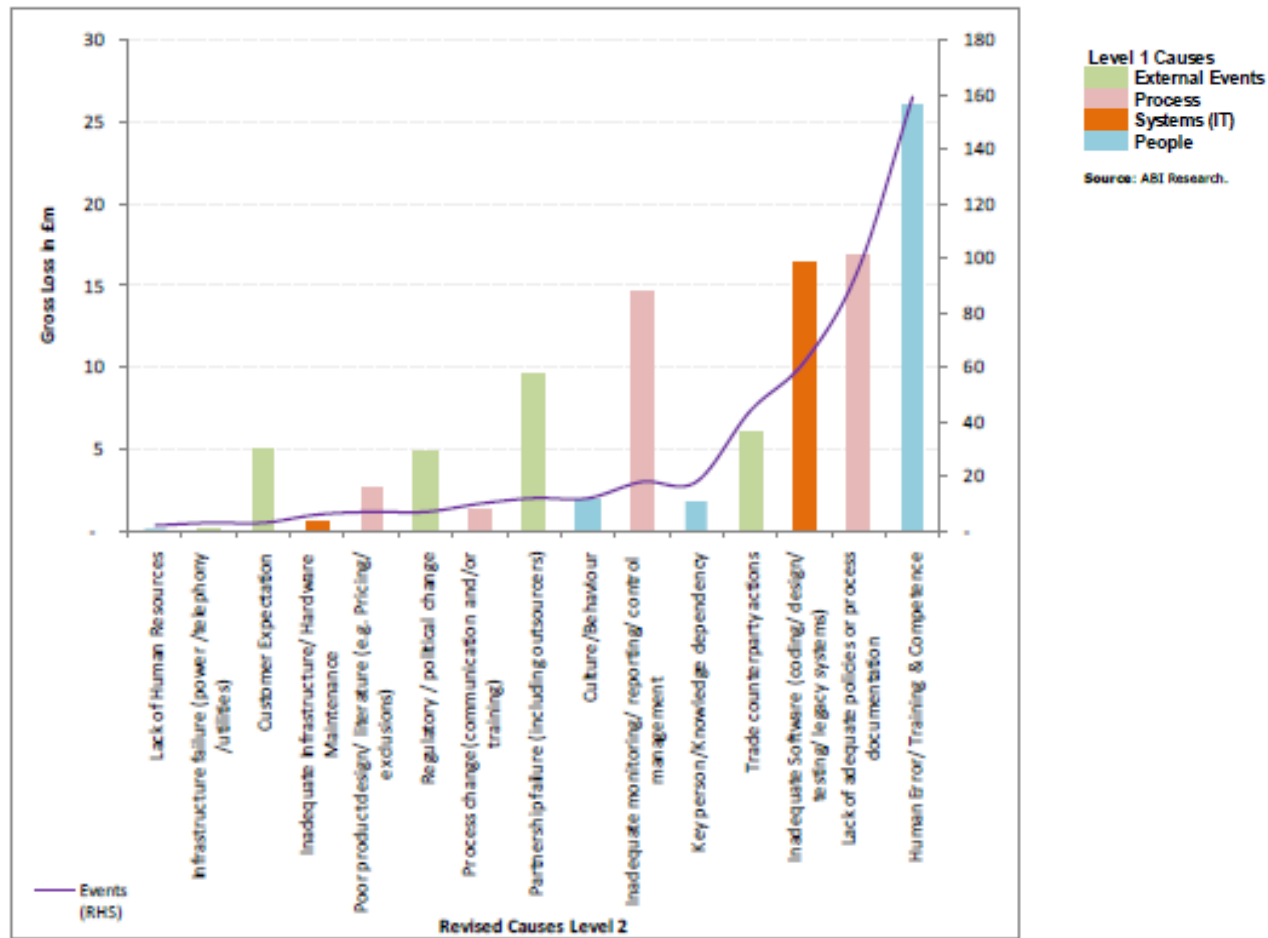
Losses by Level 1 categories (2008Q3 – 2010Q2)



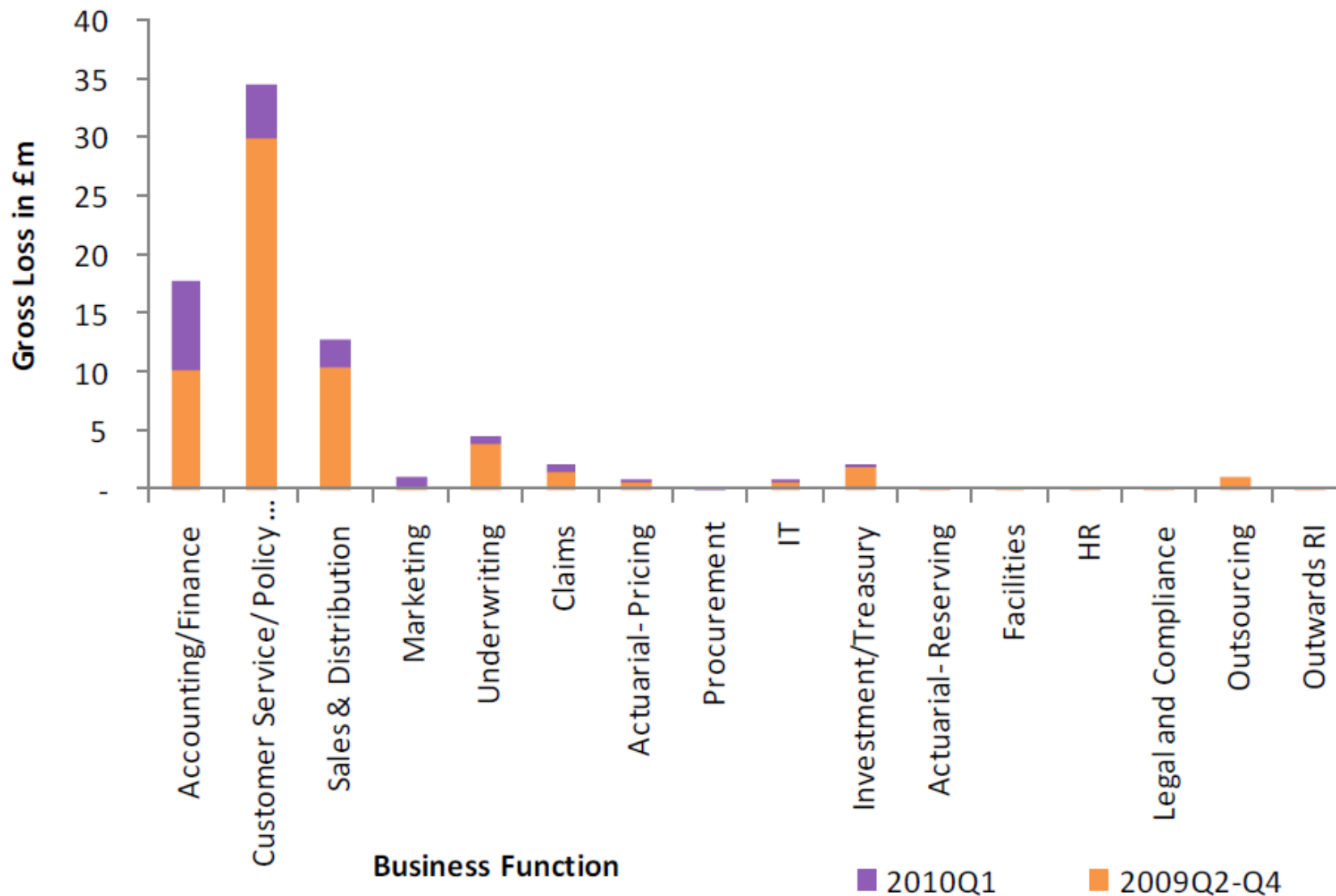
Source: ABI Research.

Note: Tail events larger than £20m have been removed.

Size and number of losses by Causal category for 2009Q2 to 2010Q1- excluding 'Other' category



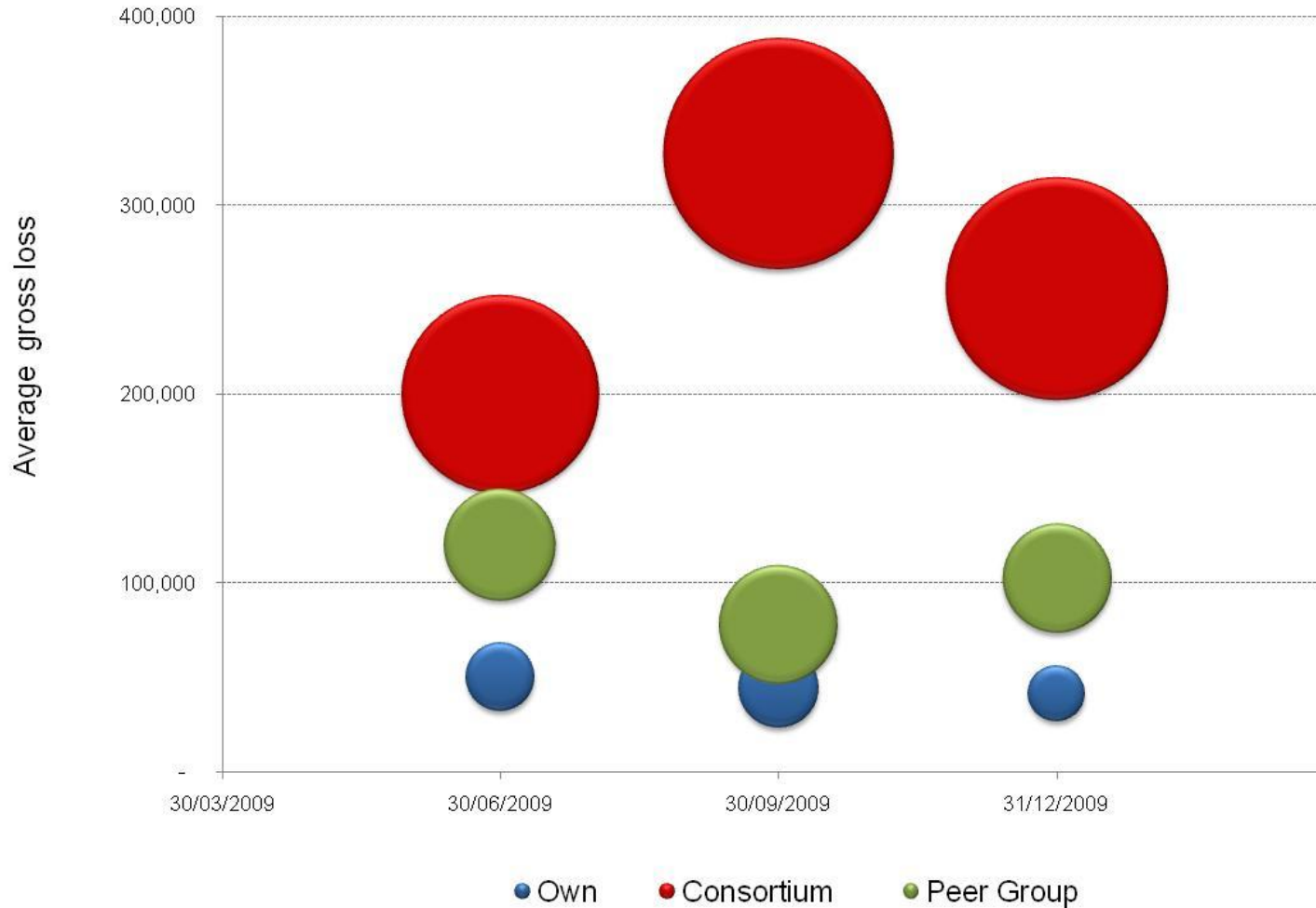
Losses by Business Function



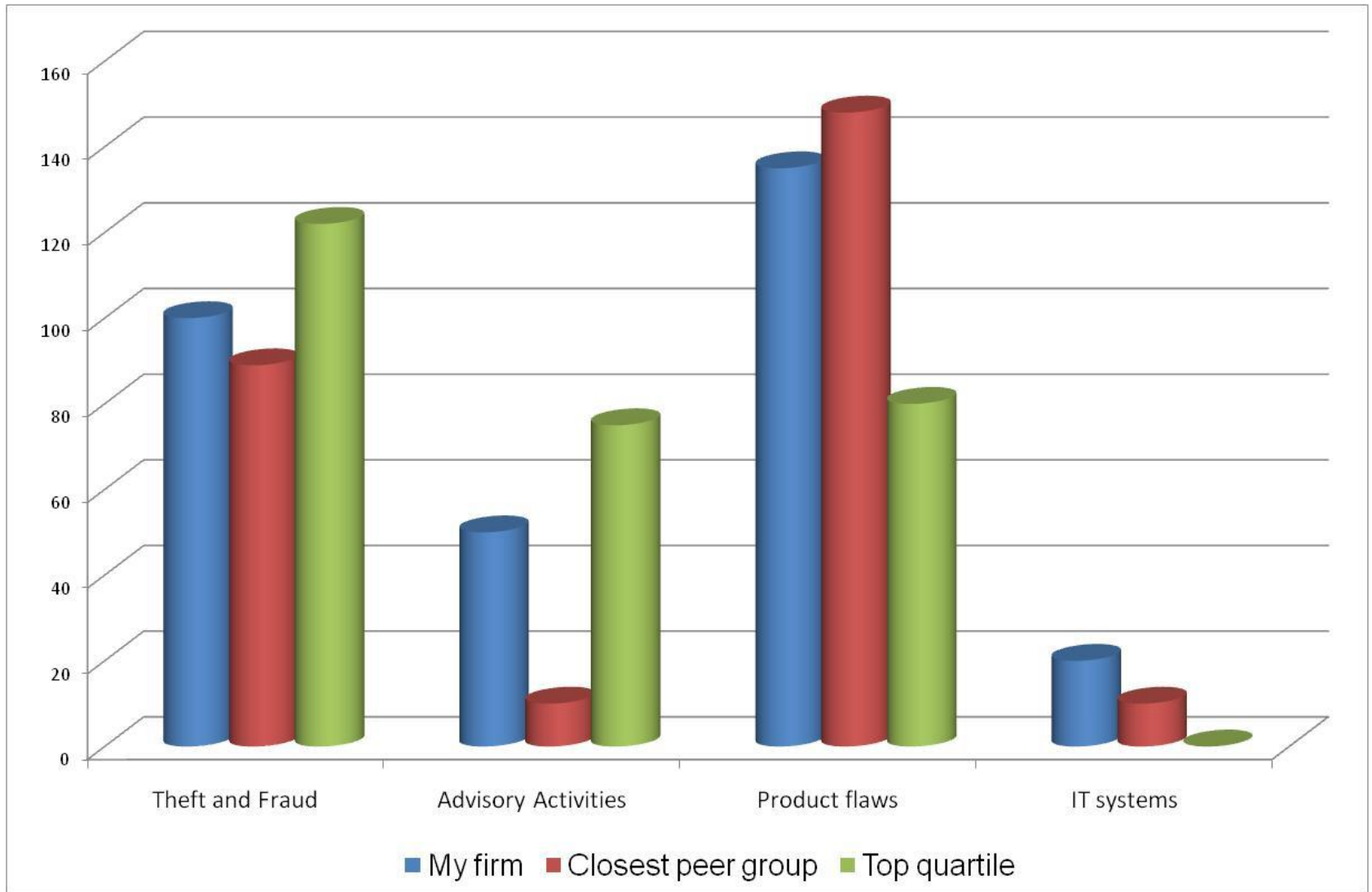
ORIC's priorities

- To provide high quality operational loss event data relevant to the insurance industry.
- To improve the tools available to members to help them with their analysis of operational risk, including:
 - Benchmarking
 - Scenario benchmarking
 - Scaling data
 - Modelling options for operational risk
- To help members work with regulators to set the framework for dealing with operational risk quantification and capital allocation in insurance.
- To help support the development of good practice in operational risk analysis and modelling in insurance and provide a framework that allows members to exchange ideas and information on the management of operational risk.

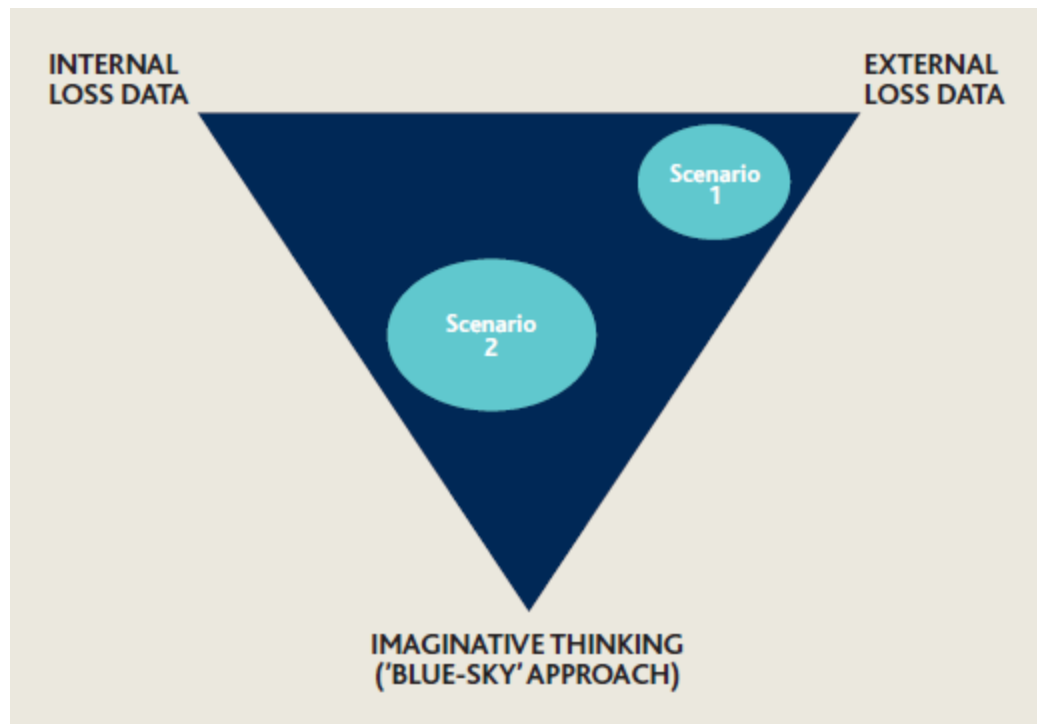
Quarterly benchmark report for oprisk losses



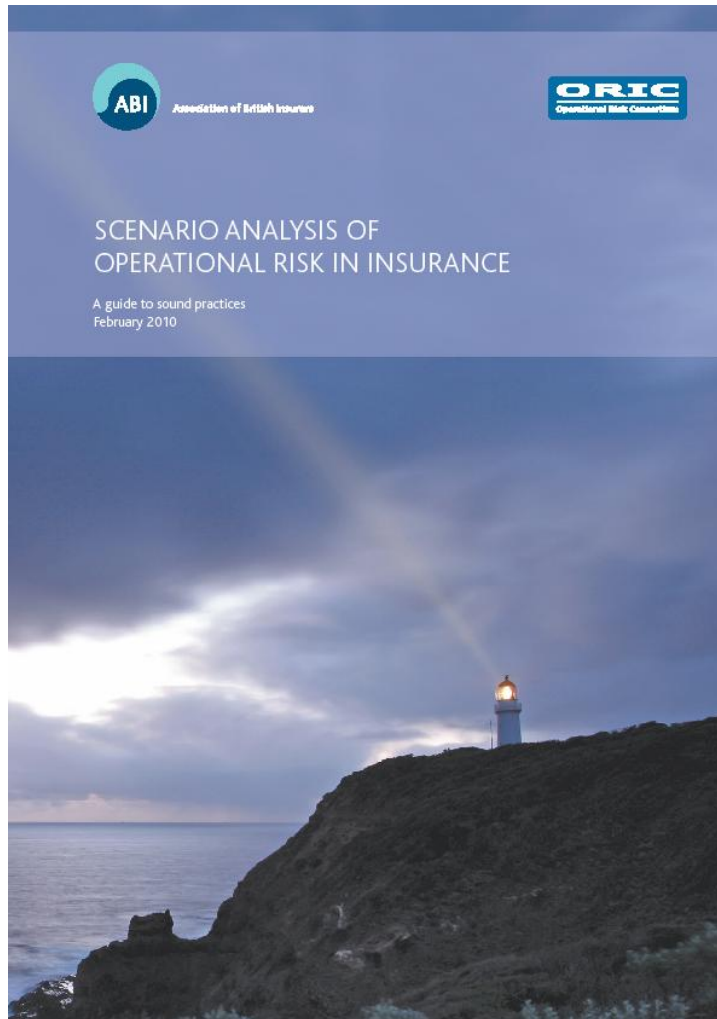
Illustrative ORIC benchmark report



Sources of information for scenario assessment

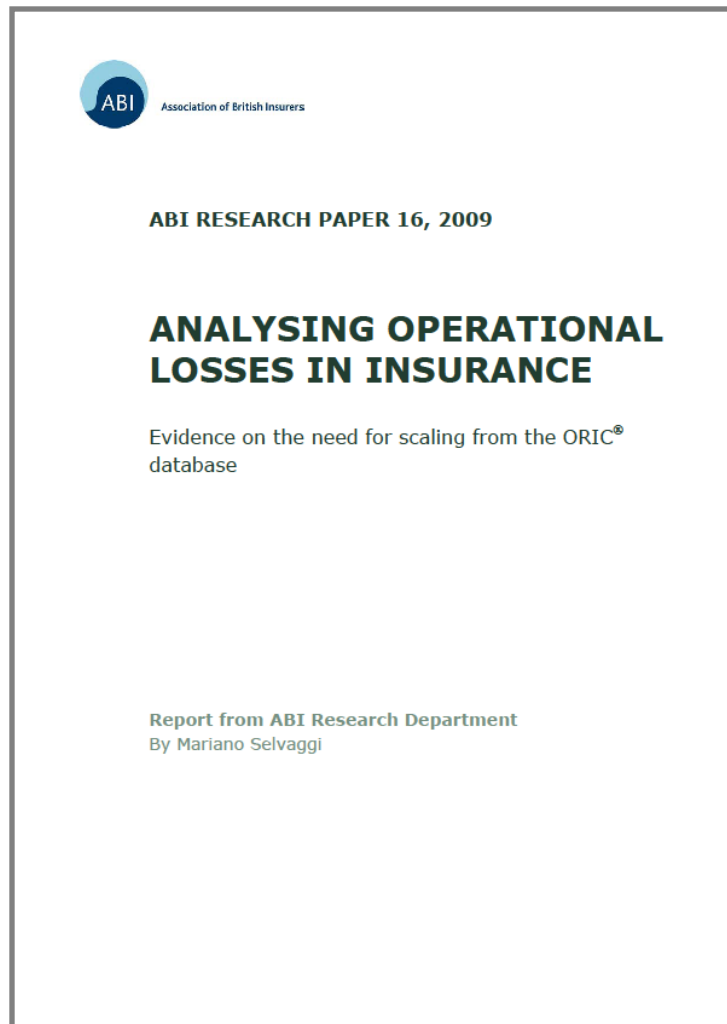


Scenarios – forward-looking element



- **Guide to sound practice** published in February 2010
- Identifies and characterises (33) top-priority scenarios for oprisk in insurance
- Provides industry guidelines for frequency and severity assessments
- Explains the key stages of a sound scenarios programme
- Analyses behavioural biases in scenario analysis workshops

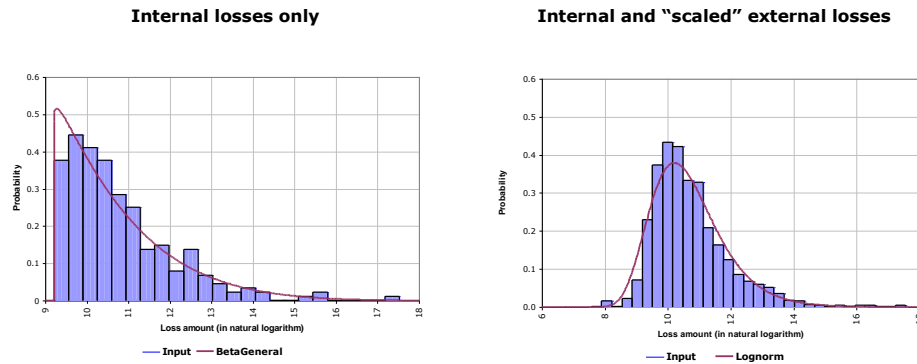
Evidence on the need for scaling



- Analyses robust techniques for scaling the size and number of external loss events
- Illustrates sound approaches and identifies early trends in the ORIC database
- Size of the insurer is correlated with the severity and number of operational losses
- But great deal of the variability in observed losses remains unexplained by models – room for improvement

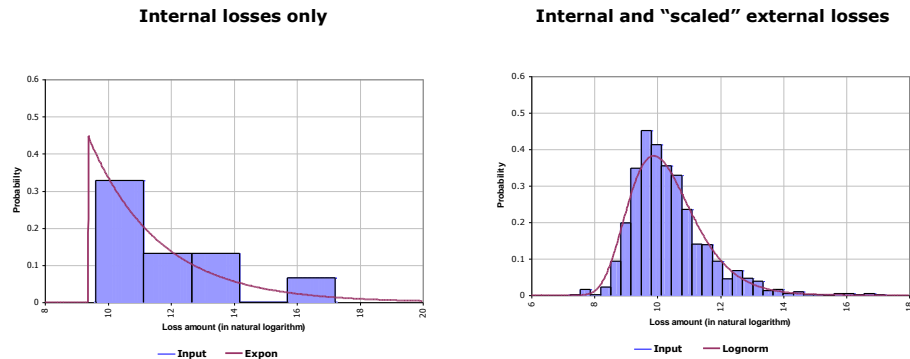
Why external data might help with modelling

Figure 1 Curve fitting for distribution of the size of losses – Insurer A



Note: This chart was created using Palisade's @Risk for Excel software.

Figure 2 Curve fitting for distribution of the size of losses – Insurer B



Note: This chart was created using Palisade's @Risk for Excel software.