



How to Quantify the Value of Risk Mitigation Actions

FM Global Business Risk Consulting



Agenda

- Who are FM Global/Business Risk Consulting
- Why insurance alone is not enough
- How to fully quantify exposures
- Case study

We insure over
1/3 of
***Fortune 1,000
Companies***

FM Global the world's largest commercial property insurer

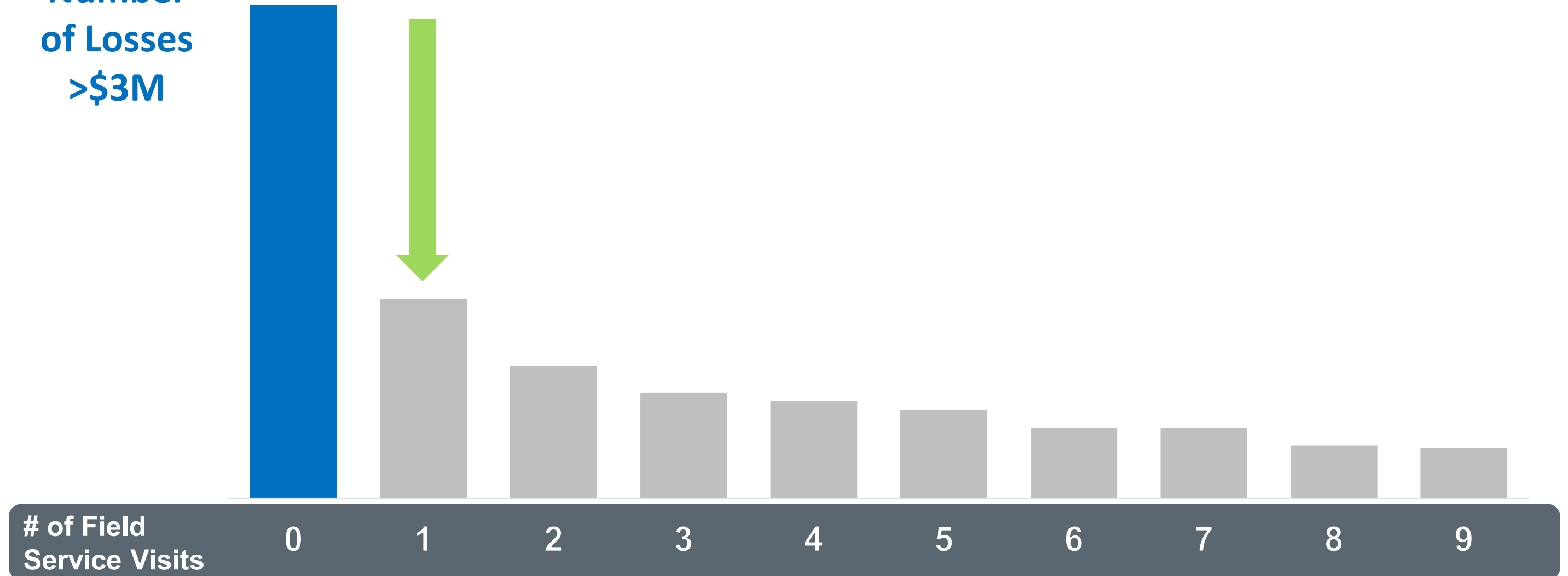
FM Global
has over 1,800
Loss Prevention Engineers

Conducting over
115,000 site visits in
145 countries



2014 – 2019 Field Engineering Visit History Prior to Loss

Number
of Losses
>\$3M





BRC services: building the path to resilience

Identify key vulnerabilities

Quantify resulting exposure

Prioritise resources to protect
business and improve resilience





BRC



“Put our engineering
expertise into the
business context of
our clients”

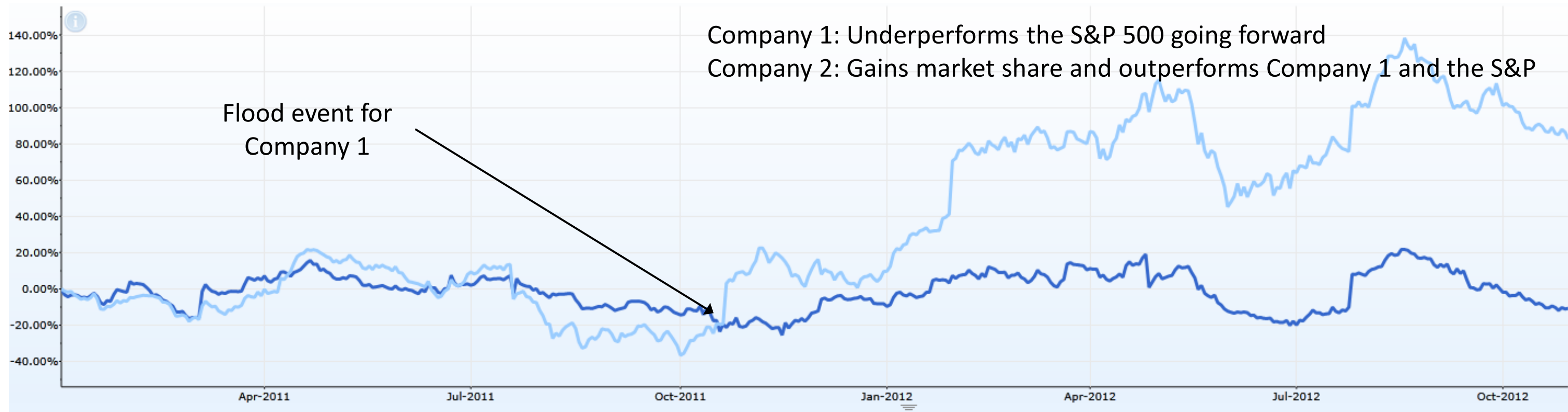


Example: A cyber disruption...



Loss of ~19% of business value, primarily due to a cyber-attack event

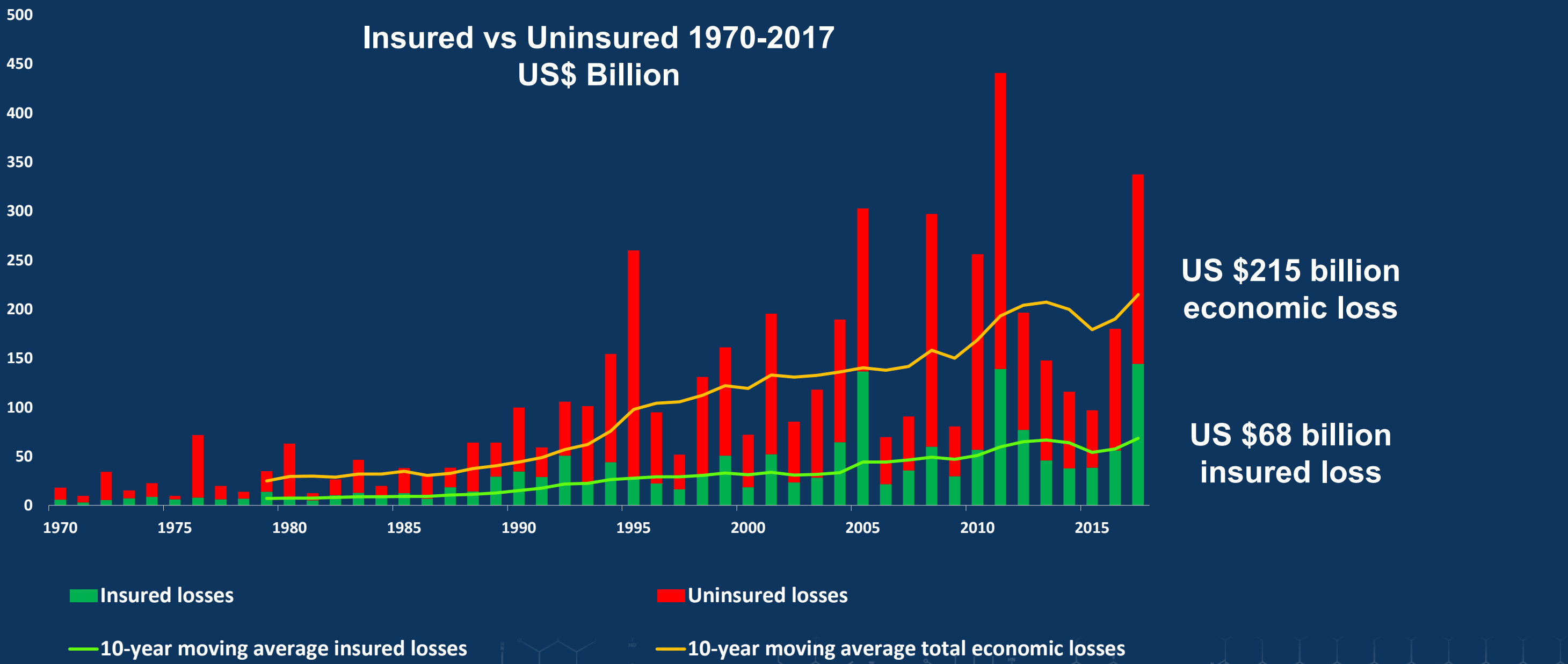
A tale of 2 competitors...



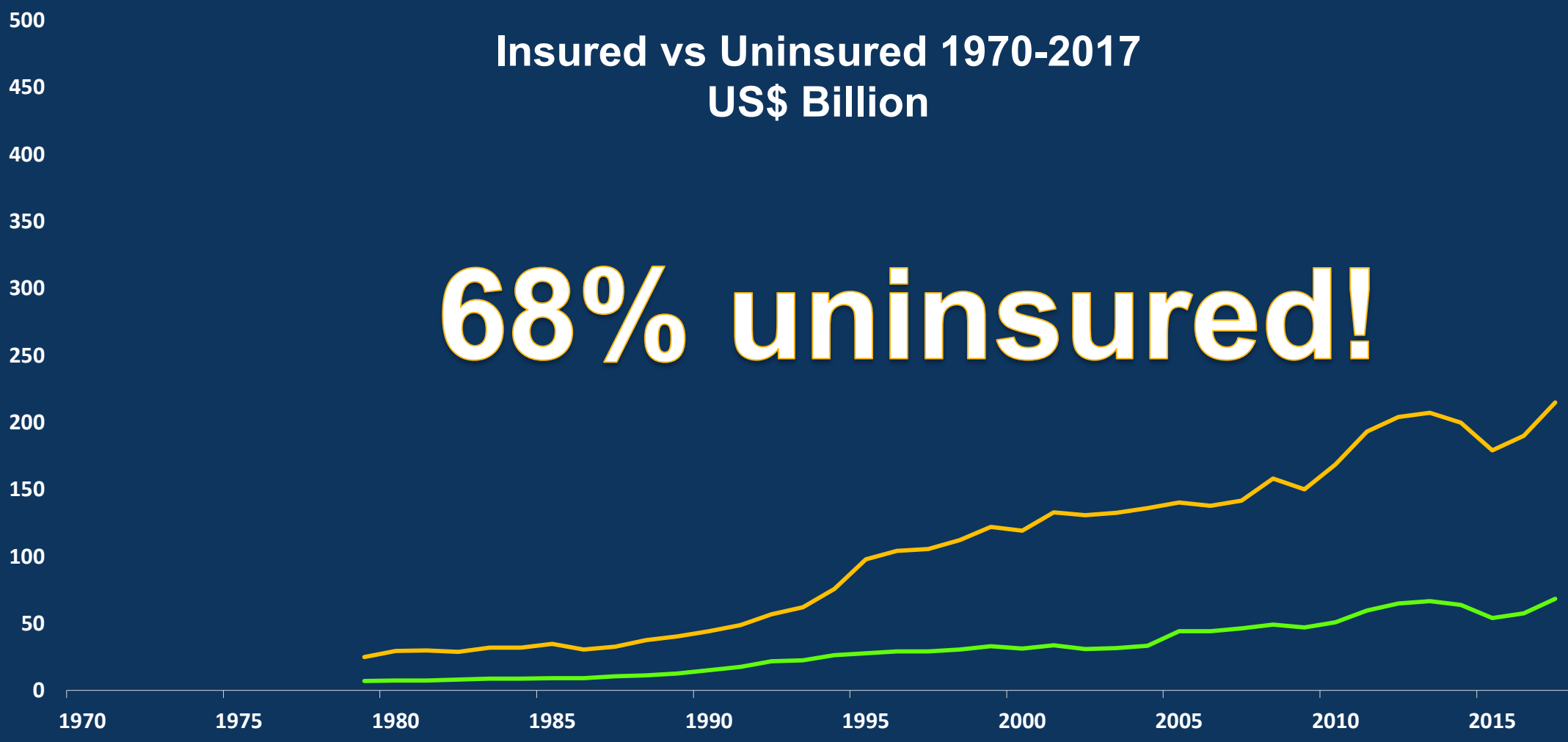
Company 1 potentially lost ~\$500M in Enterprise Value from this incident, due to:

- #1 - Lost market share
- #2 - Reduced growth
- #3 - 20% investor confidence impact one year later (increased beta/risk)

Insurance alone is not enough!



Insurance alone is not enough!



68% uninsured!

US \$215 billion economic loss



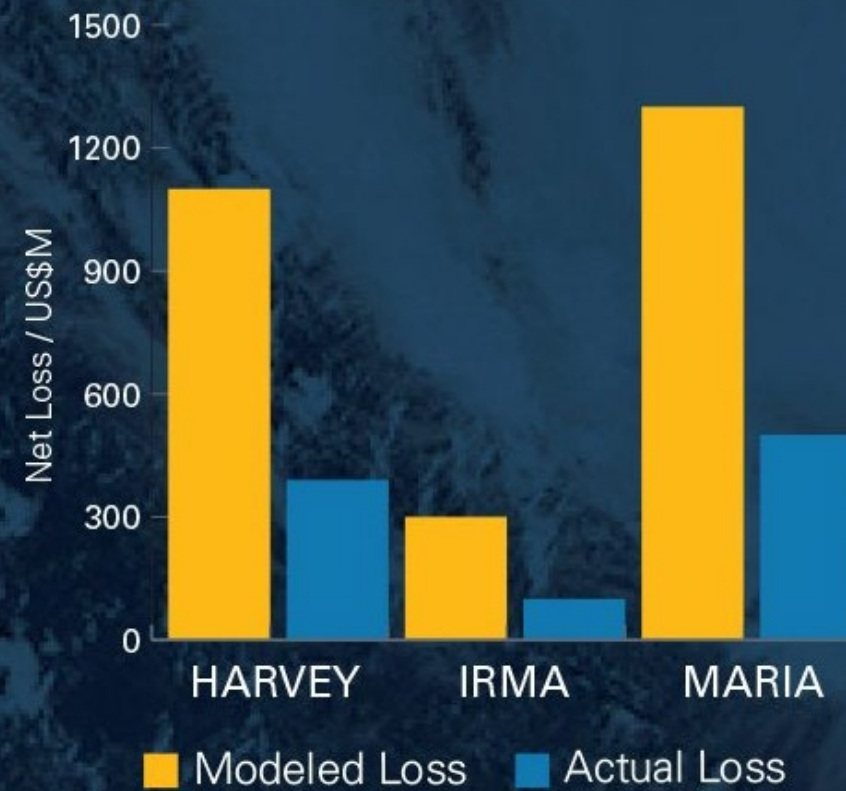
US \$68 billion insured loss

— 10-year moving average insured losses

— 10-year moving average total economic losses

3

HURRICANES



Protecting value through proven, cost-effective property risk management solutions based on scientific research.

SCIENCE



ENGINEERING

COST-EFFECTIVE LOSS PREVENTION



The fight for capital



- *Pursue growth opportunities*
- *Improve capital structure*
- *Reduce risk*

Loss Expectancy /
Maximum Foreseeable Loss
BI / PD
Insurable risk

Reputation
Market share
Growth opportunities
Investor confidence

*\$150M insured
loss estimate*



*\$1B of non-
transferrable
business value at risk*

A different conversation



A large iceberg floats in a blue ocean under a cloudy sky. The visible tip of the iceberg is small, while the vast, jagged base is submerged underwater, illustrating the concept of hidden or insurable losses.

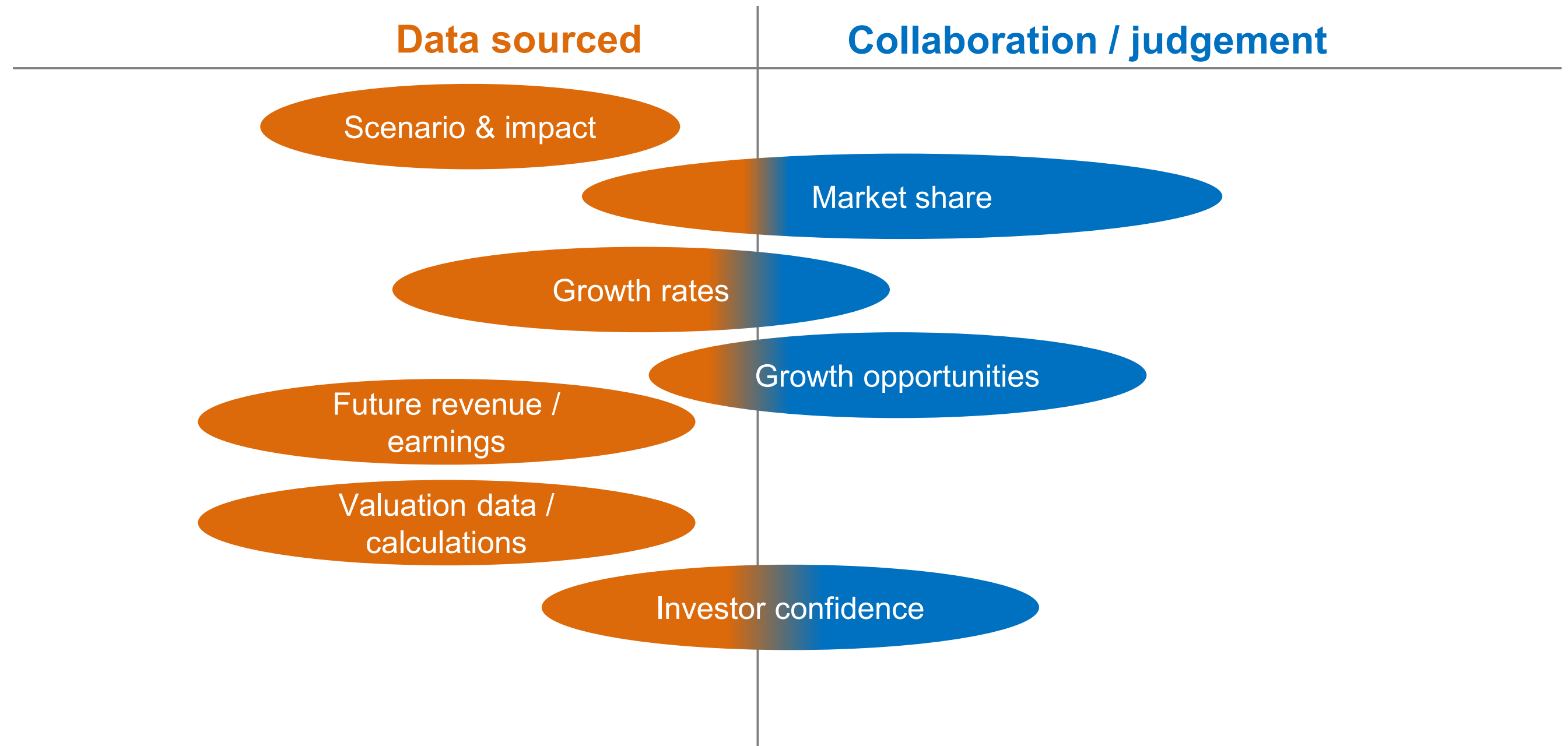
Traditional insurable loss calculations

1. Lost market share

2. Missed growth opportunities

3. Negative investor sentiment

Model data and assumptions



Example – manufacturing site

£2m risk
improvement
budget sought



- Max Foreseeable Loss = £206m (BI) + £162m (PD)
- High likelihood of loss (predisposed)
- Reference to longer-term impacts
- Insurable focus

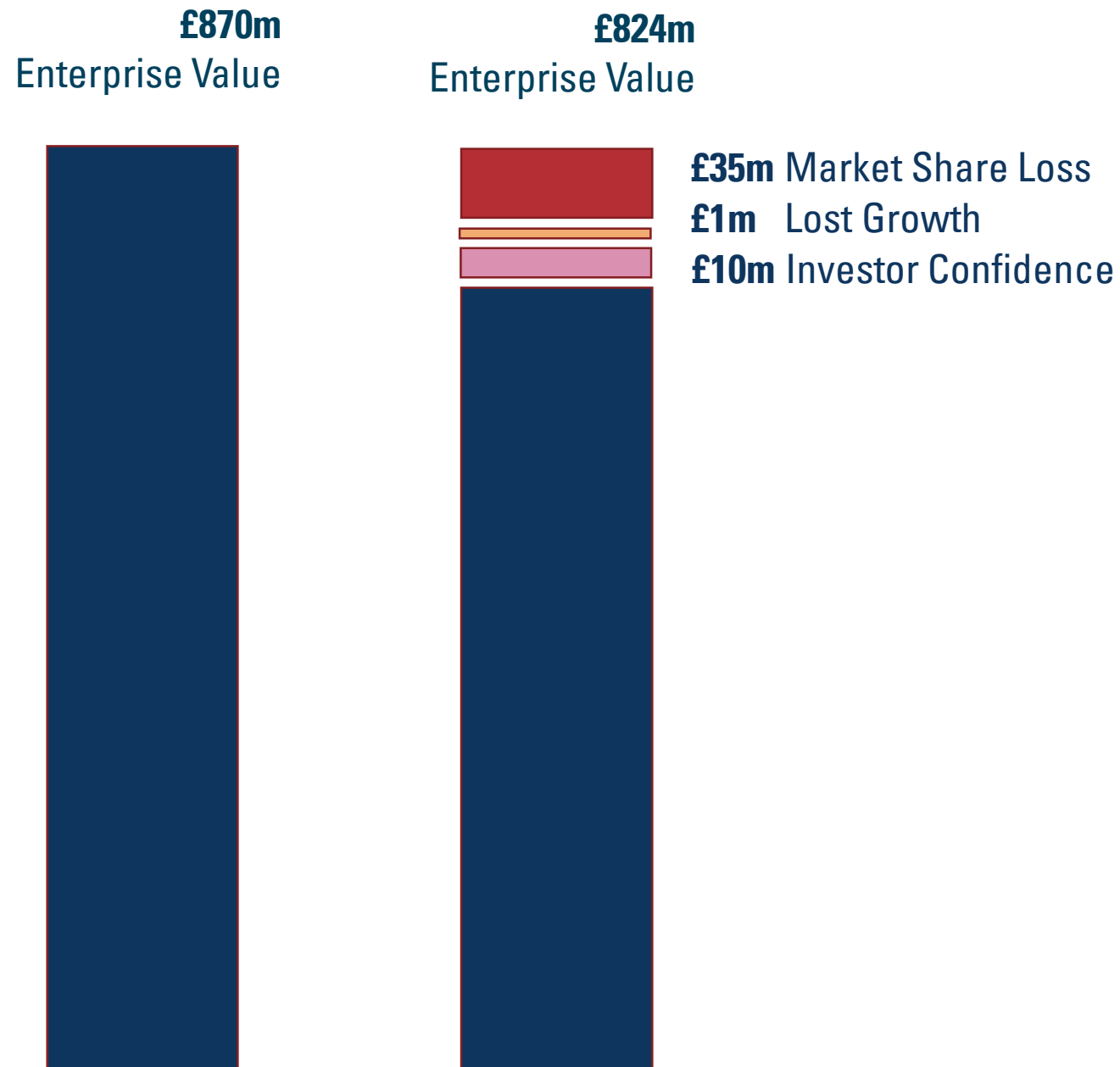
FM Global Risk Report

Engineering Loss Scenario

- **Revenue**
 - ~£250m revenue dependent on site
 - ~30% of total annual revenue
 - Higher margin branded products
- **Rebuild**
 - Fire represents key risk
 - Uncontrolled fire leads to complete destruction of site
 - 17 months to rebuild and restore production
 - No mitigation available



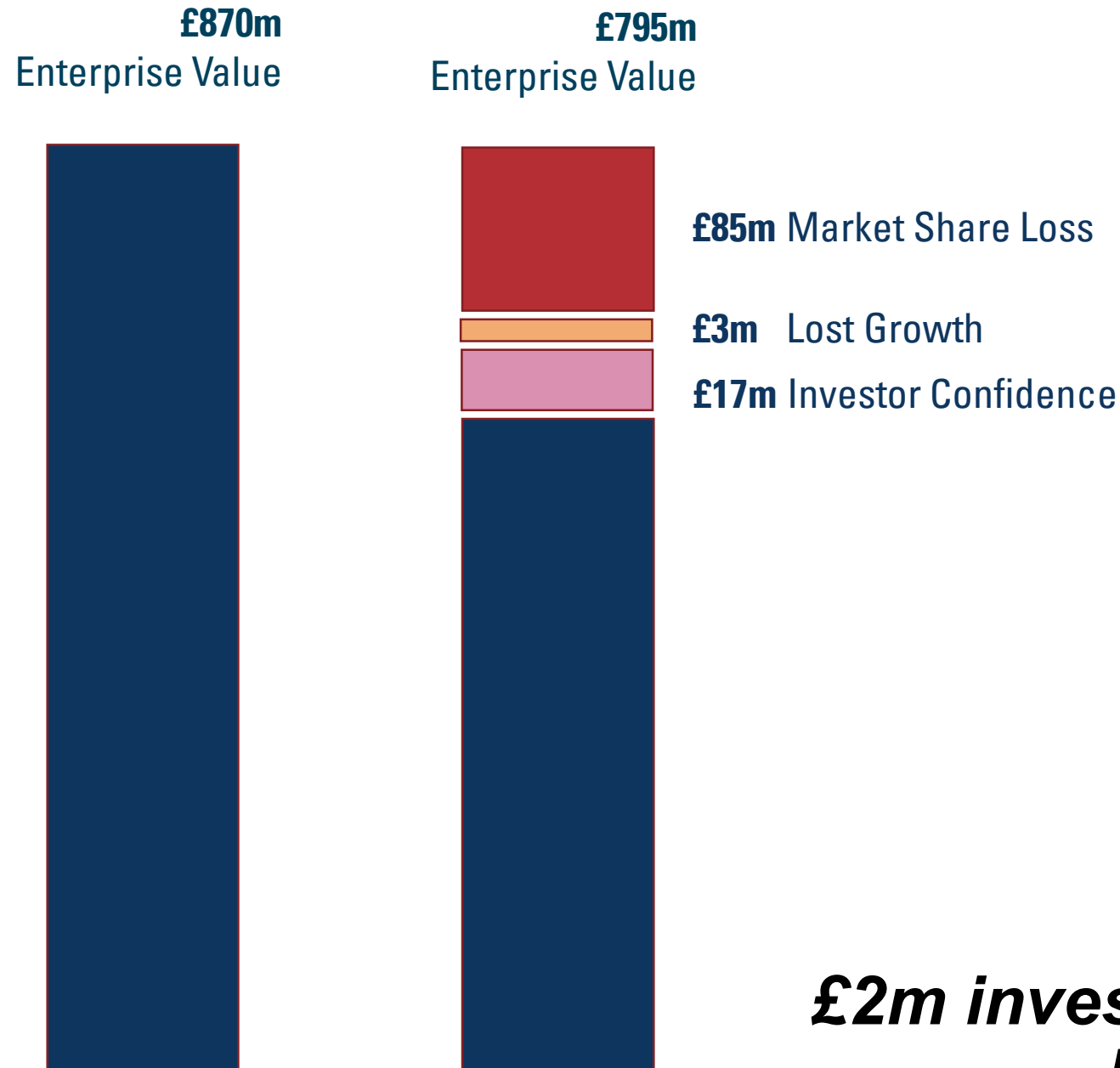
Manufacturing Fire – Impact on Enterprise Value



- **Low impact scenario**
 - Pre-loss revenue trajectory recaptured after 3 years
 - Uninsured impact -£46m to Enterprise Value
- **Enterprise Value**

↓ **5.3%**

Manufacturing Fire – Impact on Enterprise Value



- **High impact scenario**
 - Pre-loss revenue trajectory recaptured after 5 years
 - Uninsured impact -£105m to Enterprise Value

- **Enterprise Value**

↓ **12%**

£2m investment to protect up to £105m of Enterprise Value at risk

Feedback received



“This will help the business units make their case for risk improvement; goes a long way to answer the ROI question”

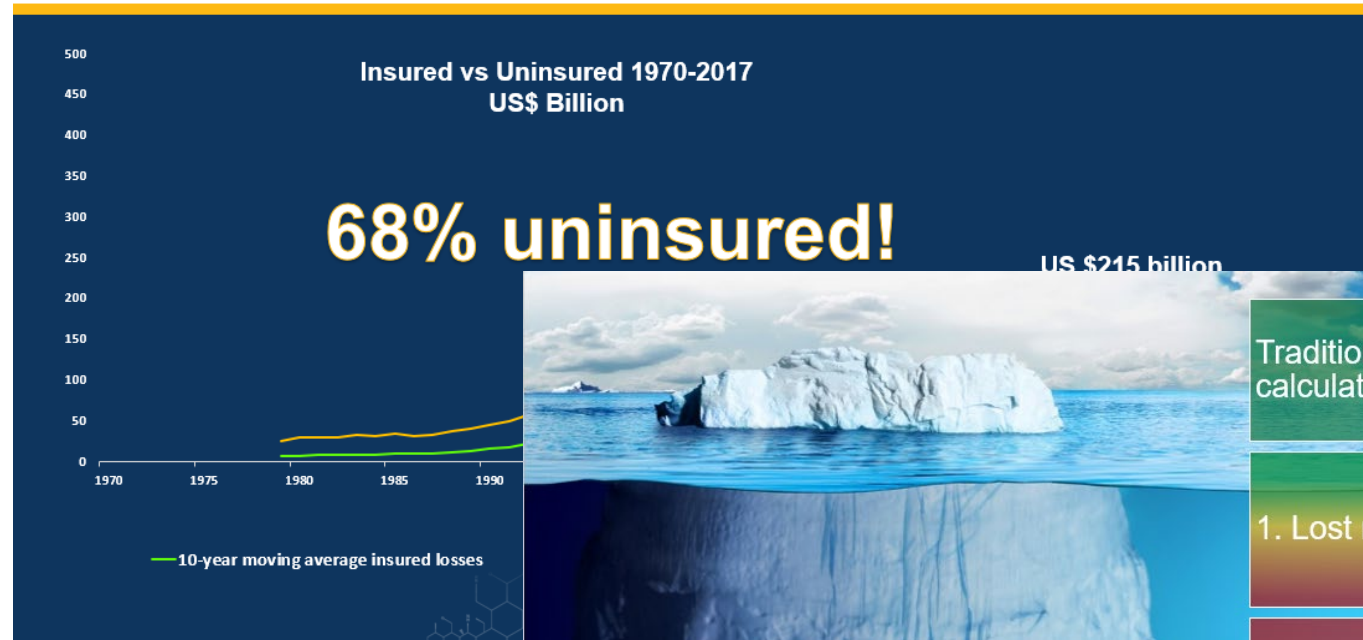
“The C-suite doesn’t always see the ROI in resilience efforts – this helps paint that picture”

“We have a similar group, but I’ve never seen anything like this...it’s very powerful”

“Impressive...really like the graphics and ability to peel back the numbers...plus the interactive capability. Great tool to help us communicate to the leadership team”

Total Financial Loss Model

Insurance alone is not enough!



Thank you

Questions?