Operational risk measurement: At the crossroads



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2018 Operational Risk Research Conference Federal Reserve Bank of Richmond Charlotte, NC July 24, 2018



The seeds of the AMA's destruction were present at the start

A brief history of the AMA

99.9th percentile set as standard

Differences in implementation

Banks grapple with stability issues

Use test de-emphasized

Financial crisis "broke" LDA models

Complexity and lack of comparability

Standardized Approach



Moral of the story:

OpRisk measurement needs:

- An attainable measurement standard
- A practical connection to management

Will stress testing ultimately meet the same fate? Let's make sure we don't repeat the same mistakes



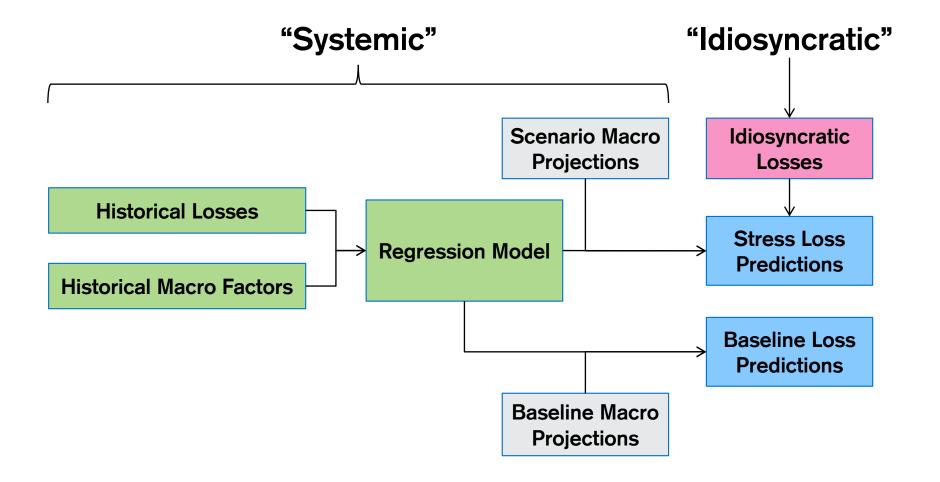
The promise of stress testing ...

- Different view of op risk measurement
- Based on a more forward-looking view
- Greater ability to respond to management
- Scenarios assessments more concrete

... and its challenges

- Not all banks see correlation w/ economy
- Thin data: only one financial crisis to date
- Hard to assess likelihood of scenarios

How do operational risk stress tests typically work?



Systemic and idiosyncratic losses are typically evaluated in fundamentally different ways

Systemic Losses	Idiosyncratic Losses
Fractional frequency predictions	Discrete 0 / 1 frequencies
Number and size of events determined by quantitative model	Number and size of events determined by standard of "adequate" stress
Can cover the full OpRisk taxonomy	Only cover selected event types
Used for "everyday" losses	Only for large, material losses

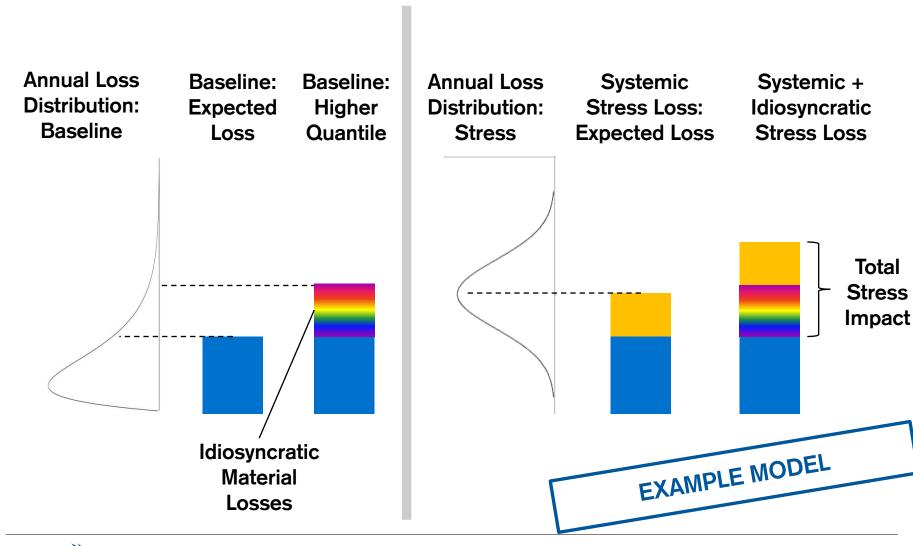
→ Are these elements compatible?

Today, idiosyncratic losses play the role of a capital measure, without a model or a measurement standard

- Idiosyncratic losses reduce comparability
- Idiosyncratic losses are not risk sensitive
- Idiosyncratic losses are not responsive to management



How can we reconcile systemic and idiosyncratic elements?



As we move from a Pillar 1 to a Pillar 2 world, we need to better connect models with managers



Both capital and stress test models are indispensable

- High quantiles under baseline conditions
- Conditional expected impacts under "what-if" scenarios

Models must provide useful information for managers

- Identify & prioritize top operational risks
- Develop exposure-based models for top operational risks
- Derive insight into key risk drivers
- Risk mitigants such as insurance should be included



Banks cannot build models on the basis of internal data alone. More industry-wide research is needed



Better understand links with systemic factors

Need to react more quickly to emerging risks

Pool insight into risk drivers as exposure models are developed

Fundamental research into capital models still needed

Let's get rid of the bathwater, but keep the baby

Quantitative models are still fundamental to operational risk management

Qualitative inputs are needed to be forward-looking and connect with management



OpRisk models could not survive with unattainable measurement standards.

They also cannot survive without standards

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