

#### Common ERM obstacles

- Lack of decision maker buy-in
- Inability to inform decision making

## Cause: Suboptimal elements of ERM program

2

- ERM framework
- Qualitative risk assessment
- ERM models
- Risk scenario development
- Individual risk exposures
- Enterprise risk exposure
- Risk appetite statement
- Risk disclosures to board

#### ERM framework: Define risk holistically

- Often, risk is defined only as extreme capital decrease  $\rightarrow$  Disconnect with strategic plan, incentives, and decision making
- Better to define risk as:
  - Anything causing deviation from strategic plan CFs
    - Links to incentives → buy-in o Captures all impacts
  - o Satisfies ORSA requirement to link ERM and strategic plan - Both upside and downside volatility (full range of scenarios)
  - o Supports decision making with risk-reward information
  - o Satisfies ORSA requirement to integrate ERM into decisions

4

5

#### **QRA: Broad and diverse inclusion**

- Often, QRA participation is limited → Incomplete key risk list / poorer risk culture / lack of buy-in
- Better if enterprise-wide (corporate and businesses) and mix of levels (executives, lieutenants, mid-level-leaders) - Captures all types of risk: strategic, operational, financial, insur.
  - o Case: Broad input resulted in broad range of identified risks - Satisfies ORSA requirement to capture all material/relevant risks
  - Enhances risk culture and buy-in
- Case:
  - Risk is now a part of everyday dialogue/decision making
  - Executives embraced this, seek inclusion in these processes

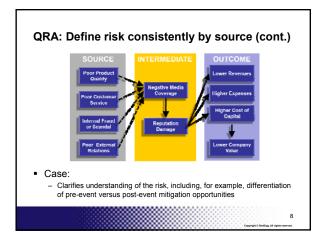
#### **QRA:** Guided interviews Guided Interviews Templates Damaged: Impersonal, Enhanced: Respectful, Relationships delegated assignment collaborative effort Level of effort Inconsistent Consistent Low; written guidance often High; interactive live Quality unread or misunderstood guidance Case: - Convey key messages to secure buy-in, re-direct mistaken impressions Build relationships Enhances risk culture Solidifies risk vocabulary 6

## QRA: Define risk consistently by source

- Risks often defined by outcome or intermediate outcome

   Reputation risk
  - Ratings downgrade
  - Decrease in profitability
- Results in problems
  - Participants scoring different risk sources  $\rightarrow$  unusable results
  - − Incomplete risk scenario  $\rightarrow$  underestimate impact
  - Lack of connection to real world  $\rightarrow$  not credible  $\rightarrow$  lack of buy-in

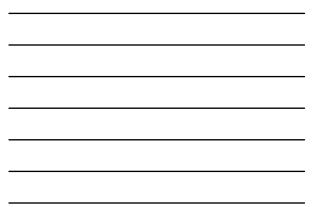
- Imperative to define risks consistently by source
  - Consistent scoring
  - Complete and credible scenarios



	Common Practice	Best Practice
Bisk Seeneria	None: Armageddon? Most-likely scenario?	<ul> <li>Define a single credible worst-case scenario</li> </ul>
Guidance	<ul> <li>Participants all scoring different risk scenarios</li> </ul>	<ul> <li>Participants all reacting to identical risk scenario</li> </ul>
Risk Scenario Guidance Most-likely s •Participants		



	Complex	Practical
Model risk	High	Low
Response time	Slow	Fast
Transparency	Low	High
models gain more rts ORSA requirement ance of transparency in of "what-if" modeling a	to integrate ER	M into decisio



#### **Risk scenario development: Deterministic**

Stochastic scenarios often directly input into ERM model

- Better to develop deterministic scenarios based on all available info (including stochastic):
  - 1. Leverages your smart people's knowledge/judgment (article) o Case: Credibility
  - 2. More dynamic (also satisfies ORSA's "dynamic" requirement)

  - 4. Fewer errors/bias via documentation/sharing (cases: hurricane reinsurance, direct marketing costs, Operation Eagle Claw)
  - 5. Enhances risk culture: Engages more people in the process o Case: Connecting with business units / Socializing baseline

11

#### Risk scenario development: Value-based

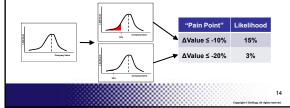
- Capital-centric and other extreme downside-only ERM frameworks often fail to generate buy-in
   Not connected to day-to-day concerns of the business
- Value-based approach engages people by addressing what they care most about:
  - "What obstacles do we have to achieving Plan?"
  - "How might we exceed Plan?"
  - "How can this process help me achieve my goals?"
  - "How can we make the business case for doing things we know needs to be done?"
- Case: "Stealth" buy-in





# Enterprise risk exposure: Quantitative

- Often, enterprise risk exposure is not a fully quantitative expression including all sources of risk
   → Not representative of full volatility → proper actions unclear
- → Value-based approach allows full quantitative expression and translates into clear and understandable information



Enter	orise risk exposure: Quantitative (cont.)		study
	"Pain Point"	Likelihood	
	Decrease in company value of more than 10%	15%	
	Ratings downgrade – one level	7%	
	Falling short of Plan revenue growth by more than 200 basis points	11%	
	Falling short of Plan earnings by more than 2¢ per share	10%	
		Copyright 0 S	15



## Risk appetite statement: Quantitative

- Many risk appetite statements lack a hard quantitative expression of the limit on enterprise risk exposure
   Not representative of full volatility
   → Not actionable
- Value-based approach allows quantitative expression that can be directly compared to enterprise risk exposure
- Case: Rock star output

	incint.	Quantin	ative (co
PAIN POINTS		LIKELIHOOD	RISK APPETITE
ΔValue			
Increase of at least	0%	32.5%	
Decrease of at least	-10%	36.3%	
Decrease of at least	-20%	13.8%	20%
Decrease of at least	-30%	2.0%	
ΔGrowth (5-Yr Prem CAGF	t, bps)		
Increase of at least	0	29.5%	
Decrease of at least	100	46.1%	
Decrease of at least	200	26.9%	
ΔCapital (5-Yr Calls on Par	ent, \$M)		
Not more than	0	55.2%	
Equal to or greater than	50	24.5%	
Equal to or greater than	100	13.3%	20%
Equal to or greater than	150	2.9%	

#### Risk disclosures to board: Understandable

- Often, board disclosures are abstract (lack of connection to strategy, esoteric math, etc.) and incomplete (not all risks included or quantified)
   → Board lacks full understanding of ERM program implications, including risk appetite, and strategy is not properly aligned
- Value-based approach clarity, practicality, and strategy connection engages and properly informs the board
- Case: Critical buy-in

18

# **Contact information**



Sim Segal, FSA, CERA President SimErgy Consulting Office: (646) 862-6134 Email: sim@simergy.com



Dave Raszeja, FSA, MAAA Chief Ethics & Risk Officer Penn Mutual Life Insurance Company Office: (215) 956-8814 Email: raszeja.dave@pennmutual.com