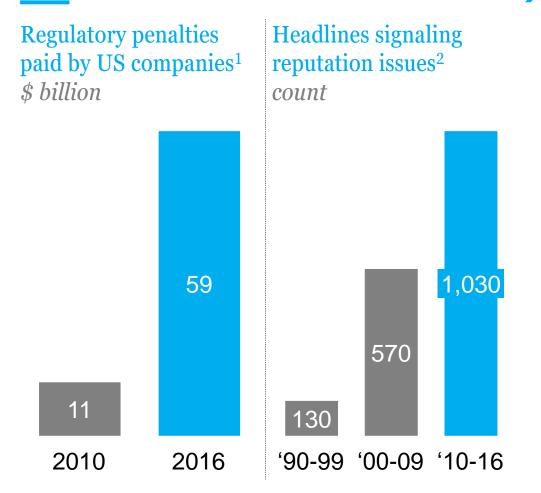


There has been a structural increase in impact & frequency of disruptions to corporations, as thriving in disequilibrium has become central to a securing a competitive edge

Structural increase in impact & frequency of disruptions to corporations



Thriving in disequilibrium has become central to securing a competitive edge today

Greater business complexity

Businesses are more complex, driven by greater digitization, globalization & concentration E.g. -



e.g., Ford F150: 150M lines of code

speed of business Trends go viral overnight, prompting faster shifts in customer behavior & faster response times



e.g., product development 60% faster

Changing stakeholder expectations

Stakeholders expect companies to do better, and are using new platforms to effect change

e.g., Google employee walkout

Furthermore, multiple media reports indicate an increased likelihood of a recession...





THE WALL STREET JOURNAL.

Economists Think the Next U.S. Recession Could Begin in 2020

 $Majority\ of\ forecasters\ surveyed\ by\ WSJ\ predict\ the\ current\ expansion\ will\ end\ only\ after\ setting\ a\ record\ for\ longevity$

The New York Times

How the Next Downturn Will Surprise Us

In their campaign to contain the risks that caused the Great Recession, central bankers may have planted the seeds for the next global economic crisis.

We are due a recession in 2020 - and we will lack the tools to fight it Conditions will soon be ripe for a financial crisis, but governments will have their hands tied

Moody's

Global Macro Outlook: 2018-19 (August 2018 Update)

Growth will remain solid in the near term, but early indications suggest it has peaked

Global Macro Outlook: 2019-20

Global growth to decelerate amid tightening global liquidity and elevated trade tensions

The New Hork Times

What Will Cause the Next Recession? A Look at the 3 Most Likely Possibilities

The expansion is nine years old. An ill-timed end of fiscal stimulus, a corporate debt bubble and the trade war are the things that could most easily end it.



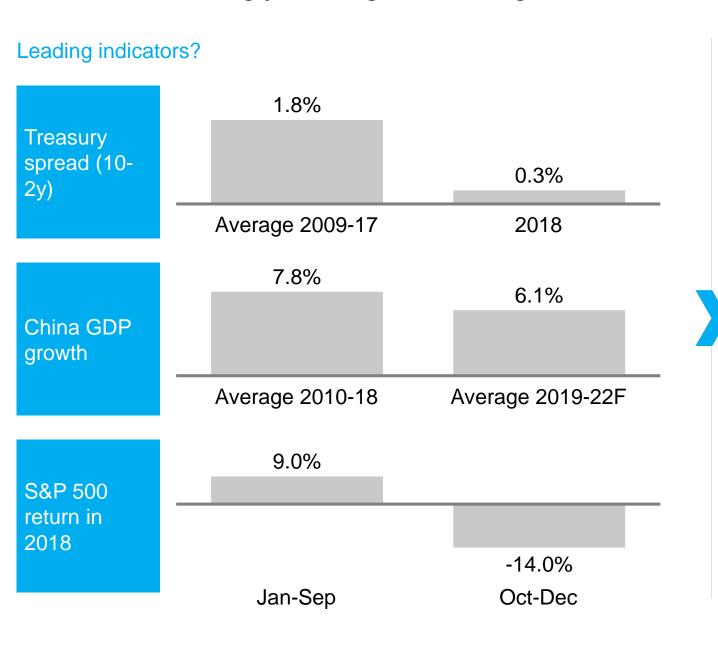
Forbes

Early Recession Warnings Are Flashing Red Orange

SOURCE: Press searches

McKinsey & Company 3

...with some flashing yellow signs indicating that a slowdown in economic growth might be approaching



Early movements?



FINANCIAL TIMES

Apple cuts sales forecast on China weakness



The New Hork Times

G.M. to Idle Plants and Cut Thousands of Jobs as Sales Slow



THE BALTIMORE SUN

Stanley Black & Decker to reduce costs because of 'headwinds'

While companies are working to adapt to this reality, a sense of underpreparedness persists

Too many potential disruptions to track and make sense of

I don't have the tools to know if my company is in a crisis before I read it on the front page of the Journal.

Disruptions evolve faster than the company's ability to orient

Harsh agendas. 500 page pre-reads. Meetings that give little time for deep discussion.

Evidence for a major disruption takes time to build; by the time evidence is clear, its too late Executives are successful by responding to facts, not because they raise red flags based on hypotheses. Tough to be proactive.

There is an inherent optimism bias within Boards and executive teams

Boards like talking about opportunities, not risks. The person who hammers on risk is the person who loses their seat.

SOURCE: McKinsey Resilience Advisory Council McKinsey & Company 5

Some key questions can help to assess company resilience



- Is there any macroeconomic scenario, foreseeable geopolitical threat that could affect significantly the business? Are you confident in your ability to respond to it?
- Do any trends in society (e.g., demographics) or industry (e.g., technology, regulation) today may disrupt your business model? Does your team have a plan to react to it?
- Could the company face major strategic or financial choices in the next 5 years that will require reallocation of >25% of employees and/or capital? Do you have a plan for this?



Ability to identify mitigation actions

- Does the company have an enterprise risk approach to avoid the top potential threats and identify proactive actions, also employing stress test and surface its own biases?
- Has the company historically been able to transition to a top down "command and control" model to manage fast-moving situations quickly?



Ability to implement defined plans

- Does the company have the required resources to implement transformations needed to mitigate threats?
- Is the company able to execute the decisions of its executive team quickly and thoroughly, or is there an "execution gap" that makes it tough to match strategic aspirations to on the ground change?
- Does the company have a crisis response framework to ensure clear roles/responsibilities of each function and to make sure to react quickly?

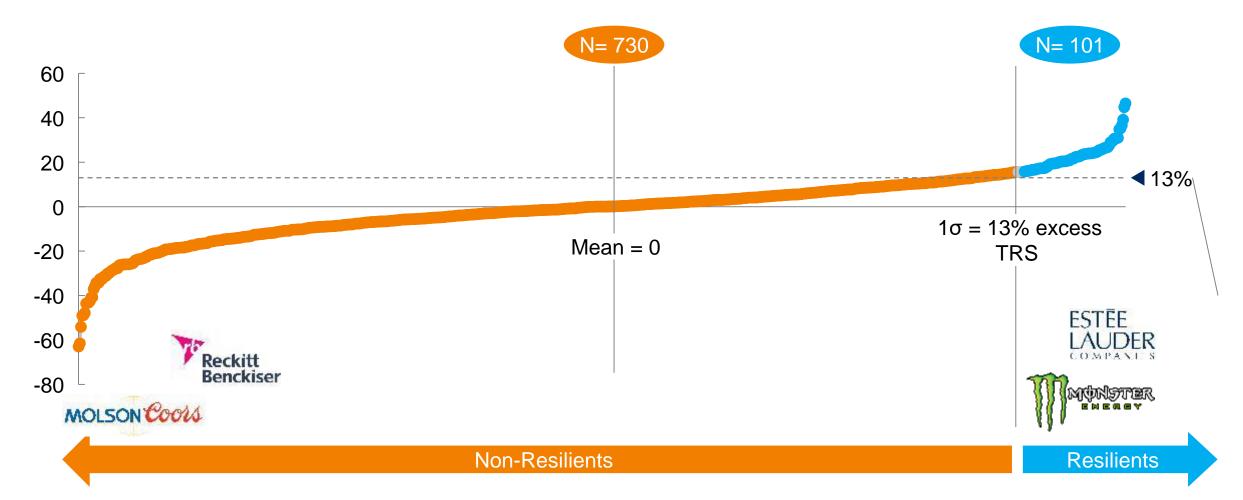
How can companies manage to be resilient?



Even during the latest economic crisis, some resilient companies flourished

Long term excess TRS1, CAGR 2007-11, percent; N=831

Power curve

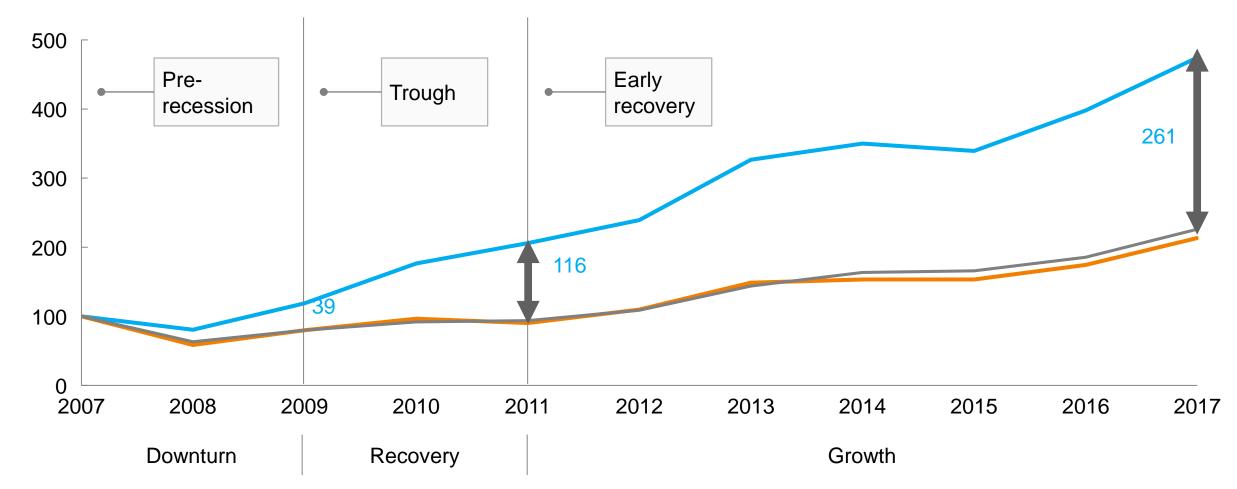


1 TRS above industry median

Resilients² Non-Resilients S&P 500

Dec 2007 Indexed to 100

TRS performance1



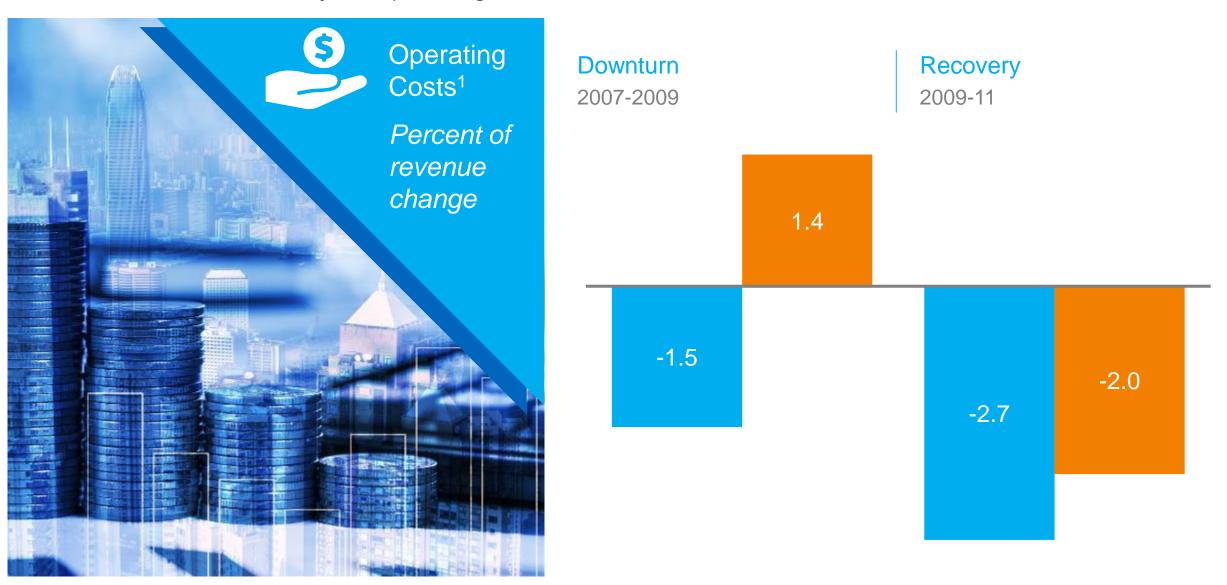
¹ Calculated as median performance of 'Resilients' and non-'Resilients' respectively

SOURCE: CPAnalytics; McKinsey analysis

McKinsey & Company 9

² Resilient companies defined as companies with excess-TRS (vs. Industry Median) 1σ from the mean





Note: Calculated as Median of "Resilients" and non-"Resilients" companies across different sub-sectors. For non-financial corporations only 1 Sum of COGS and SG&A as % of revenues

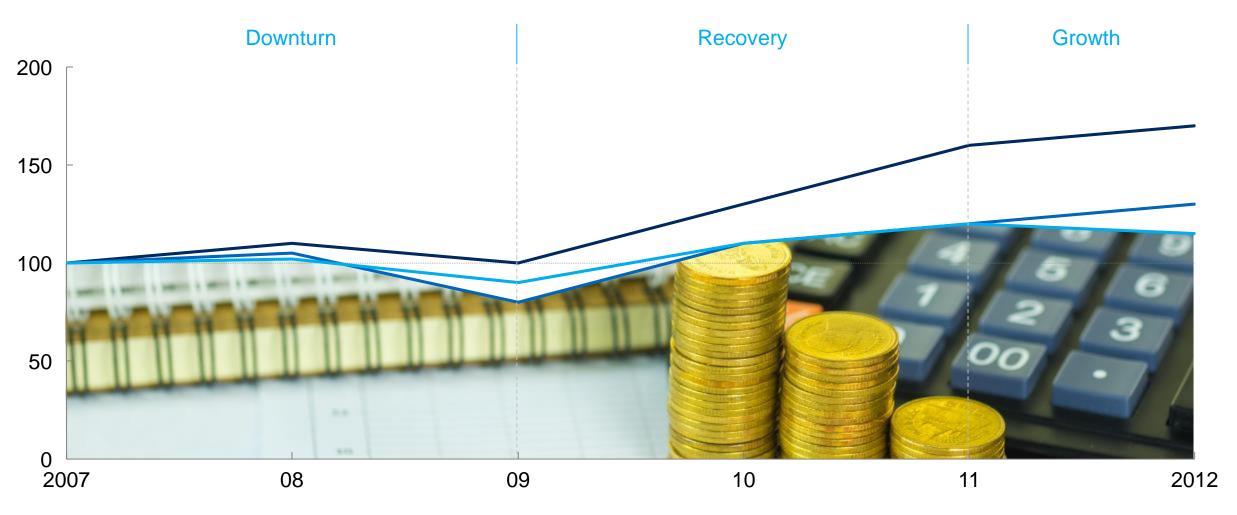
Resilients

Non-Resilients

... which was critical to driving sustained EBITDA improvement even while revenues were falling

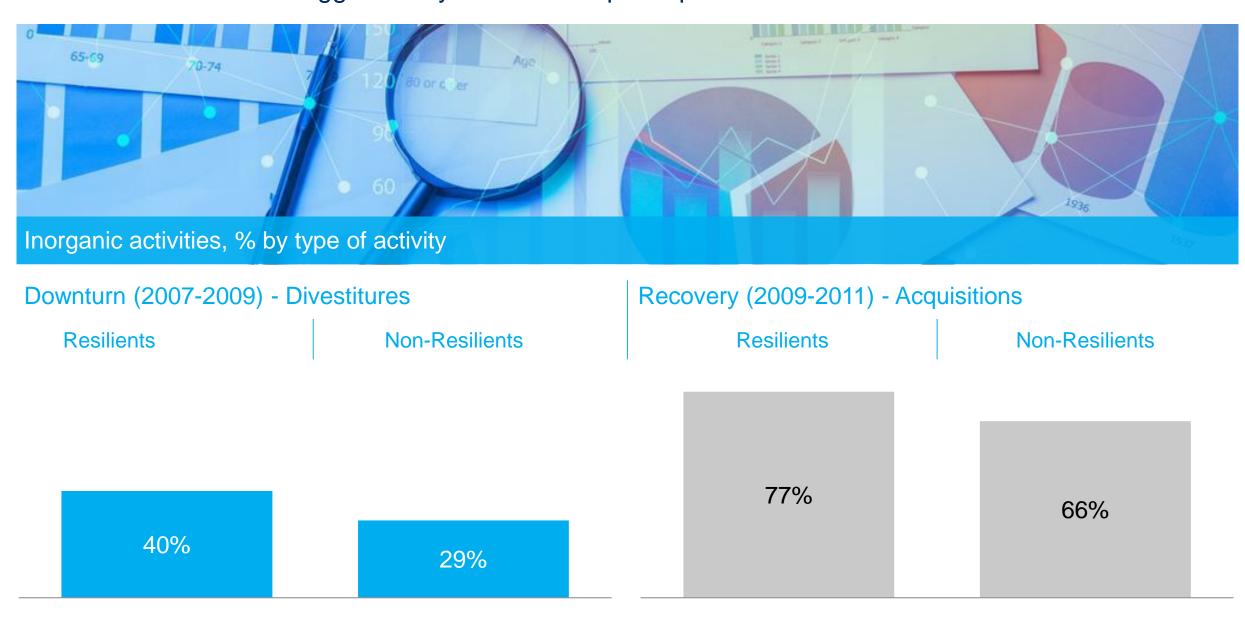
Indexed to 100 (Dec 2007) Non-Resilient EBITDA --- Resilient Revenues Resilient EBITDA

P&L evolution



Note: For non-financial corporations only

#2 "Resilients" divested aggressively and then acquired post-downturn



SOURCE: CP Analytics, Capital IQ, McKinsey analysis

#3 "Resilients" prepared their balance sheets ahead of the downturn



Note: Calculated as Median of "Resilients" and non-"Resilients" companies across different sub-sectors. For non-financial corporations only

SOURCE: CP Analytics, Capital IQ, McKinsey analysis

Resilients

Non-Resilients

How can Resilience be achieved?



Resilience management goes beyond traditional risk management, adopting a more holistic approach to ensure quick risk identification and reaction

From...

To...

Fragmented risk landscape providing limited insight into existential threats



Deep sensing of relevant opportunities and threats

Limited assessment of relevant threats or use of simple, univariate models



Integrated model to assess the total value at stake

Reactive decision making



Proactive bold decisions

Siloed and rigid structures



Agile and adaptable setup for action

SOURCE: Source McKinsey & Company 15

Corporate Resilience can be improved leveraging a 3 phase approach

Phase 1

Diagnostic -**Exposure & Potential**



- Assess exposures, i.e.
 - (Macro-economic) scenario definition
 - Impact assessment/stress testing of balance sheet positions (costs, cash, leverage, etc.)
- Define "full resilience potential" of improvements top-down
- Derive most relevant elements of the playbook, focusing on:
 - Operational and Commercial improvements (digital and technology, organizational health, talent upskilling)
 - Portfolio optimization (value and growth)

Phase 2

Resilience planning and initiatives



- Design improvement initiatives "bottom up" along
 - Prioritized elements of playbook
 - Largest areas for improvement potential
- Define leading indicators & triggers to sequence initiatives
- Create implementation plan, with
 - No regrets moves
 - Key milestones and decision points

Phase 3

Nerve-Center & Execution



- Set-up a Nerve-Center to act as an early warning indicatory and to trigger interventions
 - Monitoring /sensing leading indicators and thresholds
 - Mobilizing the organization and management team to launch initiatives
 - Tracking and reporting results / correcting course
- Stand up resilience governance
 - Decision making
 - Resource allocation
 - Communications

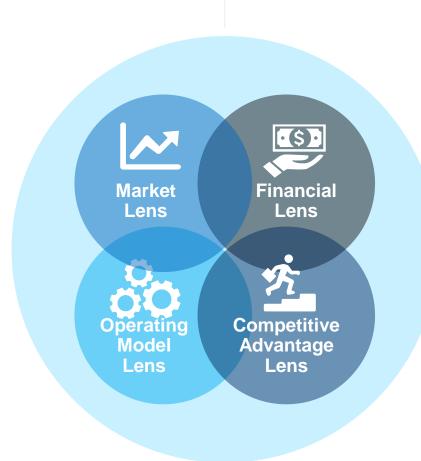
The first step is to diagnose exposure and potential...

What are the different market scenarios that could occur?

- Macro-economic scenarios
- Trends and disruptions (and implications in a downturn)
- Impact on industry profit pools and growth pockets in downturn

- Organization and talent to weather the storm and emerge stronger
- Operational processes and vendor health assessment (e.g., supply chain, procurement, sales, etc.)
- Performance management tailored to downturn

Is the organization set up to deliver?



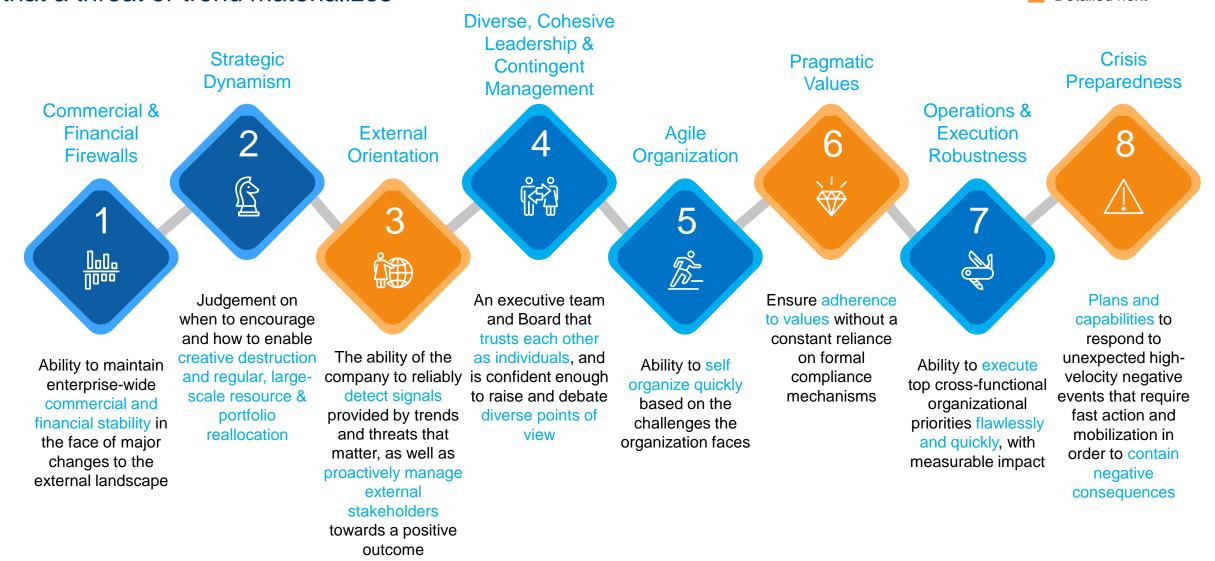
What is the financial strength of the company?

- Momentum case vs. investor expectations
- Impact of different macro-economic scenarios on the financials and text downturn exposure
- Strength of cash position /balance sheet
- Sources of cost and cash to build up financial resilience
- Position relative to competitors and likely winners in a downturn
- Ownership advantages in the portfolio
- Opportunistic moves (M&A, divestiture, organic) to strengthen the portfolio / capitalize on valuations

How could the company capitalize on strengths in a downturn?

Understanding exposures, trigger points and developing a tailored resilience playbook

...while the second and third phases aim to develop resilience assets to bounce back quickly in case that a threat or trend materializes



Examples of resilience assets



External Orientation

- Data-driven decision making
- Clear stakeholder management and communications
- Customer focus in external communications



Pragmatic Values

- Strong risk culture to foster internal challenging and admission of errors
- Responsibility and accountability for performance metrics across org. levels

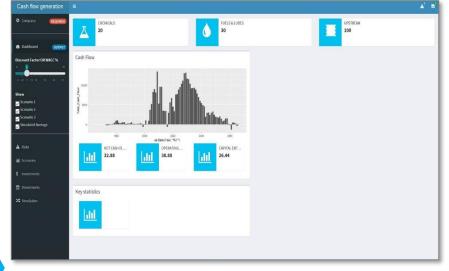


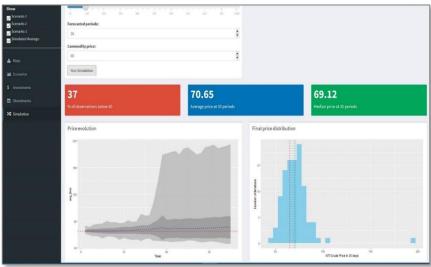
Crisis Preparedness

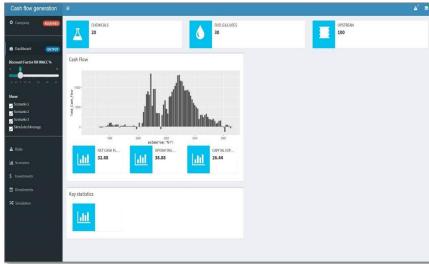
- **Business Continuity** Management processes/ crisis response toolkit in place
- Protocols/playbooks for worstcase scenarios
- Prevention of leaks (e.g., clear roles and responsibilities in access to confidential information)

Approach

- Created dataset consisting of internal data (performance of assets, terms) and external data (data on hypothetical additional assets; industry experience from various risk events)
- Created model with inputs projecting performance of individual assets under a range of macroeconomic scenarios
- Created module to model various risk events (e.g., large operational event; sanctions)
- Created module to model portfolio actions (divestments, investments)







3 External Orientation Example 2: Development of a Business Plan@Risk to support strategic planning activities

DISGUISED CLIENT EXAMPLE

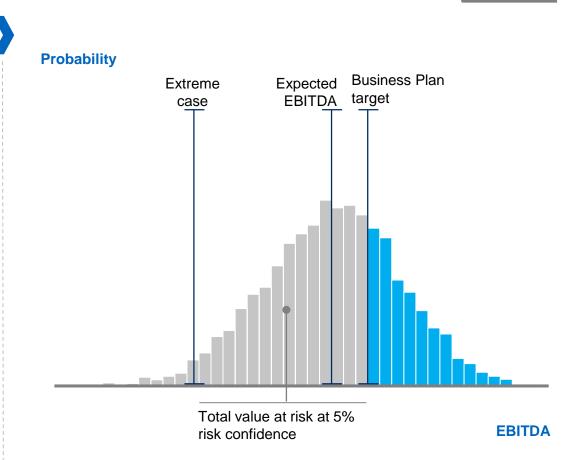
Approach followed

- Identification of main risk drivers associated with strategic plan initiatives,
- Application of Montecarlo simulation to assess likely result in case of uncertainty
- Analysis of the evolution of risk-adjusted economic variables (e.g., revenues, EBITDA) over time



Key achievements

- Identification of the likely evolution of financials over time
- Evaluation of the expected value at risk (in terms of Revenues, EBITDA, etc.) during each year on the time horizon
- Identification of remediation actions to mitigate the impact of key risks



SOURCE: Disguised client example McKinsey & Company 21

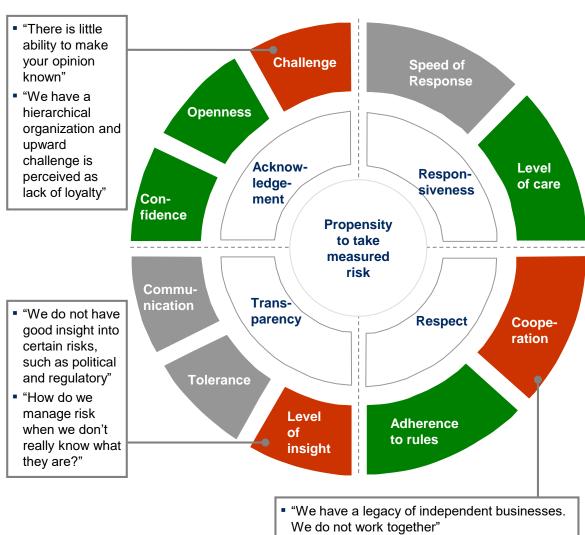


6 Pragmatic Values Example: Use of Risk Culture Diagnostic tool to identify key improvement actions

CLIENT EXAMPLE

Background

- Output sample
- **Assessment Bank's** risk culture through large scale Risk Culture Survey
- Survey administered to over 5,000 employees, across all business lines
- In-depth analysis carried out, with comparison with Global and North American benchmarks e



Example of improvement actions

Drive more mobility across BUs to create more collaboration

Adopt leadership trainings to encourage senior staff to seek and welcome challenge

Reinforce company values

Build risk analysis capabilities and provide training in country organizations

Encourage and celebrate innovative and creative approaches to risk management

Role model desired behaviour from the top and recognize in personal objectives

"The organization acts in a very siloed manner"

8 Crisis Preparedness

DISGUISED CLIENT EXAMPLE

Background



Example of end products

- **Definition of a holistic Crisis Management** framework for primary Infrastructure player in Southern Europe
- Key pillars:
 - **Dedicated** organizational structure (to be activated in case of crisis)
 - Crisis management dedicated process
 - **Tools and** resources (e.g., for External Communication)

