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Keeping E&C Risks and Rewards in Balance: A Primer on How to Support Our Clients over the Long Haul

**Delivered to the Rice Forum
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"It Was the Best of Times and It was the Worst of Times"

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- ⌘ Industrial Engineering and Construction Companies have rarely seen so many of our Markets growing simultaneously
- ⌘ Fluor is not unique, but as an example:
 - In 2004 Fluor booked over \$13 billion dollars in new awards
 - 2005 shows continued growth in most of our major markets including Oil and Gas, Power, Chemicals, Manufacturing, Infrastructure, Mining and Government
 - EPS has grown continuously for the last 5 full years

We have a Passion to Build
And lots of industrial facilities need to be built

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So how is it “the Worst of Times”?

- ⌘ Understandable efforts on the part of our clients to shift risk to contractors has resulted in:
 - A substantial number of contractors “disappearing” or being forced to live with challenged balance sheets.
- ⌘ Consolidation of clients has resulted in increased buying power and, at times, abuses of this power
- ⌘ At times our proud profession of Engineering and Construction has been reduced to begging to survive

The E&C Value Creation Equation

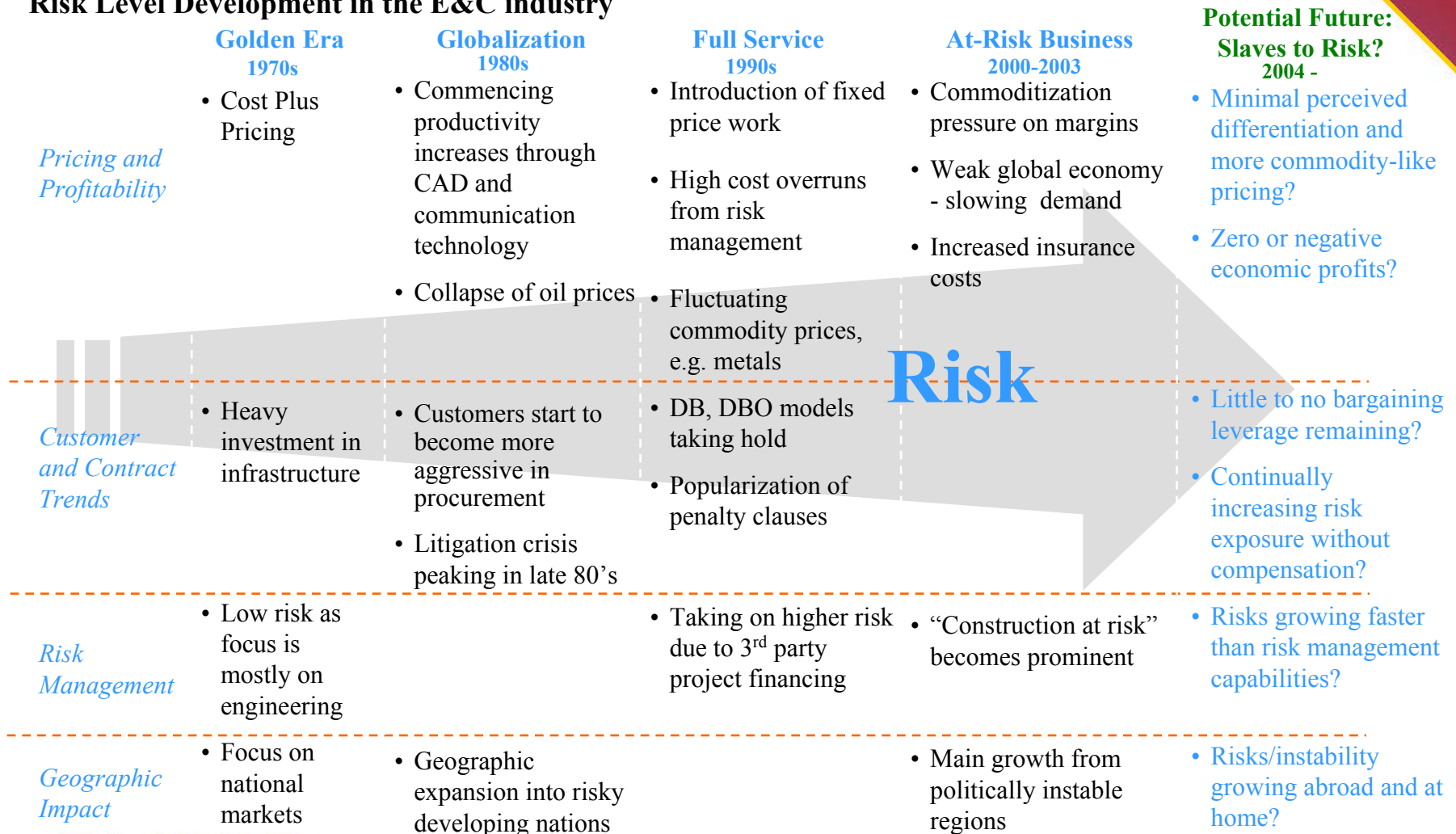
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- ⌘ To create value for our clients, Industrial E&C contractors have historically had a complicated equation to solve
 - Contractor Value = Budget + Schedule + Quality
- ⌘ This equation is uniquely challenging to solve because the variables that input to an E&C project change for every project that we do
 - We build each project in a new outdoor environment
 - We build each project with a new work force
 - We set up a new logistics support plan for each project
 - We build a prototype design on every project

Over the last three decades, the E&C industry has adopted riskier business models

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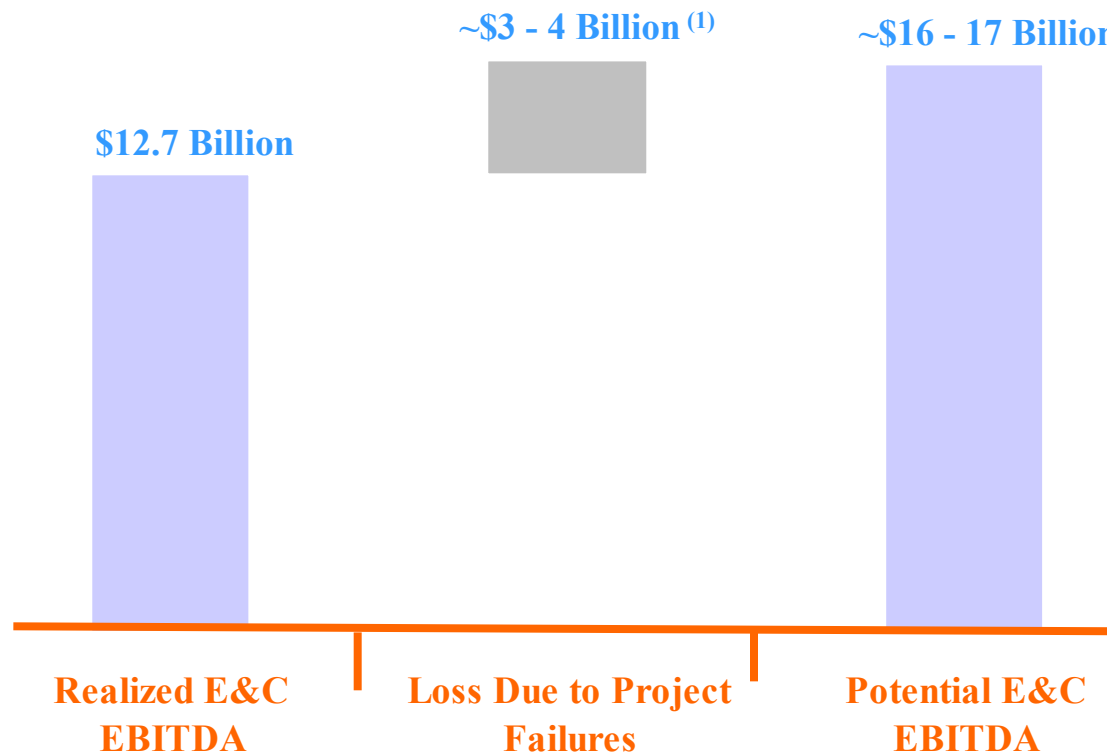
Risk Level Development in the E&C industry



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One of the first findings was that “Undermanaged” project risk alone is costing the E&C industry ~\$3 - 4 Billion annually in profits



Key Observations

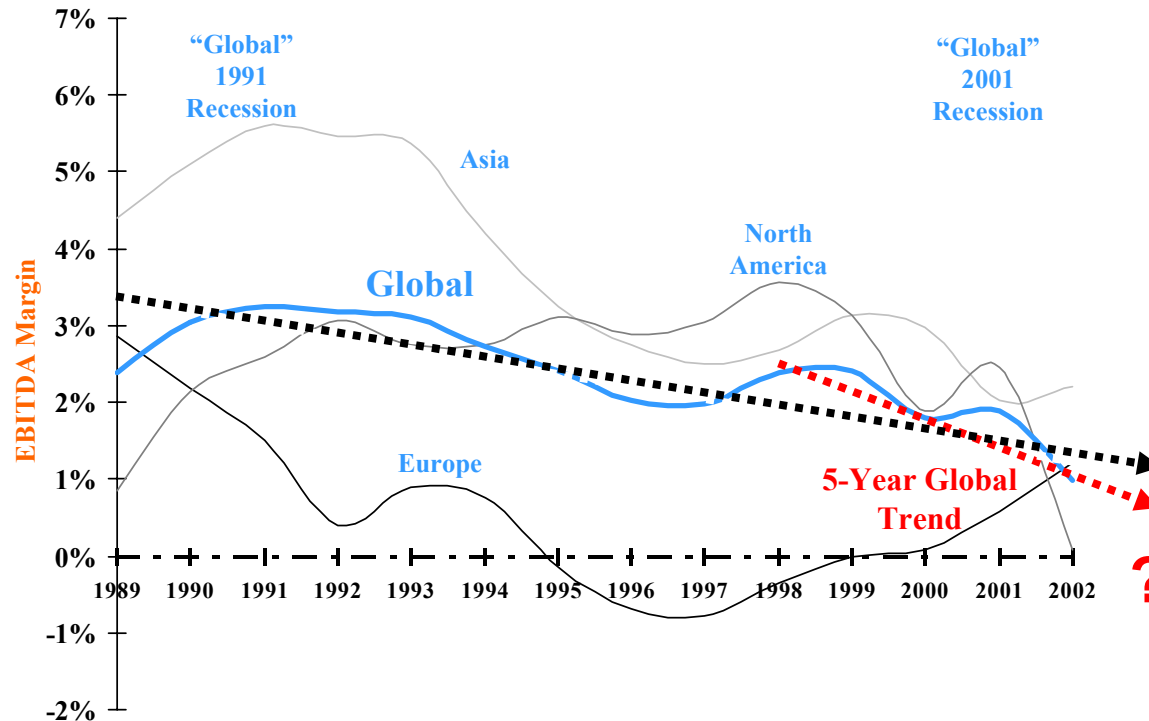
- \$200 – \$270 billion industry wide revenue would be needed to make up for lost profit
- Firms with better project management capabilities enjoy a significant advantage

Source: Datamonitor, Factset
Engineering News Record and industry expert estimates of project failure rates

Riskier business models have contributed to declining profitability, which has driven shareholder value destruction

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Global E&C Industry Profit Margin



Key Observations

- 60% EBITDA decline in 12 years
- Structural issue, not explained by "business cycles"
- Europe has improved (in the past five years), but came from negative territory
- Regions appear to be converging, reflecting globalization

Source: 1) Factset. Includes the 38 publicly traded companies in North America, Europe and Asia

Notes: 1) Profit margin is found by company's operating margin/net sales

2) Global trend is found from a composite of all companies weighted by market share

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So Isn't This a Trend that Benefits the Owners?

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NO!

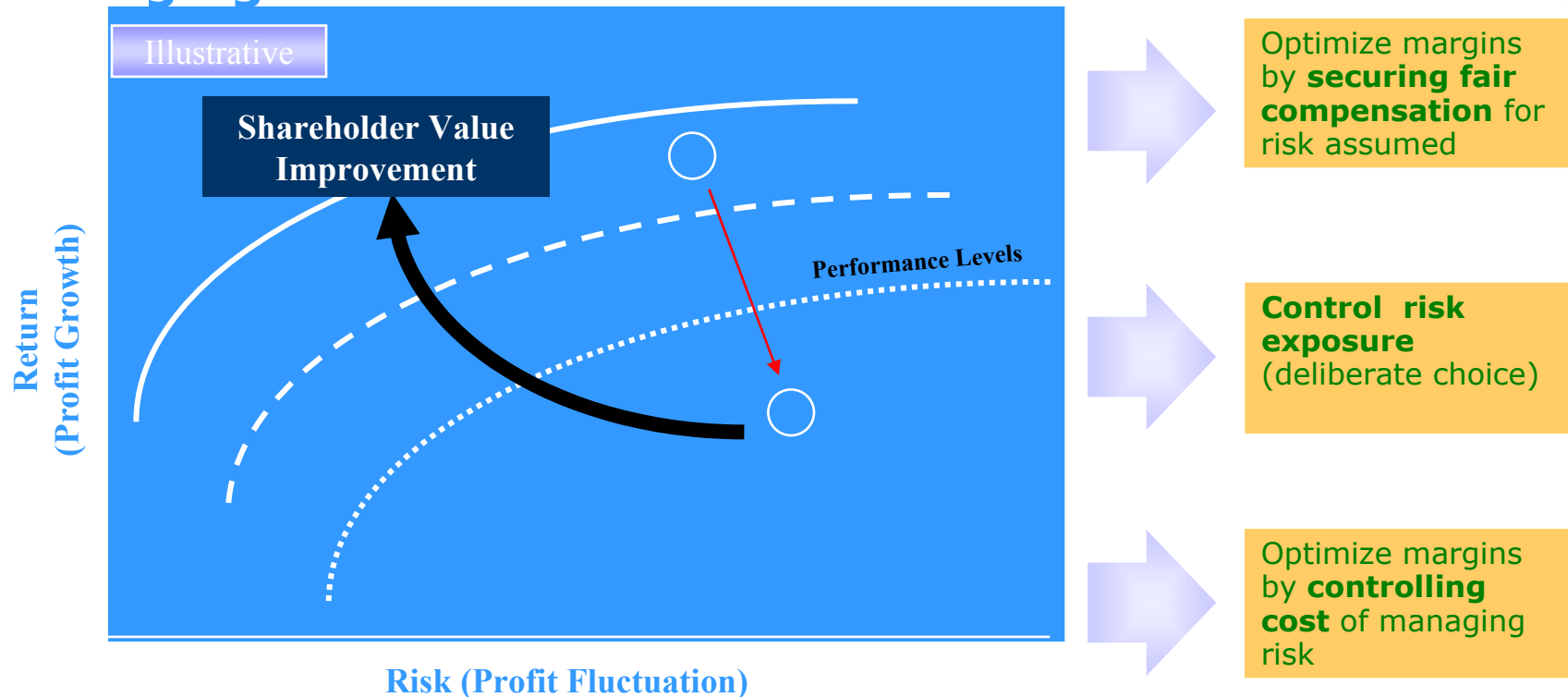
- ⌘ A contractor community that is not solvent will not keep its eye on performance
- ⌘ A contractor community that is not returning greater than the cost of capital to its investors will not attract capital to invest in new tools, training and all of the other items that will truly reduce the capital cost of facilities, improve their quality and increase the Owners ROI

In order to serve our clients well
the contractor community needs to be prosperous so that it can
invest in its core business
and continue to improve its ability to deliver capital projects that
solve the Contractor Value Equation

Thus, it became apparent that the imperative going forward should be - “Explicitly understand and include the cost of risk to manage risk profitably”

Improving Shareholder Value by Managing Risk and Return

Three Levers



Trading off risk and return, a typical investor either:

- **Maximizes return** at a chosen risk level or
- **Minimizes risk** at a chosen return level or
- **Optimizes both** in an iterative process

ECRI- An Industry Response to Ensure Superior Value Creation for Our Clients

- ⌘ The ECRI (Engineering and Construction Risk Institute) is a group 17 global E&C companies organized under the guidance of the World Economic Forum in Geneva, Switzerland.
- ⌘ ECRI's objective is to create better project outcomes by:
 - Better identifying, allocating and mitigating project related risks
 - Strengthening the analytical skills of the E&C industry so that the impact of risk assumption is better understood
 - Strengthening the E&C industries ability to Serve our Clients over the long term

Crystal Ball on the E&C Business

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- ⌘ The global economy needs a strong E&C community in order to efficiently turn capital expenditures into facilities that are built on budget, on schedule and with the quality and functionality required
- ⌘ To meet these needs the E&C community needs to learn quickly how to better evaluate, mitigate and be fairly compensated for the risks we assume.
- ⌘ This does not mean simply telling our clients “no” when they ask us to accept risk but instead evaluating the risk by using a defined process to find the best way to mitigate, allocate or cost the risk.

My crystal ball says that the opportunities to succeed in the future E&C business are great for those who can learn to manage and price risk.

Ultimately, these are the only firms that will still be standing and able to serve our clients.