Investigating the Boundary Conditions of CEO Core Self-Evaluation: A Two-Study Approach

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Under what conditions are dispositionally confident CEOs more likely to deliver favorable or unfavorable outcomes?

"The Bright Side"

- ***Decisional processes*** – Decide quickly, intuitively
- ***Strategic choices*** – Pursue more opportunities
- ***Strategic implementation*** – Can cope with adversity and challenges

"The Dark Side"

- ***Decisional processes*** – Decide with little consultation; ignore negative information
- ***Strategic choices*** – Riskier and more subjective opportunities
- ***Strategic implementation*** – Overestimate abilities; committed to select actions and ignore negative feedback

The bright and dark sides of confidence co-exist, and they must be considered as a composite whole when theorizing about performance effects.

We argue the **equilibrium of benefits and drawbacks** of confidence among executives is **conditional on the level of economic adversity** – and especially so when executives have the discretion to act in accordance with their predilections

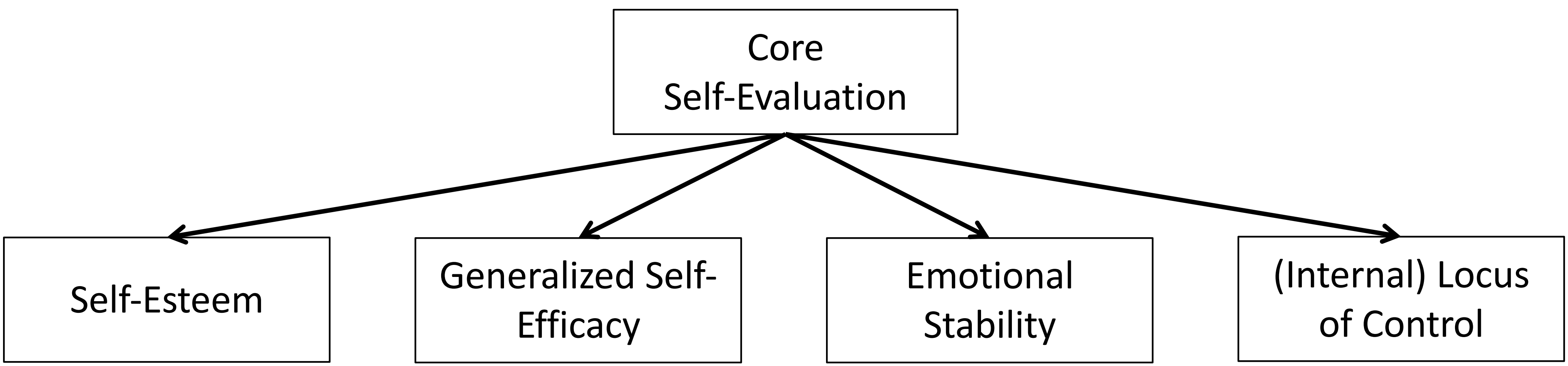
Thus, examining the range of economic adversity, from the top of a boom to the bottom of a bust, provides a starkly contrasting context in which to investigate the argument

Source: Factiva data extracted for empirical analysis.

Core self-evaluation provides a lens to examine executive dispositional confidence.

Core self-evaluation (CSE) describes how individuals evaluate themselves in relation to their environment and across situations (Judge, Locke & Durham, 1997; Judge & Bono, 2001)

- It is a “basic, fundamental appraisal of one’s worthiness, effectiveness, and capability as a person” and provides a measure of dispositional confidence (Judge, Erez, Bono, & Thoersen, 2003; Hiller & Hambrick, 2005)



In short, our claim is that confidence is of greatest benefit when it drives calculated risks that can pay off; risk taking in weak economic conditions is likely mal-adaptive.

Hypothesis 1: As economic growth gives way to adversity, the positive relationship between CEO CSE and firm performance will weaken.

Hypothesis 2: The greater the level of a firm's resource availability, the more strongly positive the association between CEO CSE and firm performance.

Hypothesis 3: CEO CSE is most strongly positively associated with firm performance when strong economic growth is accompanied with high resource availability.

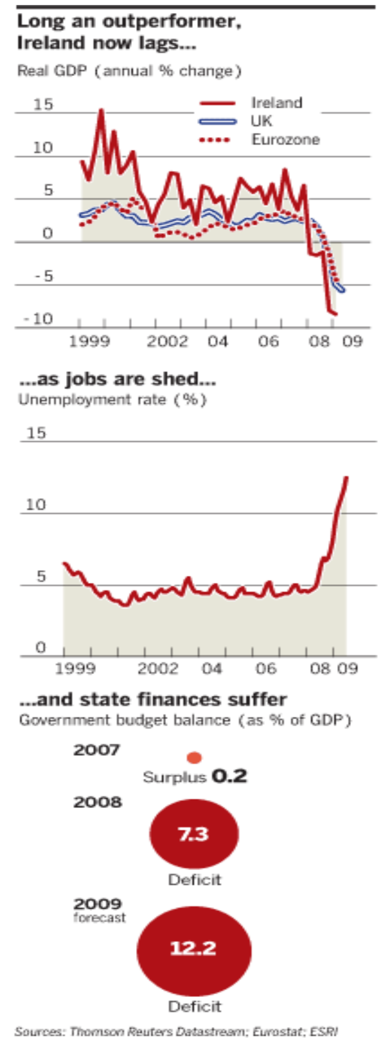
Our first study is a mixed methods survey / field design situated in Ireland during the period from 2005 – 2009.

Varying macro-economic conditions in Ireland.

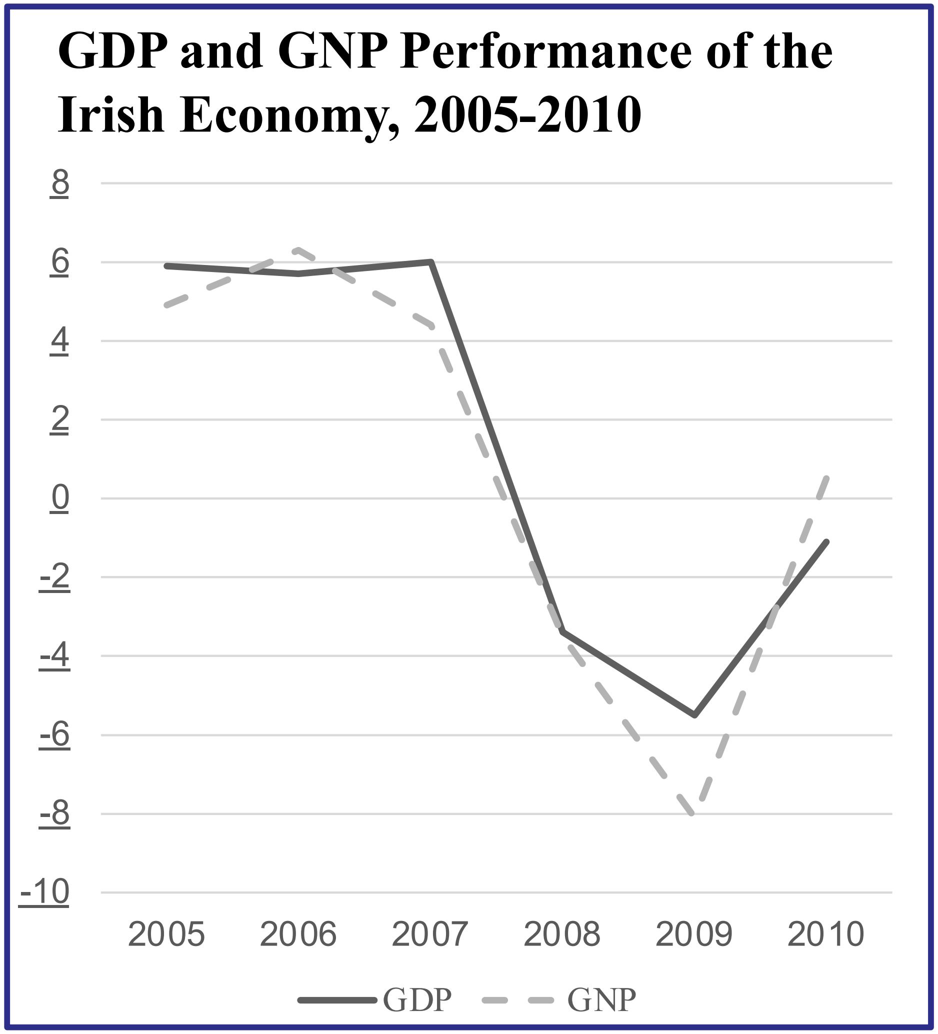
Rapid growth in consumption, expenditure, and investment

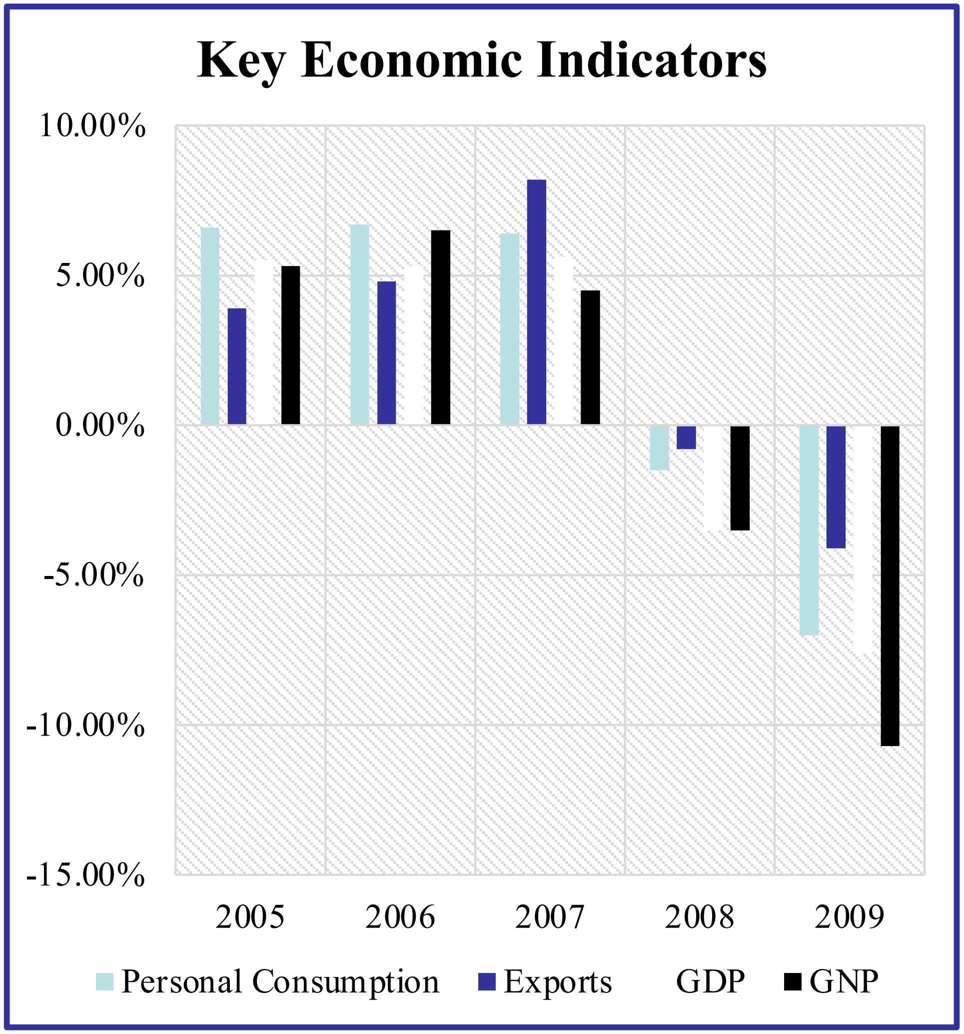
Fuelled by cheap credit and (unsustainable) increases in bank lending, house prices, and government spending

… resulting in crash in house prices (and construction sector), yawning fiscal deficit, and EU/IMF bailout in 2010



There is clear evidence of a sharp increase in macro-economic adversity (i.e., a bust) during our window of observation.





Our sample of 172 Irish SME firms is formed by the intersection of a survey of 504 CEOs with firms that have complete financial data from 2006 – 2009.

Variable	Measure/Data Source	Time Period
CEO Core Self-Evaluation	12 item survey instrument developed by Judge et al. (2003) measured on 7 point scale (α = .78)	2005
Firm Performance	ROA	2006-2009
Economic Conditions	Average of seven standardized indicators: real annual growth in private consumer expenditure; public net current expenditure; investment; exports; imports; gross domestic product; and gross national product (α = 0.94).	2006-2009
Resource Availability	Current ratio	2006-2009
Controls	Firm size, firm age, past ROA, industry expansion, industry ROA, and CEO tenure	

We find evidence to suggest that macro-economic adversity and slack appear to condition the confidence – performance relationship.

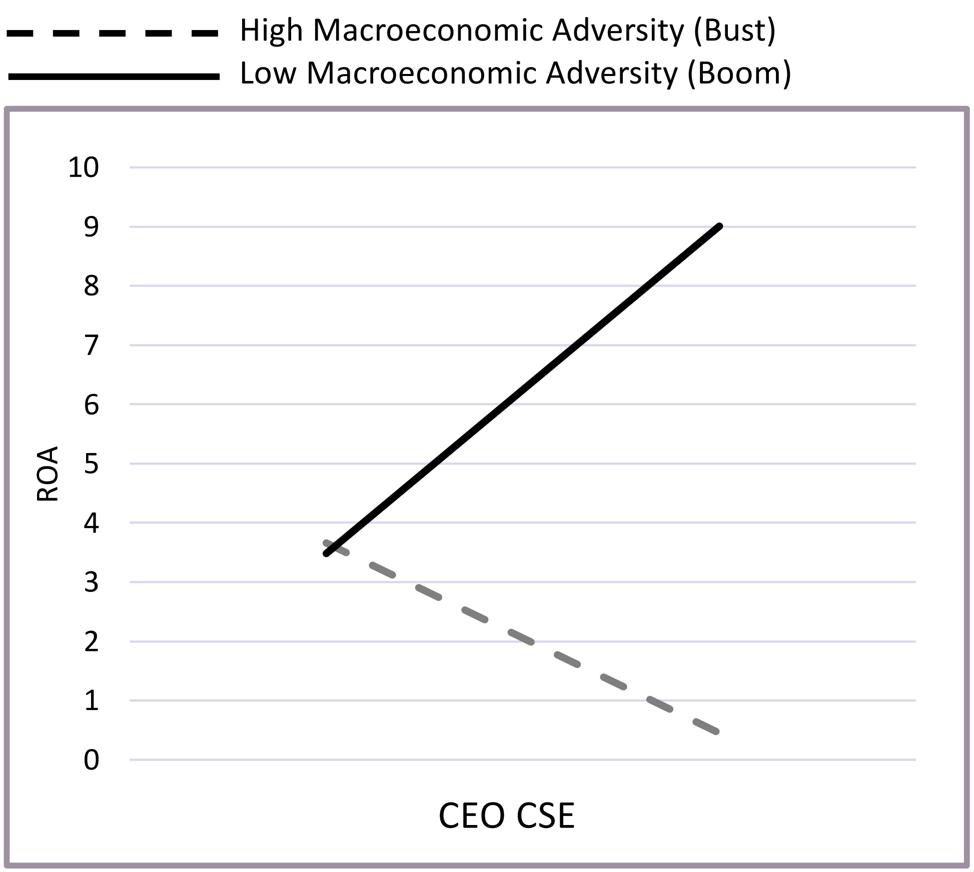


Figure 1. Plot of interaction of CEO confidence and macroeconomic adversity on firm ROA

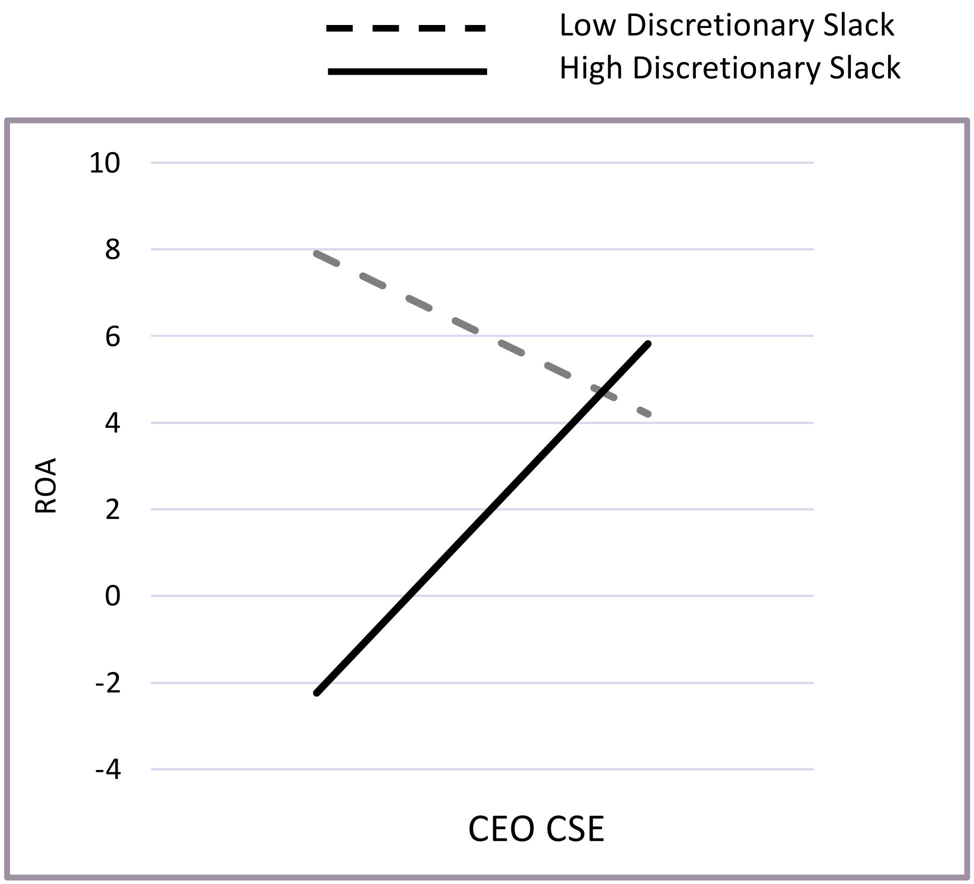
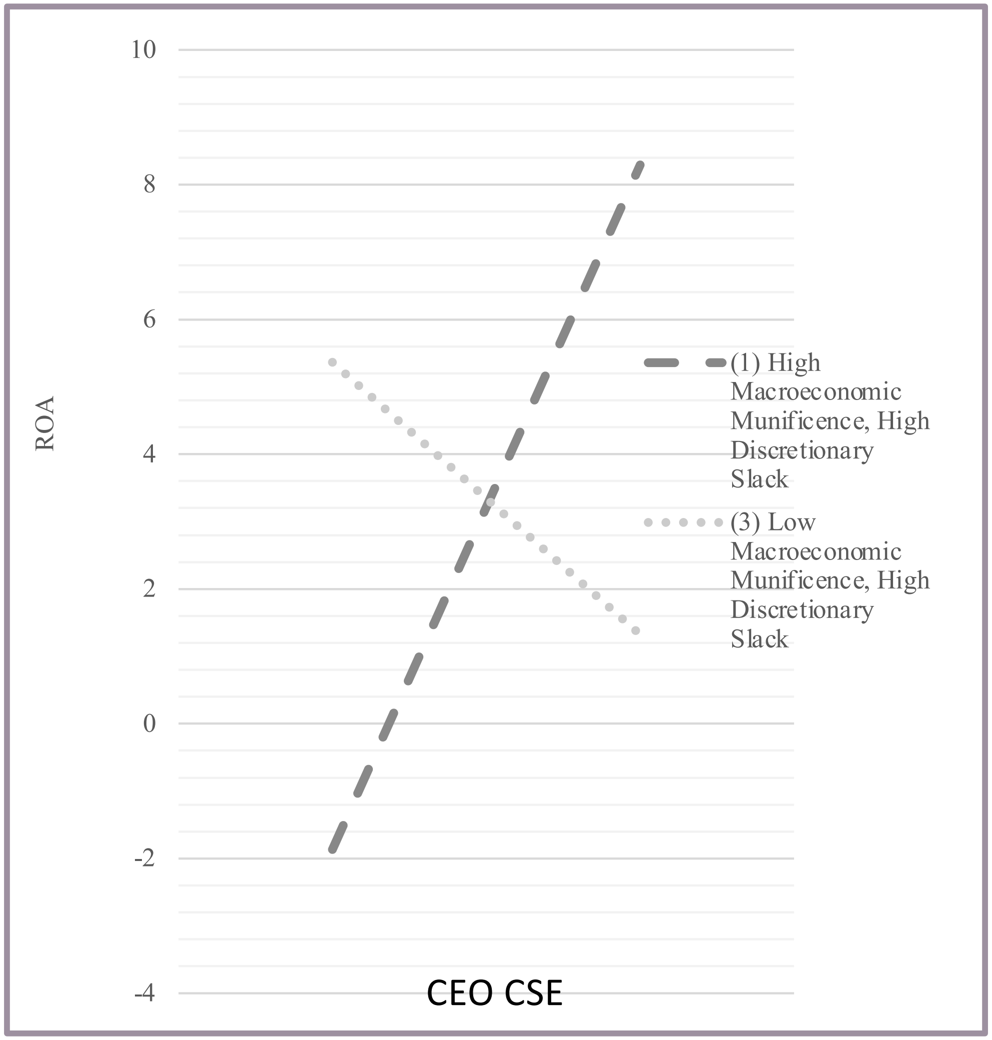


Figure 2. Plot of interaction of CEO confidence and discretionary slack on firm ROA

STUDY 1: FINDINGS

Digging deeper, our three-way interaction plots seem to indicate that only when adversity is low and slack is high do the net benefits of dispositional confidence substantively materialize.



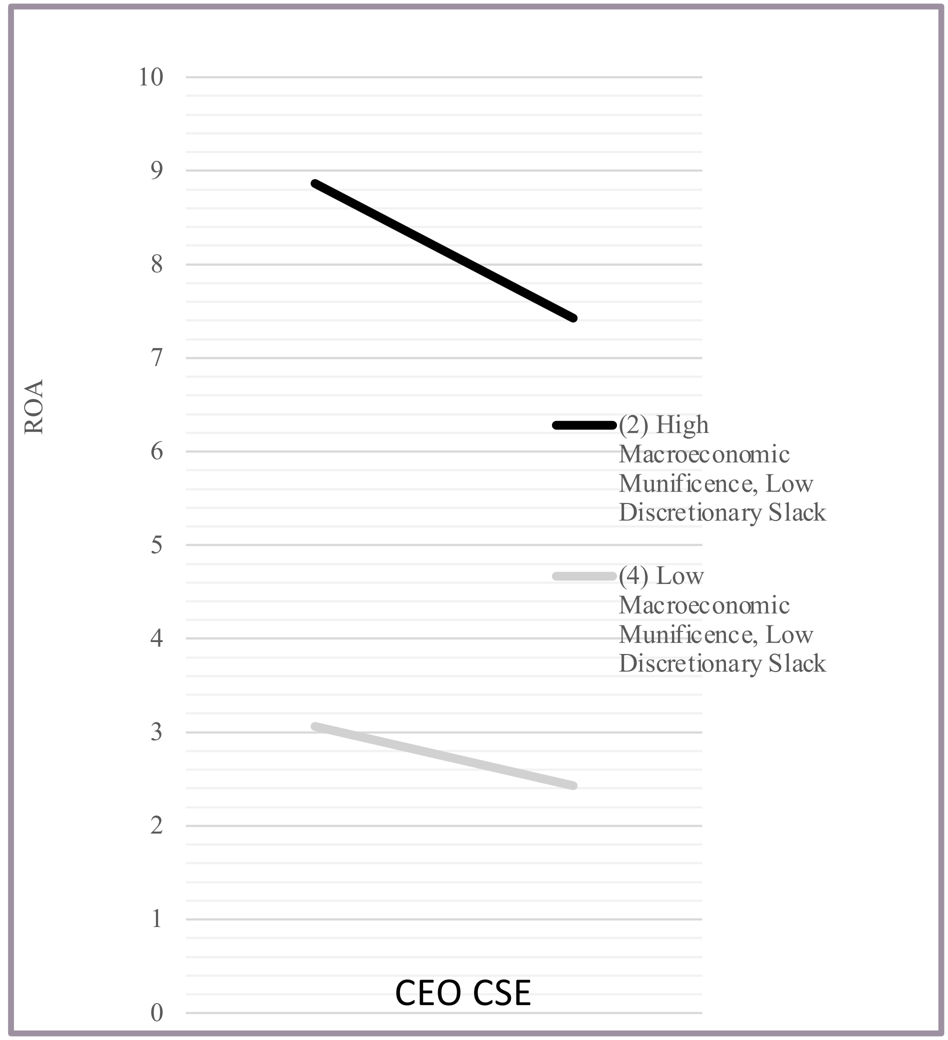


Figure 3. Plot of three-way interaction of CEO confidence X macroeconomic munificence X discretionary slack

This pattern of findings appears to be robust across a number of alternative specifications.

Boom v. bust

We also examined the pattern of hypothesized effects across three distinct periods (sub-panels) manifested in our Irish context: boom (2006-2007), bust (2008-2010), and post-bust (2011-2013).

Consistent with the earlier pattern, the combined influence of confidence and slack was only significant in the boom panel. There was no evidence of either a main or interactive effect of confidence in either the bust or post-bust panels.

Family v. non-family

We found some, albeit marginal, evidence to indicate that high confidence CEOs have a stronger influence on performance in family-owned firms

We divided our sample into sub-samples: family-owned (35 percent of firms in our sample) and non-family-owned

The three-way interaction significantly related to performance for both

Governance controls

The three-way interaction of CEO confidence, macroeconomic munificence, and slack was significantly related to performance when we controlled for the number of directors & CEO ownership percentage in each firm.

Industry effects

Because some industries may have experienced sharper fluctuations, we ran our analyses on a sub-sample that excluded all construction and building firms. The findings are robust to the exclusion of these firms.

To dive deeper into this pattern of findings, we needed to use an alternative approach.

Among other issues, one thing that **we cannot directly examine** in Study 1 is the **risk-taking behaviors** of CEOS we theorize…

… and **as a consequence**, we performed a **supplemental policy-capturing experiment**

We placed a series of executives recruited by Qualtrics in a iteratively-developed hypothetical decision making setting.

Goal: To probe the behavioral mechanisms behind the findings from the field study

Research question:
How does the risk-taking behavior of highly confident CEOs differ from less confident CEOs under different economic conditions?

Hypothetical context: Senior-level manager at a publicly-traded auto manufacturer, making decisions about investments in strategic growth initiatives

Sample: 68 business executives recruited via Qualtrics Panel Services
Age: mean = 48, s.d. = 15
Corporate experience: mean = 20.9, s.d. = 10.1
Female = 29%

To gain more insight into risk taking behavior, we considered multiple dimensions of risk-taking simultaneously.

Dependent variable: Risk-taking

Quantitative = Capital Outlay – How much of $500M available capital would you invest under each condition presented?

Qualitative = Type of risk – How much would you invest in exploratory (high return/low probability of success versus exploitative (low return/high probability of success) initiatives?

Each measured:
1) directly,
2) as a change from neutral scenario, and
3) as a standard deviation across all scenarios

Our design allowed us to examine individuals with varying levels of CSEs across multiple resource conditions, where those conditions are independent of the level of CSE.

Independent Variable

CEO CSE – measured using same 12-item scale from the primary study

Mean = 5.25/7, s.d. = .82

Manipulations – 3x3 = 9 scenarios

Moderator = Economic growth: high, moderate, low

Control = Resource conditions: high, moderate, low

Economic Conditions:
In this scenario, imagine that macro-economic conditions are ***stable with mod***
Profitability in your company's industry is highly dependent upon macro-econ
can be viewed here:

	Growth in:					
	GDP	GNI	Exports	Imports	Investment	Employment
2018	1.5%	1%	7%	5%	2%	3%
2019	3.0%	2%	8%	6%	3%	3.5%
2020	4.5%	1.5%	10%	4%	5%	4%
2021	5.0%	1.5%	9%	5%	8%	4.5%
2022	5.5%	2%	11%	6%	7%	5%

Resource Conditions:
In this scenario, also imagine that your company's liquid cash position is ***at an***
levels of investment in the initiative with slack resources, but a large investme
recent financial data for this scenario can be viewed here:

	Balance Sheet			
	Cash (,000s)	Accounts Receivable (,000s)	Cash/Assets Ratio	Debt/Equity Ratio
2013	$110,000	$80,000	38%	74%
2014	$112,000	$78,000	37%	73%
2015	$111,000	$81,000	37%	74%
2016	$112,000	$82,000	38%	73%
2017	$111,000	$81,000	39%	72%

Our results provide a good jumping-off point for discussion.

Expectations

1. When economic conditions are favorable, high confidence executives will exhibit higher levels of risk-taking than low confidence executives

2. When economic conditions are unfavorable, low confidence executives will exhibit greater changes in risk-taking behavior than high confidence executives

Results

1. Interaction between confidence and economic conditions is marginally significant for qualitative risk-taking (partially supports expectation 1)

2. The direct effect for confidence on change in qualitative risk-taking is negative – less confident executives change their risk-taking behavior when economic conditions deteriorate and highly confident executives' risk-taking does not change (partially supports expectation 2)

Less confident executives appear to take *greater risks* as the economy deteriorates; confident ones do not appear to.

DV: Predicted change in funds allocated ($MM) between neutral and negative conditions.

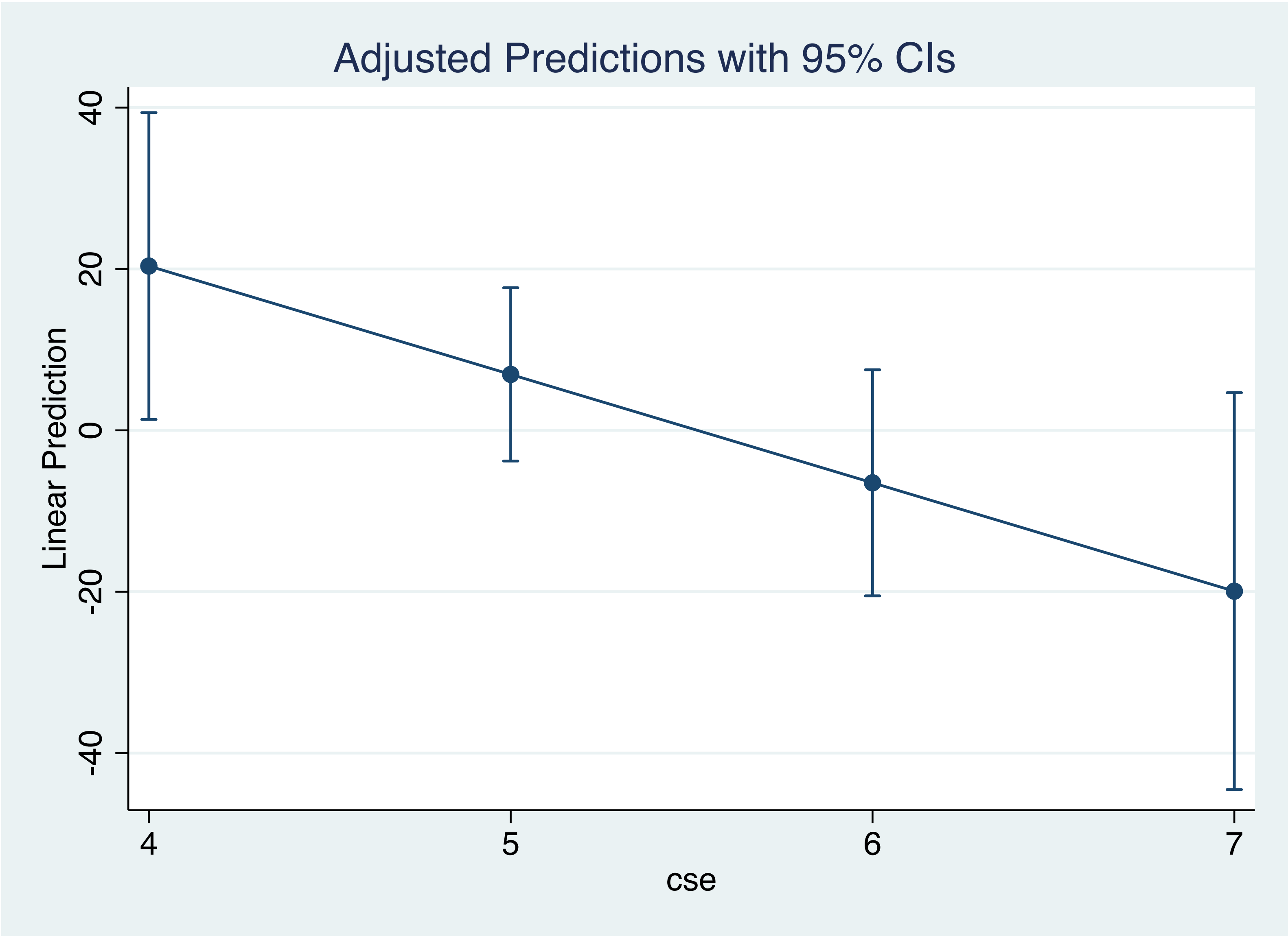


Figure 6. Effect of executive confidence on change in outlays.

Topics for discussion

Findings from the supplementary experiment begin to probe at behavioral differences between highly and less confident executives

- High confidence executives pursue greater risks in booming economic conditions, but are rigid in economic downturns

- Less confident executives are likely to change their risk-taking behavior in economic downturns

However, this pattern of behavior only aligns with the results of the field study under the assumption that more risk taking is better in all economic conditions

Further research is required to understand alternative contingencies and behavioral mechanisms that explain why highly and less confident executives perform better/worse under varying conditions