

What Is CEO Overconfidence?

Evidence from Executive Assessments

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CEO characteristics matter

- ▶ CEO characteristics and abilities matter
- ▶ Overconfidence has received much attention
 - ▶ JEP devoted a symposium to overconfidence in 2015
- ▶ CEOs control great resources
 - ▶ Overconfidence can lead to poor decisions

CEO overconfidence

- ▶ “In the behavioral finance literature, the most common approach to measuring CEO overconfidence has been to use decisions that the executive makes on his or her **personal portfolio of company stock options**”
Malmendier and Tate (2015)
- ▶ *Longholder* measure
 - ▶ CEO during his or her tenure held an option to the last year before expiration provided it was at least 40 percent in-the-money entering its final year
 - ▶ Idea is that risk averse CEOs should rationally have exercised already to diversify company-specific risk

Based on theory but not individual traits

- ▶ Does *Longholder* capture **other traits**?
- ▶ Does *Longholder* measure overconfidence?
 - ▶ CEOs may choose to take advantage of the tax deferral
 - ▶ CEOs can hedge the value of their equity holdings
 - ▶ CEOs may be precluded from exercising options
 - ▶ CEOs may have private information about performance
- ▶ If it measures overconfidence, what is its nature?

This paper

- ▶ We use CEO characteristics from detailed assessments
- ▶ We study the relation of *Longholder* and CEO characteristics
- ▶ We also use two other measures of overconfidence
 - ▶ Otto (2014) measure of optimism based on EPS forecasts
 - ▶ Precision of EPS forecasts

ghSMART sample

- ▶ Detailed assessments of 2,600+ C-level executives
- ▶ Assessments performed by ghSMART—not recruiting firm
- ▶ Assessments are based on four-hour structured interviews
- ▶ Assessments of 30+ characteristics

Factor analysis by Kaplan and Sorensen (2021) (1)

- ▶ **Factor 1** General ability/talent
 - ▶ (+) all characteristics
 - ▶ sorts executives from those with high grades on across all characteristics to those with low grades across all characteristics
- ▶ **Factor 2** Interpersonal (+) vs Execution (–)
 - ▶ (+) Respect, Open to Criticism, Listening Skills, Teamwork
 - ▶ (–) Aggressive, Fast, Proactive, Holds People Accountable, Removes Underperformers

Factor analysis by Kaplan and Sorensen (2021) (2)

- ▶ **Factor 3** Analysis (+) vs Charisma (–)
 - ▶ (+) Analytical Skills, Attention to Detail, Organization, Brainpower
 - ▶ (–) Enthusiasm, Persuasion, Aggressive, Proactive, Fast
- ▶ **Factor 4** Strategic/Creative (+) vs Manager (–)
 - ▶ (+) Strategic Vision, Brainpower, Analytical Skills, Creative
 - ▶ (–) Holds People Accountable, Efficiency, Attention to Detail, Organization

Match ghSMART data with public company CEOs

- ▶ We use web-searches to identify public company CEOs
- ▶ We find 67 public company CEOs in ghSMART data
- ▶ We collect option holdings from DEF 14A
 - ▶ **9 of 67 are *Longholders***
 - ▶ Acknowledge we have a small sample

How do characteristics relate to overconfidence?

	Longholder = 0	Longholder = 1	t-test
Hires A players	3.415	3.344	-0.441
Develops people	3.357	3.367	0.061
Removes underperf.	3.354	3.178	-0.894
Respect	3.613	3.533	-0.526
Efficiency	3.723	3.522	-1.398
Network	3.642	3.178	-2.870***
Flexible	3.568	3.367	-1.346
Integrity	3.918	3.889	-0.361
Organization	3.624	3.189	-2.871***
Calm	3.696	3.400	-2.189**
Aggressive	3.763	3.633	-1.070
Fast	3.727	3.411	-2.221**
Commitments	3.889	3.600	-3.107***
Brainpower	3.746	3.522	-1.794*
Analytical skills	3.661	3.322	-2.597**
Strategic vision	3.542	3.267	-1.866*
Creative	3.629	3.333	-1.957*
Attention to detail	3.533	3.267	-1.573
Enthusiasm	3.560	3.444	-0.653
Persistent	3.824	3.744	-0.673
Proactive	3.816	3.633	-1.369
Work ethic	3.954	3.756	-2.551**
High standards	3.747	3.744	-0.021
Listening skills	3.508	3.067	-2.731***
Open to criticism	3.454	3.133	-1.905*
Teamwork	3.635	3.411	-1.636
Persuasion	3.571	3.367	-1.351
Holds accountable	3.648	3.522	-0.866

How do factors relate to overconfidence?

	(1)	(2)	Longholder (3)	(4)	(5)
Factor 1	-0.136** (0.051)				-0.125** (0.052)
Factor 2		-0.056 (0.056)			-0.043 (0.054)
Factor 3			-0.072 (0.059)		-0.054 (0.057)
Factor 4				-0.051 (0.056)	-0.051 (0.054)
R ²	0.102	0.016	0.023	0.013	0.137
Obs.	64	64	64	64	64

- ▶ Overconfident CEOs are less able
- ▶ Low-ability individuals are more overconfident (e.g., Kruger and Dunning, 1999)

How do characteristics relate to overconfidence?

	High Forecast			Point Estimate		
Hires A players	-0.093	[216]	0.072*	-0.021	[216]	0.788
Develops people	-0.043	[212]	0.447	-0.051	[212]	0.614
Removes underperf.	-0.115	[216]	0.004***	0.057	[216]	0.416
Respect	0.004	[212]	0.935	-0.057	[212]	0.384
Efficiency	-0.220	[216]	0.000***	0.054	[216]	0.594
Network	-0.058	[216]	0.397	0.104	[216]	0.378
Flexibility	-0.058	[216]	0.188	-0.006	[216]	0.927
Integrity	-0.122	[216]	0.464	-0.087	[216]	0.575
Organization	-0.080	[216]	0.133	-0.073	[216]	0.496
Calm	-0.010	[216]	0.896	0.068	[216]	0.411
Aggressive	-0.159	[216]	0.121	0.064	[216]	0.640
Fast	-0.037	[216]	0.632	0.262	[216]	0.002***
Commitments	-0.327	[216]	0.065*	0.224	[216]	0.240
Brainpower	-0.240	[216]	0.000***	-0.038	[216]	0.784
Analysis	-0.094	[216]	0.340	0.006	[216]	0.970
Strategic vision	-0.035	[216]	0.566	0.186	[216]	0.033**
Creative	-0.251	[216]	0.006***	-0.129	[216]	0.387
Attention to details	-0.192	[216]	0.000***	-0.057	[216]	0.618
Enthusiasm	0.006	[212]	0.932	0.064	[212]	0.485
Persistent	-0.291	[216]	0.010***	-0.050	[216]	0.707
Proactive	-0.347	[216]	0.000***	-0.190	[216]	0.288
Work ethic	-0.503	[216]	0.154	0.317	[216]	0.043**
High standards	-0.571	[216]	0.000***	-0.388	[216]	0.059*
Listening skills	0.018	[212]	0.658	0.010	[212]	0.873
Open to criticism	0.005	[216]	0.918	-0.012	[216]	0.863
Teamwork	0.005	[216]	0.938	0.027	[216]	0.761
Persuasion	-0.027	[216]	0.756	0.163	[216]	0.106
Holds accountable	-0.231	[212]	0.001***	-0.221	[212]	0.073*

How do factors relate to overconfidence?

	(1)	(2)	High Forecast		(5)
			(3)	(4)	
Factor 1	-0.137*** (0.039)				-0.129*** (0.047)
Factor 2		0.027 (0.027)			0.059* (0.032)
Factor 3			-0.056** (0.028)		-0.023 (0.025)
Factor 4				0.059 (0.056)	0.117* (0.065)
R ²	0.062	0.007	0.014	0.006	0.090
Obs.	212	212	212	212	212

- ▶ Again, overconfident CEOs are less able

Investment-cash-flow sensitivity for less able CEOs

	Investment		
	(1)	(2)	(3)
Q	0.054*	0.051*	0.037
	(0.029)	(0.026)	(0.030)
Size	-0.065**	-0.074***	-0.058*
	(0.026)	(0.023)	(0.030)
Stock ownership	0.064	-0.441	0.258
	(0.592)	(0.373)	(0.653)
Vested options	-2.569	-2.390	-3.272
	(3.820)	(3.924)	(3.195)
Cash flow	-0.011	0.126	0.104
	(0.044)	(0.083)	(0.090)
Longholder	-0.095		-0.127
	(0.093)		(0.104)
Longholder × Cash flow	0.039*		0.046**
	(0.021)		(0.023)
Factor 1		-0.004	-0.066
		(0.034)	(0.048)
Factor 1 × Cash flow		-0.015***	0.010
		(0.005)	(0.009)
			...
Controls × Cash flow	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Year FE × Cash flow	Yes	Yes	Yes
R ²	0.358	0.351	0.398
Obs.	317	351	317

Conclusion

- ▶ Better understanding of *Longholder* measure
- ▶ *Longholder* and *High Forecast* relate to lower ability
- ▶ Evidence on Dunning-Kruger effect

