Online Appendix

Table A1: Summary Statistics of Alternative Measures of Luck and Skill

The table provides the summary statistics of various measures of luck and skill considered in the paper. Main Table 3 describes the 15 different measures of luck and skill that we estimate as part of robustness to our baseline.

Row			Mean	Stdev	Median	p25	p75
(0)	Baseline Specification (Panel C, Table 2)	Luck	0.153	0.267	0.143	0.009	0.295
		Skill	0.002	0.316	0.008	-0.165	0.176
(1)	Pooled (instead of by executive) regression	Luck	0.156	0.235	0.170	0.023	0.305
		Skill	-0.002	0.320	-0.007	-0.178	0.168
(2)	Pooled regressions with executive FE (instead of by executive)	Luck	0.156	0.235	0.170	0.023	0.306
		Skill	-0.002	0.320	-0.008	-0.178	0.168
(3)	Luck sensitivity estimated each year using prior year data	Luck	0.153	0.360	0.126	-0.033	0.328
		Skill	0.002	0.413	0.012	-0.211	0.223
(4)	Skill = Residual (not Residual + Intercept)	Luck	0.162	0.277	0.168	0.013	0.317
		Skill	-0.008	0.282	-0.009	-0.161	0.143
(5)	Skill = Intercept (not Residual + Intercept)	Luck	0.145	0.385	0.136	-0.073	0.348
		Skill	0.010	0.141	0.018	-0.052	0.088
(6)	No regression; Luck = industry returns (similar to RPE)	Luck	0.156	0.235	0.170	0.023	0.305
		Skill	-0.002	0.320	-0.007	-0.178	0.168
(7)	Luck factor: only industry returns (no market returns)	Luck	0.154	0.250	0.144	0.019	0.289
		Skill	0.001	0.312	0.004	-0.166	0.171
(8)	Luck factors: Fama-French + Momentum factors	Luck	0.120	0.242	0.126	-0.005	0.255
		Skill	0.035	0.330	0.028	-0.148	0.211
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	Luck	0.009	0.331	0.029	-0.160	0.197
		Skill	0.146	0.384	0.122	-0.075	0.344
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	Luck	0.119	0.365	0.120	-0.055	0.296
		Skill	0.048	0.350	0.027	-0.147	0.219
(11)	Excluding (instead of including) firm return in industry return	Luck	0.159	0.258	0.144	0.019	0.291
		Skill	-0.004	0.327	0.006	-0.175	0.178
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	Luck	0.116	0.245	0.129	0.003	0.255
		Skill	0.038	0.322	0.032	-0.132	0.205
(13)	Only December fiscal year end firms (instead of all firms)	Luck	0.149	0.266	0.137	0.008	0.292
		Skill	0.004	0.307	0.010	-0.159	0.172
(14)	Annual returns (instead of monthly returns)	Luck	0.189	0.421	0.128	-0.028	0.345
		Skill	-0.020	0.381	-0.022	-0.217	0.165
(15)	Unwinsorized (instead of winsorized) firms returns	Luck	0.165	0.293	0.144	0.012	0.303
		Skill	0.000	0.338	0.007	-0.173	0.179

Table A2: New Baseline = ΔLog(Pay) instead of ΔPay as dependent variable

The table reports the results using an alternative baseline where we use ΔLog(Pay) instead of ΔPay as dependent variable in the 2nd stage regression.

Panel A: Main Table 3 Redone

Row	Robustness to 1st stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 1, Table 4)	0.29*** (6.9)	**0.08** **(0.9)**	24,676
(1)	Pooled (instead of by executive) regression	0.26*** (6.2)	**0.12** **(1.3)**	24,676
(2)	Pooled regressions with executive FE (instead of by executive)	0.26*** (6.2)	**0.12** **(1.3)**	24,676
(3)	Luck sensitivity estimated each year using prior year data	0.34*** (12.4)	**0.02*** **(1.6)**	23,071
(4)	Skill = Residual (not Residual + Intercept)	0.30*** (7.2)	**0.10** **(1.3)**	24,676
(5)	Skill = Intercept (not Residual + Intercept)	0.36*** (15.2)	**-0.00** **(-0.0)**	24,676
(6)	No regression; Luck = industry returns (similar to RPE)	0.26*** (6.2)	**0.12** **(1.3)**	24,676
(7)	Luck factor: only industry returns (no market returns)	0.29*** (6.4)	**0.15** **(1.6)**	24,676
(8)	Luck factors: Fama-French + Momentum factors	0.20*** (4.1)	**-0.09** **(-0.9)**	24,676
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	0.26*** (5.7)	**0.12*** **(1.8)**	25,116
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	0.26*** (5.6)	**0.10** **(1.3)**	15,984
(11)	Excluding (instead of including) firm return in industry return	0.26*** (5.7)	**0.10** **(1.1)**	24,676
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	0.17*** (3.7)	**0.18**** **(2.0)**	24,676
(13)	Only December fiscal year end firms (instead of all firms)	0.24*** (4.6)	**0.07** **(0.7)**	17,092
(14)	Annual returns (instead of monthly returns)	0.24*** (7.7)	**0.23***** **(3.4)**	23,447
(15)	Unwinsorized (instead of winsorized) firms returns	0.28*** (7.1)	**0.08** **(1.0)**	24,676

Panel B: Main Table 4 Redone

Row	Robustness to 2nd stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 1, Table 4)	0.29***	**0.08**	24,676
		(6.9)	**(0.9)**	
(1)	ΔLog(Pay) instead of ΔPay	This is the baseline; Same as Row (0)		
(2)	Log(Pay) instead of ΔPay	0.39***	**-0.03**	25,132
		(12.0)	**(-0.4)**	
(3)	Luck and Skill in $ terms (instead of rates of return) [×10^{-4}]	0.82***	**-0.03**	24,676
		(4.1)	**(-1.4)**	
(4)	ΔOI/Assets (instead of Stock Returns)	2.55***	**0.78***	23,551
		(6.1)	**(1.8)**	
(5a)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to stock returns	0.27***	**0.07**	23,105
		(6.4)	**(0.8)**	
(5b)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to ΔOI/Assets	1.69***	**0.71***	23,105
		(4.2)	**(1.7)**	
(6)	Performance period: 12 months prior to date of largest grant	0.28***	**0.10**	23,033
		(6.8)	**(1.2)**	
(7)	Performance period: Current fiscal year and the prior two fiscal years	0.55***	**0.40****	23,000
		(8.2)	**(2.0)**	
(8)	Median (instead of OLS) regression	0.24***	**0.05**	24,676
		(9.8)	**(0.9)**	
(9)	Exclude Size as control variable	0.30***	**0.08**	24,676
		(7.1)	**(0.9)**	
(10)	Exclude Skill terms	0.23***	**0.09**	24,676
		(5.3)	**(1.0)**	
(11)	Exclude cdf (Variance) terms	0.24***	**0.08**	25,138
		(6.2)	**(1.0)**	
(12)	Bad Luck = Bottom 20th percentile; Good Luck = Top 20th percentile	0.34***	**0.01**	24,676
		(4.9)	**(0.2)**	
(13)	Bad Luck = Bottom 10th percentile; Good Luck = Top 10th percentile	0.37***	**0.03**	24,676
		(4.5)	**(0.4)**	

Table A3: New Baseline = Log(Pay) instead of ΔPay as dependent variable

The table reports the results using an alternative baseline where we use Log(Pay) instead of ΔPay as dependent variable in the 2nd stage regression.

Panel A: Main Table 3 Redone

Row	Robustness to 1st stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 2, Table 4)	0.39*** (12.0)	**-0.03** **(-0.4)**	25,132
(1)	Pooled (instead of by executive) regression	0.39*** (11.6)	**-0.02** **(-0.3)**	25,132
(2)	Pooled regressions with executive FE (instead of by executive)	0.39*** (11.6)	**-0.02** **(-0.3)**	25,132
(3)	Luck sensitivity estimated each year using prior year data	0.39*** (16.8)	**0.01*** **(1.7)**	23,251
(4)	Skill = Residual (not Residual + Intercept)	0.40*** (12.6)	**-0.09** **(-1.6)**	25,132
(5)	Skill = Intercept (not Residual + Intercept)	0.44*** (19.5)	**-0.02** **(-0.5)**	25,132
(6)	No regression; Luck = industry returns (similar to RPE)	0.39*** (11.6)	**-0.02** **(-0.3)**	25,132
(7)	Luck factor: only industry returns (no market returns)	0.41*** (11.3)	**-0.03** **(-0.4)**	25,132
(8)	Luck factors: Fama-French + Momentum factors	0.32*** (8.5)	**-0.12** **(-1.4)**	25,132
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	0.38*** (9.9)	**0.03** **(0.6)**	25,578
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	0.36*** (10.3)	**0.05** **(0.7)**	16,209
(11)	Excluding (instead of including) firm return in industry return	0.37*** (10.6)	**0.00** **(0.0)**	25,132
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	0.32*** (8.2)	**0.05** **(0.6)**	25,132
(13)	Only December fiscal year end firms (instead of all firms)	0.35*** (8.2)	**0.09** **(1.0)**	17,310
(14)	Annual returns (instead of monthly returns)	0.30*** (11.8)	**0.21***** **(3.8)**	23,856
(15)	Unwinsorized (instead of winsorized) firms returns	0.39*** (12.3)	**-0.06** **(-0.9)**	25,132

Panel B: Main Table 4 Redone

Row	Robustness to 2nd stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 2, Table 4)	0.39*** (12.0)	**-0.03** **(-0.4)**	25,132
(1)	ΔLog(Pay) instead of ΔPay	0.29*** (6.9)	**0.08** **(0.9)**	24,676
(2)	Log(Pay) instead of ΔPay	This is the baseline; Same as Row (0)		
(3)	Luck and Skill in $ terms (instead of rates of return) [×10^{-4}]	0.94*** (4.4)	**-0.06*** **(-1.9)**	25,132
(4)	ΔOI/Assets (instead of Stock Returns)	2.01*** (5.8)	**0.68*** **(1.8)**	23,960
(5a)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to stock returns	0.38*** (11.4)	**-0.03** **(-0.4)**	23,507
(5b)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to ΔOI/Assets	0.97*** (2.9)	**0.57** **(1.5)**	23,507
(6)	Performance period: 12 months prior to date of largest grant	0.22*** (6.8)	**0.01** **(0.1)**	23,218
(7)	Performance period: Current fiscal year and the prior two fiscal years	0.64*** (10.0)	**0.35**** **(2.1)**	23,283
(8)	Median (instead of OLS) regression	0.68*** (15.6)	**-0.19**** **(-2.1)**	25,132
(9)	Exclude Size as control variable	0.18*** (5.3)	**0.07** **(1.0)**	25,132
(10)	Exclude Skill terms	0.32*** (9.5)	**-0.01** **(-0.1)**	25,132
(11)	Exclude cdf (Variance) terms	0.33*** (11.9)	**-0.10** **(-1.4)**	26,941
(12)	Bad Luck = Bottom 20th percentile; Good Luck = Top 20th percentile	0.42*** (7.6)	**-0.01** **(-0.2)**	25,132
(13)	Bad Luck = Bottom 10th percentile; Good Luck = Top 10th percentile	0.44*** (6.9)	**0.01** **(0.2)**	25,132

Table A4: New Baseline = Luck and Skill in $ terms (instead of rates of return)

The table reports the results using an alternative baseline where we use luck and skill estimated in $ terms in the 2nd stage regression. This is obtained by multiplying the baseline luck and skill estimated as rate of return by the firm's lagged market capitalization.

Panel A: Main Table 3 Redone

Row	Robustness to 1st stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 5, Table 4)	0.52***	**-0.01**	24,714
		(4.1)	**(0.3)**	
(1)	Pooled (instead of by executive) regression	0.39***	**-0.01**	24,714
		(3.5)	**(0.6)**	
(2)	Pooled regressions with executive FE (instead of by executive)	0.37***	**-0.01**	24,714
		(3.4)	**(0.6)**	
(3)	Luck sensitivity estimated each year using prior year data	0.52***	**0.02**	23,106
		(4.4)	**(0.8)**	
(4)	Skill = Residual (not Residual + Intercept)	0.43***	**-0.00**	24,714
		(3.2)	**(-0.1)**	
(5)	Skill = Intercept (not Residual + Intercept)	0.68***	**-0.00**	24,714
		(8.2)	**(-0.1)**	
(6)	No regression; Luck = industry returns (similar to RPE)	0.39***	**-0.01**	24,714
		(3.5)	**(-0.6)**	
(7)	Luck factor: only industry returns (no market returns)	0.42***	**-0.00**	24,714
		(3.5)	**(-0.1)**	
(8)	Luck factors: Fama-French + Momentum factors	0.43***	**-0.00**	24,714
		(2.8)	**(-0.1)**	
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	0.58***	**0.05****	25,154
		(4.4)	**(2.3)**	
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	0.65***	**0.04**	16,011
		(4.2)	**(1.6)**	
(11)	Excluding (instead of including) firm return in industry return	0.52***	**-0.00**	24,714
		(3.7)	**(0.0)**	
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	0.44***	**-0.01**	24,714
		(3.8)	**(-0.6)**	
(13)	Only December fiscal year end firms (instead of all firms)	0.31***	**-0.01**	17,127
		(2.9)	**(-0.5)**	
(14)	Annual returns (instead of monthly returns)	0.47***	**0.05***	23,483
		(4.8)	**(1.8)**	
(15)	Unwinsorized (instead of winsorized) firms returns	0.41***	**-0.02**	24,714
		(2.8)	**(-0.5)**	

Panel B: Main Table 4 Redone

Row	Robustness to 2nd stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 5, Table 4)	0.52*** (4.1)	**-0.01** **(-0.3)**	24,714
(1)	ΔLog(Pay) instead of ΔPay [×10^{-4}]	0.82*** (4.1)	**-0.03** **(-1.4)**	24,676
(2)	Log(Pay) instead of ΔPay [×10^{-4}]	0.94*** (4.4)	**-0.06*** **(-1.9)**	25,132
(3)	Luck and Skill in $ terms (instead of rates of return)	This is the baseline; Same as Row (0)		
(4)	ΔOI/Assets (instead of Stock Returns)	7,083.91*** (3.1)	**5,580.02**** **(2.4)**	23,587
(5a)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to stock returns	0.50*** (3.9)	**-0.01** **(-0.3)**	23,147
(5b)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to ΔOI/Assets	5,351.33** (2.4)	**5,661.30**** **(2.4)**	23,147
(6)	Performance period: 12 months prior to date of largest grant	1,717.58*** (7.3)	**212.90** **(0.4)**	23,064
(7)	Performance period: Current fiscal year and the prior two fiscal years	3,058.21*** (7.6)	**2,284.56*** **(1.9)**	23,035
(8)	Median (instead of OLS) regression	0.35*** (7.5)	**-0.01** **(-0.4)**	24,714
(9)	Exclude Size as control variable	0.50*** (3.9)	**-0.01** **(-0.2)**	24,714
(10)	Exclude Skill terms	0.50*** (4.2)	**0.01** **(0.2)**	24,714
(11)	Exclude cdf (Variance) terms	0.11*** (3.0)	**-0.02** **(-0.6)**	25,178
(12)	Bad Luck = Bottom 20th percentile; Good Luck = Top 20th percentile	0.54*** (3.6)	**0.07** **(0.7)**	24,714
(13)	Bad Luck = Bottom 10th percentile; Good Luck = Top 10th percentile	0.53*** (3.3)	**0.07** **(0.7)**	24,714

Table A5: New Baseline = Value-weighted (instead of Equal-weighted) industry and market returns

The table reports the results using an alternative baseline where the luck factors used in the 1st stage regression are computed using value-weighted firm returns.

Panel A: Main Table 3 Redone

Row	Robustness to 1st stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 12, Table 3)	843.86*** (2.9)	**931.96 (1.5)**	24,714
(1)	Pooled (instead of by executive) regression	823.54*** (2.9)	**1,492.01** ** (2.0)**	24,714
(2)	Pooled regressions with executive FE (instead of by executive)	770.29** (2.5)	**1,419.39** ** (2.0)**	24,714
(3)	Luck sensitivity estimated each year using prior year data	1,263.74*** (6.5)	**677.90** ** (2.0)**	23,106
(4)	Skill = Residual (not Residual + Intercept)	959.15*** (3.6)	**1,226.57** ** (2.3)**	24,714
(5)	Skill = Intercept (not Residual + Intercept)	1,570.03*** (10.1)	**512.11 (0.7)**	24,714
(6)	No regression; Luck = industry returns (similar to RPE)	904.27*** (3.4)	**1,233.08** ** (2.1)**	24,714
(7)	Luck factor: only industry returns (no market returns)	763.97*** (2.6)	**1,170.58** * (1.7)**	24,714
(8)	Luck factors: Fama-French + Momentum factors [Same as Row 8 of Main Table 3]	792.25*** (2.7)	**361.15 (0.6)**	24,714
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	842.89*** (2.9)	**1,004.42 (1.6)**	25,064
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	1,450.25*** (4.5)	**86.29 (0.1)**	15,268
(11)	Excluding (instead of including) firm return in industry return	720.26** (2.4)	**1,026.67** * (1.7)**	24,714
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	This is the baseline; Same as Row (0)		
(13)	Only December fiscal year end firms (instead of all firms)	194.93 (0.5)	**2,051.39*** (2.9)**	17,127
(14)	Annual returns (instead of monthly returns)	1,129.30*** (5.4)	**564.05** * (1.7)**	23,483
(15)	Unwinsorized (instead of winsorized) firms returns	847.89*** (3.1)	**735.38 (1.3)**	24,714

Panel B: Main Table 4 Redone

Row	Robustness to 2nd stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 12, Table 3)	843.86*** (2.9)	**931.96 (1.5)**	24,714
(1)	ΔLog(Pay) instead of ΔPay	0.17*** (3.7)	**0.18** (2.0)**	24,676
(2)	Log(Pay) instead of ΔPay	0.32*** (8.3)	**0.05 (0.6)**	25,132
(3)	Luck and Skill in $ terms (instead of rates of return)	0.44*** (3.8)	**-0.01 (-0.6)**	24,714
(4)	ΔOI/Assets (instead of Stock Returns)	5,209.94** (2.0)	**9,676.36*** (3.1)**	23,587
(5a)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to stock returns	896.16*** (3.0)	**794.15 (1.3)**	23,141
(5b)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to ΔOI/Assets	1,213.18 (0.5)	**9,357.50*** (3.0)**	23,141
(6)	Performance period: 12 months prior to date of largest grant	1,907.69*** (6.6)	**-240.36 (-0.5)**	23,064
(7)	Performance period: Current fiscal year and the prior two fiscal years	2,852.04*** (5.7)	**2,262.10 (1.6)**	23,035
(8)	Median (instead of OLS) regression	504.14*** (8.4)	**166.71 (1.2)**	24,714
(9)	Exclude Size as control variable	810.93*** (2.8)	**931.45 (1.5)**	24,714
(10)	Exclude Skill terms	706.95** (2.4)	**593.06 (1.0)**	24,714
(11)	Exclude cdf (Variance) terms	965.38*** (3.4)	**1,382.14** (2.5)**	25,178
(12)	Bad Luck = Bottom 20th percentile; Good Luck = Top 20th percentile	1,876.92*** (4.3)	**781.51* (1.8)**	24,714
(13)	Bad Luck = Bottom 10th percentile; Good Luck = Top 10th percentile	1,976.08*** (3.7)	**622.12 (1.1)**	24,714

Table A6: New Baseline = Pooled (instead of CEO-Firm) Regressions

The table reports the results using an alternative baseline where the performance decomposition is done using a pooled regression.

Panel A: Main Table 3 Redone

Row	Robustness to 1st stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 1, Table 3)	1,101.63*** (4.5)	**977.51*** (1.8)**	24,714
(1)	Pooled (instead of by executive) regression	Same as Row (0) above		
(2)	Pooled regressions with executive FE (instead of by executive)	1,100.12*** (4.5)	**978.87*** (1.8)**	24,714
(3)	Luck sensitivity estimated each year using prior year data	1,086.06*** (4.4)	**896.07 (1.5)**	23,973
(4)	Skill = Residual (not Residual + Intercept)	Same as Row (0) above		
(5)	Skill = Intercept (not Residual + Intercept)	NA because there is only one intercept		
(6)	No regression; Luck = industry returns (similar to RPE)	NA		
(7)	Luck factor: only industry returns (no market returns)	1,101.63*** (4.5)	**977.51*** (1.8)**	24,714
(8)	Luck factors: (Fama-French + Momentum) factors	509.74 (1.1)	**-245.96 (-0.2)**	25,190
(9)	Industry = *Compustat* (instead of *Execucomp*) firms in same 2-digit SIC	1,331.83*** (5.3)	**209.66 (0.4)**	25,154
(10)	Industry = Firms with same TNIC (instead of same 2-digit SIC)	1,475.61*** (5.1)	**54.18 (0.1)**	15,268
(11)	Excluding (instead of including) firm return in industry return	991.24*** (3.6)	**905.67 (1.4)**	24,714
(12)	Value-weighted (instead of Equal-weighted) industry and market returns	823.54*** (2.8)	**1,492.01** (2.0)**	24,714
(13)	Only December fiscal year end firms (instead of all firms)	902.68*** (5.4)	**612.39 (0.9)**	17,127
(14)	Annual returns (instead of monthly returns)	886.79*** (3.2)	**1,503.04* (1.9)**	16,256
(15)	Unwinsorized (instead of winsorized) firms returns	1160.37*** (5.0)	**716.12 (1.4)**	24,714

Panel B: Main Table 4 Redone

Row	Robustness to 2nd stage regression	Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	New Baseline Specification (Row 1, Table 3)	1,101.63*** (4.5)	**977.51*** **(1.8)**	24,714
(1)	ΔLog(Pay) instead of ΔPay	0.26*** (6.2)	**0.12** **(1.3)**	24,676
(2)	Log(Pay) instead of ΔPay	0.39*** (11.6)	**-0.02** **(-0.3)**	25,132
(3)	Luck and Skill in $ terms (instead of rates of return)	0.39*** (3.5)	**-0.01** **(-0.6)**	24,714
(4)	ΔOI/Assets (instead of Stock Returns)	-2,249.39 (-0.5)	**23,323.47*** **(3.9)**	23,587
(5a)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to stock returns	1,051.33*** (4.1)	**361.28** **(0.7)**	23,141
(5b)	ΔOI/Assets and Stock Returns (instead of just Stock Returns): Coefficients relating to ΔOI/Assets	-6,952.17 (-1.5)	**25,181.32*** **(4.2)**	23,141
(6)	Performance period: 12 months prior to date of largest grant	1,705.29*** (6.9)	**459.87** **(0.8)**	23,066
(7)	Performance period: Current fiscal year and the prior two fiscal years	2,952.87*** (7.1)	**2,931.35** **(2.4)**	23,054
(8)	Median (instead of OLS) regression	509.44*** (9.1)	**83.10** **(0.6)**	24,714
(9)	Exclude Size as control variable	1,079.92*** (4.5)	**986.93*** **(1.8)**	24,714
(10)	Exclude Skill terms	736. 81*** (3.0)	**1,081.68*** **(1.9)**	24,714
(11)	Exclude cdf (Variance) terms	812.64* (3.6)	**909.27*** **(1.7)**	25,186
(12)	Bad Luck = Bottom 20th percentile; Good Luck = Top 20th percentile	2,348.77*** (5.4)	**1,101.91*** **(2.7)**	24,714
(13)	Bad Luck = Bottom 10th percentile; Good Luck = Top 10th percentile	2,190.69*** (4.4)	**771.29** **(1.5)**	24,714

Table A7: Is There Asymmetry Across Different Time Periods?

The table replicates the baseline results (Panel C of Table 2) for two different time periods: 1992-2005 and 2006-2014. Row 0 reports the baseline to make it easy to compare results. t-statistics are based on standard errors that are adjusted for heteroscedasticity and firm-level clustering. ***, **, and * represent significance at the 1%, 5%, and 10% levels.

Row		Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	Baseline Specification (Panel C, Table 2)	1,305.56*** (5.6)	**341.63** **(0.7)**	24,714
(1)	1992-2005	1,776.90*** (5.1)	**-29.73** **(-0.0)**	13,843
(2)	2006-2014	626.88** (2.0)	**346.61** **(0.6)**	10,871

Table A8: Is There Asymmetry Across Different Industries?

The table replicates the baseline results (Panel C of Table 2) for different industry groups. We map 2-digit SIC codes to industry groups based on the classification provided at https://www.osha.gov/pls/imis/sic_manual.html. *Construction* = firms with 2-digit SIC codes between 15 and 17, *Manufacturing* = firms with 2-digit SIC codes between 20 and 39, *Regulation* = firms with 2-digit SIC codes between 40 and 49, *Trade* = firms with 2-digit SIC codes between 50 and 59, *Finance* = firms with 2-digit SIC codes between 60 and 69, *Service* = firms with 2-digit SIC codes between 70 and 89. We exclude the *Agriculture* sector, which includes firms with two-digit SIC codes below 10, because there are only 23 such firm-years in our sample. Row 0 reports the baseline to make it easy to compare results. t-statistics are based on standard errors that are adjusted for heteroscedasticity and firm-level clustering. ***, **, and * represent significance at the 1%, 5%, and 10% levels.

Row		Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	Baseline Specification (Panel C, Table 2)	1,305.56*** (5.6)	**341.63** **(0.7)**	24,714
(1)	Mining	-971.85 (-0.7)	**1,707.74** **(1.2)**	950
(2)	Construction	1,041.81 (0.5)	**2,142.43** **(0.4)**	311
(3)	Manufacturing	1,912.26*** (5.5)	**-953.48** **(-1.5)**	10,717
(4)	Regulated	441.16 (0.5)	**1,559.63** **(0.8)**	2,890
(5)	Trade	1,217.92* (1.8)	**-200.01** **(-0.1)**	2,698
(6)	Finance	-433.77 (-0.5)	**2,951.44** **(1.6)**	3,526
(7)	Service	1,589.92** (2.4)	**65.38** **(0.0)**	3,524

Table A9: Is There Asymmetry Across Different Compensation Groups?

The table replicates the baseline results (Panel C of Table 2) for different compensation groups based on total pay, total value of options granted, and the ratio of option grants to total pay. The "high" and "low" groups are based on the annual median value. Row 0 reports the baseline to make it easy to compare results. t-statistics are based on standard errors that are adjusted for heteroscedasticity and firm-level clustering. ***, **, and * represent significance at the 1%, 5%, and 10% levels.

Row		Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	Baseline Specification (Panel C, Table 2)	1,305.56*** (5.6)	**341.63** **(0.7)**	24,714
(1)	Total Pay (High)	1,726.19*** (4.0)	**605.18** **(0.7)**	12,969
(2)	Total Pay (Low)	200.54 (1.5)	**561.62*** **(1.7)**	11,745
(3)	Value of Option Grants (High)	1,673.30*** (4.6)	**358.43** **(0.4)**	13,050
(4)	Value of Option Grants (Low)	593.18** (2.2)	**316.58** **(0.5)**	11,664
(5)	Value of Option Grants/Total Pay (High)	1,290.34*** (3.7)	**304.56** **(0.4)**	12,821
(6)	Value of Option Grants/Total Pay (Low)	970.12*** (3.1)	**-58.66** **(-0.1)**	11,893

Table A10: Is There Asymmetry Using Alternative Accounting Measures?

The table tests of asymmetry in pay for accounting performance using alternative accounting performance. For comparison, we report the baseline number from Row 4, Table 4. The baseline accounting performance is the change in the ratio of Operating Income to Assets [given by Δ(EBIT/Assets)]. *Row 1*: use level of EBIT/Assets. *Row 2*: use Δ(EBITDA/Assets). *Row 3*: use level of EBITDA/Assets. *Row 4*: use Δ(NI/Assets). *Row 5*: use level of NI/Assets. t-statistics are based on standard errors that are adjusted for heteroscedasticity and firm-level clustering. ***, **, and * represent significance at the 1%, 5%, and 10% levels.

Row		Pay for Good Luck	Incremental Pay for Bad Luck	N
(0)	Baseline: Δ(OI/Assets) = Δ(EBIT/Assets) [Same as Row 4, Table 4]	7,083.91*** (3.1)	**5,580.02**** **(2.4)**	23,587
(1)	EBIT/Assets	6,473.48*** (7.9)	**-553.84** **(-0.3)**	23,794
(2)	Δ(EBITDA/Assets)	4,644.76** (2.1)	**5,718.90**** **(2.5)**	23,587
(3)	EBITDA/Assets	5,755.45*** (7.2)	**1,554.91** **(0.8)**	23,794
(4)	Δ(NI/Assets)	6,405.31*** (3.9)	**2,107.67** **(1.5)**	23,846
(5)	NI/Assets	5,521.51*** (6.4)	**-1,121.81** **(-1.1)**	24,008

Table A11: Alternative definitions of industry

The table tests of asymmetry in pay for luck using alternative definitions of industry. Column 1 reports the results from our baseline for comparison purposes. Column 2 reports the results when the first stage includes only equally weighted market returns in the 1st stage estimation of luck and skill. Column 3 reports the results when the first stage includes only value weighted market returns in the 1st stage estimation of luck and skill. Column 4 reports the results when we include equally weighted market returns as well as equally weighted peer group returns in the 1st stage estimation of luck and skill. We form peer groups as in Bizjak, Lemmon, and Naveen (2008). We first sort all firms in each year into two size groups, and within each size group, we sort firms into groups based on their two-digit SIC group. Column 5 reports the results when we include value-weighted market returns as well as the value-weighted peer group returns in the 1st stage. In Columns 2-5, the 2nd stage is identical to the baseline. t-statistics are based on standard errors that are adjusted for heteroscedasticity and firm-level clustering. ***, **, and * represent significance at the 1%, 5%, and 10% levels.

	Dependent Variable = ΔPay				
	(1)	(2)	(3)	(4)	(5)
	Baseline	Only EW Market in 1st stage	Only VW Market in 1st stage	EW Peer Group + EW Market	VW Peer Group + VW Market
Luck	1,506.32***	-424.55	8.49	1,105.55**	759.64
	(3.6)	(-0.6)	(0.0)	(2.5)	(1.6)
Incremental Pay for Bad Luck	**341.63**	**1,737.98****	**1,534.04****	**810.25**	**1004.51***
	(0.7)	**(2.2)**	**(2.3)**	**(1.6)**	**(1.9)**
Controls as in baseline	Yes	Yes	Yes	Yes	Yes
Observations	24,714	25,190	25,190	23,328	23,328

Table A12: GM for subsamples by time

The table estimates annual regressions of *ΔPay* (=$TDC1_t$ –$TDC1_{t-1}$). Column 1 of presents the baseline GM specification where *Luck* and *Skill* are computed based on the GM methodology for the full sample period (1992-2014). We start with 1993 because we wish to include five years of data in each subsample and we do not have change in pay for 1992. In all columns, *Luck* and *Skill* are estimated over the full sample period using the GM methodology. In Columns 2 through 5, the 2nd stage is estimated over the relevant 5-year sub-period.

		5-year subsamples			
	(1) GM: Baseline for 1992-2014	(2) GM 1993-1997	(3) GM 1998-2002	(4) GM 2003-2007	(5) GM 2008-2012
Pay for Good Luck	0.40***	0.14	0.81*	0.86*	0.22
	(2.8)	(0.5)	(1.9)	(1.8)	(0.9)
Incremental Pay for Bad Luck	**-0.04****	**-0.96****	**-0.19***	**-0.11**	**0.08**
	(-2.1)	**(-2.1)**	**(-1.8)**	**(-0.9)**	**(1.6)**
Controls as in GM	Yes	Yes	Yes	Yes	Yes
Observations	17,512	3,353	3,739	3,989	4,676