

Technical Appendix to CEO PAY AND FIRM SIZE: AN UPDATE AFTER THE CRISIS

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Appendix B. Additional Tables

Table B1

CEO Pay, Own Firm Size, and Reference Firm Size—Excluding Sticky Equity Awards (Size Is Market Total Value)

	ln(Total compensation)					
	Top 1,000			Top 500		
	(1)	(2)	(3)	(4)	(5)	(6)
ln(Firm value)	0.327 (0.0164) (0.0150)	0.384 (0.0175) (0.0133)	0.241 (0.0538) (0.0313)	0.300 (0.0285) (0.0300)	0.347 (0.0279) (0.0270)	0.112 (0.118) (0.0465)
ln(Firm value of firm no. 250)	0.686 (0.0396) (0.0692)	0.609 (0.0378) (0.0657)	0.847 (0.0516) (0.0749)	0.851 (0.0620) (0.0717)	0.741 (0.0612) (0.0750)	1.075 (0.107) (0.0820)
Industry fixed effects	No	Yes	No	No	Yes	No
Firm fixed effects	No	No	Yes	No	No	Yes
ln(Firm value) + ln(Firm value of firm no. 250) – 1	0.014 (0.039) (0.065)	–0.007 (0.038) (0.061)	0.089 (0.040) (0.068)	0.151 (0.061) (0.071)	0.088 (0.060) (0.072)	0.187 (0.051) (0.072)
Observations	18,297	18,297	18,297	9,129	9,129	9,129
R ²	0.190	0.262	0.569	0.132	0.209	0.556

Notes. The sample consists of all US-based firms between 1992 and 2011 for which we can retrieve both firm size in Compustat and CEO compensation in Execucomp. For each year we select the top n ($n = 500, 1,000$) largest firms (in term of total market firm value, i.e. debt plus equity). The formula we use for total firm value is $(CSHO \times PRCC_F + AT_CEQ_TXDB)$. Deferred taxes (item TXDB) are set to 0 when missing. We retrieve from Execucomp the total compensation variable, TDC1 in year t , which includes salary, bonus, restricted stock granted and the Black–Scholes value of stock-options granted. All nominal quantities are converted into year 2000 dollars using the GDP deflator of the Bureau of Economic Analysis. We exclude the observations for which the number of options (respectively performance shares, shares granted under non-performance-based plans) granted to the CEO in year t is positive and the same as in year $t - 1$. The industries are the Fama and French (1997) 48 sectors. We regress the log of total compensation of the CEO in year t on the log of the firm value (debt plus equity) at the end of the year $t - 1$, and the log of the 250th firm market value at the end of the year $t - 1$. We report standard errors clustered at the firm level (first line) and at the year level (second line).

Table B2

CEO Pay, Own Firm Size, and Reference Firm Size—Excluding Sticky Equity Awards (Size Is Equity Value)

	ln(Total compensation)					
	Top 1,000			Top 500		
ln(Equity Value)	0.384 (0.0213) (0.0147)	0.386 (0.0218) (0.0148)	0.271 (0.0441) (0.0255)	0.327 (0.0429) (0.0278)	0.323 (0.0414) (0.0278)	0.207 (0.105) (0.0400)
ln(Equity Value of firm no. 250)	0.447 (0.0312) (0.0704)	0.424 (0.0317) (0.0683)	0.548 (0.0369) (0.102)	0.578 (0.0496) (0.0854)	0.557 (0.0519) (0.0815)	0.707 (0.0836) (0.102)
Industry fixed effects	No	Yes	No	No	Yes	No
Firm fixed effects	No	No	Yes	No	No	Yes
ln(Equity Value)+ln (Equity Value of firm no. 250)-1	-0.170 (0.030) (0.067)	-0.190 (0.030) (0.065)	-0.180 (0.032) (0.093)	-0.096 (0.046) (0.086)	-0.120 (0.046) (0.080)	-0.086 (0.045) (0.094)
Observations	18,267	18,267	18,267	9,140	9,140	9,140
R ²	0.207	0.232	0.566	0.130	0.167	0.540

Notes. The sample consists of all US-based firms between 1992 and 2011 for which we can retrieve both firm size from Compustat and CEO compensation from Execucomp. For each year we select the top n ($n = 500, 1,000$) largest firms in term of equity value. The formula we use for equity value is $(CSHO \times PRCC_F)$. We retrieve from ExecuComp the total compensation variable, TDC1 in year t , which includes salary, bonus, restricted stock granted and the Black–Scholes value of stock-options granted. All nominal quantities are converted into year 2000 dollars using the GDP deflator of the Bureau of Economic Analysis. We exclude the observations for which the number of options (performance shares, shares granted under non-performance-based plans) granted to the CEO in year t is positive and the same as in year $t - 1$. The industries are the Fama and French (1997) 48 sectors. We regress the log of total compensation of the CEO in year t on the log of the equity value at the end of the year $t - 1$, and the log of the 250th equity value at the end of the year $t - 1$. We report standard errors clustered at the firm level (first line) and at the year level (second line).

Table B3

CEO Pay, Own Firm Size, and Reference Firm Size – Adjusting TDC1 Before 2006 (Size Is Market Total Value)

	ln(Total compensation)					
	Top 1,000			Top 500		
	(1)	(2)	(3)	(4)	(5)	(6)
ln(Firm value)	0.327 (0.0156)	0.384 (0.0165)	0.247 (0.0500)	0.306 (0.0271)	0.352 (0.0263)	0.126 (0.108)
	(0.0145)	(0.0130)	(0.0296)	(0.0281)	(0.0250)	(0.0403)
ln(Firm value of firm no. 250)	0.720 (0.0380)	0.641 (0.0363)	0.888 (0.0484)	0.889 (0.0589)	0.783 (0.0583)	1.116 (0.0983)
	(0.0681)	(0.0651)	(0.0749)	(0.0708)	(0.0732)	(0.0799)
Industry fixed effects	No	Yes	No	No	Yes	No
Firm fixed effects	No	No	Yes	No	No	Yes
ln(Firm value) + ln (Firm Value of firm no. 250)–1	0.046 (0.037)	0.025 (0.037)	0.135 (0.038)	0.185 (0.058)	0.135 (0.057)	0.242 (0.049)
	(0.064)	(0.061)	(0.068)	(0.070)	(0.070)	(0.072)
Observations	19,907	19,907	19,907	9,987	9,987	9,987
R ²	0.198	0.272	0.573	0.143	0.222	0.560

Notes. The sample consists of all US-based firms between 1992 and 2011 for which we can retrieve both firm size in Compustat and CEO compensation in Execucomp. For each year we select the top n ($n = 500, 1,000$) largest firms (in term of total market firm value, i.e. debt plus equity). The formula we use for total firm value is $(CSHO \times PRCC_F + AT - CEQ - TXDB)$. Deferred taxes (item TXDB) are set to 0 when missing. ExecuComp total compensation variable, TDC1, is adjusted as follows: when measured in its pre-2006 format, we subtract from TDC1 the amount paid under the company's long-term incentive plan (Execucomp variable LTIP). We then add the *ex ante* value of performance shares by multiplying the target number of performance shares granted (Execucomp variable SHRTARG) by the stock price at the end of the fiscal year. When missing, the variable SHRTARG is replaced by 0. All nominal quantities are converted into year 2000 dollars using the GDP deflator of the Bureau of Economic Analysis. The industries are the Fama and French (1997) 48 sectors. We regress the log of total compensation of the CEO in year t on the log of the firm value (debt plus equity) at the end of the year $t - 1$, and the log of the 250th firm market value at the end of the year $t - 1$. We report standard errors clustered at the firm level (first line) and at the year level (second line).

Table B4

CEO Pay, Own Firm Size, and Reference Firm Size – Adjusting TDC1 Before 2006 (Size Is Equity Value)

	ln(Total compensation)					
	Top 1,000			Top 500		
ln(Equity Value)	0.385 (0.0197) (0.0142)	0.387 (0.0203) (0.0141)	0.276 (0.0408) (0.0252)	0.337 (0.0392) (0.0258)	0.332 (0.0383) (0.0255)	0.224 (0.0966) (0.0345)
ln(Equity Value of firm no. 250)	0.468 (0.0297) (0.0712)	0.444 (0.0303) (0.0692)	0.577 (0.0348) (0.106)	0.601 (0.0467) (0.0860)	0.581 (0.0494) (0.0825)	0.736 (0.0772) (0.107)
Industry fixed effects	No	Yes	No	No	Yes	No
Firm fixed effects	No	No	Yes	No	No	Yes
ln(Equity Value)+ ln(Equity Value of firm no. 250)-1	-0.147 (0.028) (0.067)	-0.170 (0.029) (0.065)	-0.147 (0.031) (0.093)	-0.062 (0.044) (0.086)	-0.088 (0.044) (0.081)	-0.040 (0.043) (0.096)
Observations	19,906	19,906	19,906	9,983	9,983	9,983
R ²	0.217	0.242	0.569	0.142	0.177	0.541

Notes. The sample consists of all US-based firms between 1992 and 2011 for which we can retrieve both firm size from Compustat and CEO compensation from Execucomp. For each year we select the top n ($n = 500, 1,000$) largest firms in term of equity value. ExecuComp total compensation variable, TDC1, is adjusted as follows: when measured in its pre-2006 format, we subtract from TDC1 the amount paid under the company's long-term incentive plan (execucomp variable LTIP). We then add the *ex ante* value of performance shares by multiplying the target number of performance shares granted (execucomp variable SHRTARG) by the stock price at the end of the fiscal year. When missing, the variable SHRTARG is replaced by 0. All nominal quantities are converted into year 2000 dollars using the GDP deflator of the Bureau of Economic Analysis. The industries are the Fama and French (1997) 48 sectors. We regress the log of total compensation of the CEO in year t on the log of the equity value at the end of the year $t - 1$, and the log of the 250th equity value at the end of the year $t - 1$. We report standard errors clustered at the firm level (first line) and at the year level (second line).

Reference

Fama, E. and French, K. (1997). 'Industry costs of equity', *Journal of Financial Economics*, vol. 43(2), pp. 153–93.