Equity Pay Beyond the C-Suite

Andrea L. Eisfeldt (UCLA and NBER) Antonio Falato (Fed Board) Dongryeol Lee (UCLA) Mindy Z. Xiaolan (UT Austin McCombs)

11th ABFER Annual Conference, May 2024

Motivation

• Equity Pay is common: 84% of firms use equity pay beyond the C-Suite.



- 7% of value-added in 2019, and about 11% of market capitalization is implicitly promised to employees (Eisfeldt, Falato, Xiaolan (2022))
- Labor income mismeasured without equity pay

Motivation

• Equity Pay is common: 84% of firms use equity pay beyond the C-Suite.



- 7% of value-added in 2019, and about 11% of market capitalization is implicitly promised to employees (Eisfeldt, Falato, Xiaolan (2022))
- Labor income mismeasured without equity pay
- How different is equity-based pay across firms?

Equity pay: Very Unequal across Firms



Lorenz Curve. This figure plots Lorenz curves of equity pay for high-skilled employees and CEO as of 2019. Gini coefficients for each item are 0.72 for high-skilled and 0.55 for CEO. Equity pay for high-skilled is defined as the value of granted shares per high-skilled employee.

- 1. Capital gains or stock price changes
- 2. Changes in shares granted per employee
- 3. Initial values

- 1. Capital gains or stock price changes \leftarrow agency theory or risk sharing
- 2. Changes in shares granted per employee
- 3. Initial values

- 1. Capital gains or stock price changes \leftarrow agency theory or risk sharing
- 2. Changes in shares granted per employee \leftarrow capital structure decision
- 3. Initial values

- 1. Capital gains or stock price changes \leftarrow agency theory or risk sharing
- 2. Changes in shares granted per employee \leftarrow capital structure decision
- 3. Initial values \leftarrow passive or fixed effect

Equity Pay beyond C-suite

Both compensation and capital structure decision.

- **Cross Sections: Initial values matter A LOT.**
 - 1. Peer effects (equity pay for retention/participation constraint)
 - 2. Financial constraints (firms borrow from workers)

Equity Pay beyond C-suite

Both compensation and capital structure decision.

- **Cross Sections: Initial values matter A LOT.**
 - 1. Peer effects (equity pay for retention/participation constraint)
 - 2. Financial constraints (firms borrow from workers)

► Time Series: actively managed in high-equity-pay firms.

- 1. Manage share grants more actively to counteract stock price changes
- 2. Tend to be younger, experience ex-post higher employment growth

Equity Pay beyond C-suite

Both compensation and capital structure decision.

- **Cross Sections: Initial values matter A LOT.**
 - 1. Peer effects (equity pay for retention/participation constraint)
 - 2. Financial constraints (firms borrow from workers)

► Time Series: actively managed in high-equity-pay firms.

- 1. Manage share grants more actively to counteract stock price changes
- 2. Tend to be younger, experience ex-post higher employment growth
- Different from CEO pay: designed to satisfy IC constraint so high sensitivity of CEO pay to stock price movements.

Section 1

Measurement

Data Construction

Measurement strategy:

Firm-level accounting data on shares reserved for employee compensation.

- SP1500+, from 1994-2019 (List from Execucomp)
- Source: Shares Reserved for Compensation (Balance Sheet Data)
 IRRC-Risk Metrics, Compustat, Hand-collect RS from SEC filings (2006-2019 10K, Proxy statements)
- Other data sources:
 - ONET for skilled/unskilled ratio
 - ExecuComp for C-Suite

Measurement

 New grants (NG) = Annual firm-level new equity grants (Eisfeldt, Falato, Xiaolan, Human Capitalists 2022, Macro Annual)

 $NG \equiv \frac{\text{Outstanding shares reserved for compensation (RS)}}{\text{Weighted average granting period (GP)}}$

Average granting period (GP): 6 years (from IRRC-Risk Metrics)

- New granted per employee (N) = $\frac{NG}{No. high-skilled employees}$
 - High-skilled employee ratio from ONET by industry
- Equity pay per employee in year $t = P_t \times N_t$

Section 2

Stylized Facts

Summary Statistics

Panel B1. Subsample (1994 - 2000)

Variables	Mean	Std Dev	P10	P25	Median	P75	P90	
Equity Pay (High Skilled)	33.845	138.478	1.631	4.442	11.185	28.054	69.084	
Equity Pay (CEO)	2,446.698	11,629.225	0.000	0.000	526.289	1,919.757	5,110.377	
RS/SO	0.119	0.091	0.030	0.060	0.099	0.156	0.225	
	Pane	el B2. Subsa	mple (20	001 - 200	17)			
Variables	Mean	Std Dev	P10	P25	Median	P75	P90	
Equity Pay (High Skilled)	67.899	153.960	6.121	13.466	30.622	71.086	150.221	
Equity Pay (CEO)	3,175.029	7,606.988	0.000	89.445	1,181.537	3,490.272	7,896.145	
RS/SO	0.157	0.102	0.059	0.092	0.137	0.196	0.274	
	Pane	el B3. Subsa	mple (20	008 - 201	4)			
Variables	Mean	Std Dev	P10	P25	Median	P75	P90	
Equity Pay (High Skilled)	62.866	156.805	4.018	9.695	24.164	58.565	135.502	
Equity Pay (CEO)	2,985.086	4,870.886	0.000	369.600	1,594.400	3,939.278	7,289.995	
RS/SO	0.136	0.099	0.043	0.073	0.116	0.171	0.249	
Panel B4. Subsample (2015 - 2019)								
Variables	Mean	Std Dev	P10	P25	Median	P75	P90	
Equity Pay (High Skilled)	95.785	233.814	5.046	12.744	31.965	84.616	221.808	
Equity Pay (CEO)	4,157.386	6,312.066	0.000	839.900	2,699.879	5,529.449	9,672.298	
RS/SO	0.119	0.091	0.034	0.059	0.099	0.153	0.224	

7/26



Industry Composition of Top 10% Equity Payers



Beyond the C-Suite vs. CEO



Interquartile Range to Median

Inequality in Equity Pay Beyond the C-Suite Continues to Grow While for CEOs it's Shrinking.

Section 3

Equity Pay Heterogeneity cross Firms Initial Values Matter A LOT

Determinants of Equity Pay Heterogeneity cross Firms

Equity Pay $P_t N_t$:

- 1. Initial Level P_0N_0
- 2. Path of N_t over time
- 3. Path of P_t over time

Findings on cross-firm differences in equity pay:

- echo evidence from capital structure literature
 - Peer effect (binding participation constraint)
 - ► Financing: firms "borrow" from workers

Determinants of Equity Pay Heterogeneity cross Firms

Equity Pay $P_t N_t$:

- 1. Initial Level P_0N_0 (66% at 10-yr horizon)
- 2. Path of N_t over time
- 3. Path of P_t over time

Findings on cross-firm differences in equity pay:

- echo evidence from capital structure literature
 - Peer effect (binding participation constraint)
 - ► Financing: firms "borrow" from workers

Average Equity Pay for Equity-Pay Quartiles in Event Time

- 1. Starting in 1994, sort firms into quartiles based on equity pay (P_tN_t) .
- 2. Compute the equally-weighted average values within each of these 1994-sorted portfolios for the subsequent 10 years, holding the portfolio composition constant.
- 3. Conduct this sorting and within-portfolio averaging for the four portfolios sorted in each subsequent year from 1995 to 2019.
- 4. Average the portfolio values across sorting years for each "event year", that is, for one year post-sort, two years post-sort, etc.
- 5. Robustness: Repeat this analysis using the subsample of firms that exist throughout each post-sort period (*Survivors*).

Average Equity Pay for Equity-Pay Quartiles in Event Time



High Equity Pay Firms Remain High Even 10 years Post Sorting

$P_t N_t$ Dynamics: Persistence in Value of Pay

$$y_{it} = \alpha_i + \beta y_{i0} + \rho y_{it-1} + \epsilon_{it}, \quad y_{it} \in \{P_{it}N_{it}, \ln P_{it}N_{it}\},\$$

		Values			Log Values		
	(1)	(2)	(3)	(4)	(5)	(6)	
Initial value		0.377**			0.665***		
		(2.653)			(12.836)		
Lagged value			0.726***			0.868***	
			(8.219)			(65.232)	
Constant		41.957***	16.579***		1.208***	0.418***	
		(4.850)	(3.314)		(5.902)	(6.838)	
Observations	51291	52247	43602	51291	52247	43602	
R^2	0.630	0.247	0.583	0.705	0.424	0.789	
Firm Fixed Effect	Yes	No	No	Yes	No	No	

t statistics in parentheses

$P_t N_t$ Dynamics: Persistence in Value of Pay for CEOs

$$y_{it} = \alpha_i + \beta y_{i0} + \rho y_{it-1} + \epsilon_{it}, \quad y_{it} \in \{P_{it}N_{it}, \ln P_{it}N_{it}\},\$$

		Values			Log Values		
	(1)	(2)	(3)	(4)	(5)	(6)	
Initial value		0.139***			0.636***		
		(3.394)			(20.511)		
Lagged value			0.311***			0.484***	
			(5.381)			(33.123)	
Constant		2745.928***	2315.323***		0.224	2.676***	
		(14.354)	(9.642)		(0.873)	(29.296)	
Observations	42215	42318	38926	42215	42318	38926	
R^2	0.240	0.022	0.092	0.337	0.061	0.256	
Firm Fixed Effect	Yes	No	No	Yes	No	No	

t statistics in parentheses

Nt Dynamics: Persistence in Shares Granted

$$y_{it} = \alpha_i + \beta y_{i0} + \rho y_{it-1} + \gamma \frac{P_{it-1}}{P_{it-2}} + \epsilon_{it}, \quad y_{it} \in \{N_{it}, \ln N_{it}\},$$

		V	alues			Log Values			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Initial value		0.346***				0.717***			
		(6.225)				(23.534)			
Lagged value			0.877***	0.882***			0.927***	0.929***	
			(44.050)	(44.465)			(103.491)	(104.809)	
$P_{t-1}/P_{t-2} - 1$				-0.709***				-0.143***	
				(-6.389)				(-12.990)	
Constant		2.236***	0.346***	0.351***		-0.028	-0.007	-0.005	
		(7.313)	(6.341)	(6.193)		(-0.770)	(-0.609)	(-0.486)	
Observations	51288	52243	43601	42403	51288	52243	43601	42403	
R^2	0.625	0.284	0.833	0.833	0.795	0.569	0.889	0.891	
Firm Fixed Effect	Yes	No	No	No	Yes	No	No	No	

t statistics in parentheses

				Equ	ity Pay		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Industry Average Equity Pay		1.609***				0.606***	
		(15.408)				(5.940)	
City Average Equity Pay				0.683***			0.271***
, , , , ,				(5.894)			(5.030)
Cash-to-asset					211.091***	199.343***	211.113***
					(3.923)	(3.474)	(3.351)
Cashflow-to-asset					47.034*	59.511**	69.192**
					(1.702)	(2.356)	(2.326)
Leverage					18.114	23.678	13.641
0					(0.932)	(1.279)	(0.714)
Dividend payer					-29.265**	-17.717	-25.315
					(-2.594)	(-1.493)	(-1.450)
Log Asset					6.810***	4.335***	6.296***
0					(4.213)	(3.660)	(2.861)
Return volatility					239.714***	221.131***	264.624**
,					(2.735)	(2.682)	(2.595)
Observations	6729	6746	2706	5090	1976	1976	1431
R ²	0.162	0.099	0.325	0.042	0.098	0.113	0.110
Initial Year \times Industry FE	Yes	No	No	No	No	No	No
City × Initial Year Fixed Effect	No	No	Yes	No	No	No	No

Initial Values: Equity Pay P_0N_0 (Peer Effects and Employee Financing)

to to the tight on the second the second

15/26

Decomposing Equity Pay

$$\ln(P_t N_t) = \ln\left(P_{t-k} N_{t-k}\right) + \ln\left(\frac{P_t}{P_{t-k}}\right) + \ln\left(\frac{N_t}{N_{t-k}}\right)$$

$$1 = \frac{\cos\left[\ln\left(P_{t-k}N_{t-k}\right), \ln\left(P_{t}N_{t}\right)\right]}{Var\left[\ln\left(P_{t}N_{t}\right)\right]} + \frac{\cos\left[\ln\left(\frac{P_{t}}{P_{t-k}}\right), \ln\left(P_{t}N_{t}\right)\right]}{Var\left[\ln\left(P_{t}N_{t}\right)\right]} + \frac{\cos\left[\ln\left(\frac{N_{t}}{N_{t-k}}\right), \ln\left(P_{t}N_{t}\right)\right]}{Var\left[\ln\left(P_{t}N_{t}\right)\right]},$$

▶ Run the following regressions and plot each coefficients over *k*-horizon,

$$\ln P_{it-k}N_{it-k} = \alpha_t + \beta_{Lag,k} \times \ln P_{it}N_{it} + \epsilon_{it},$$

$$\ln \frac{P_{it}}{P_{it-k}} = \alpha_t + \beta_{Price,k} \times \ln P_{it}N_{it} + \epsilon_{it},$$

$$\ln \frac{N_{it}}{N_{it-k}} = \alpha_t + \beta_{Shares,k} \times \ln P_{it}N_{it} + \epsilon_{it}.$$

The figure plots the regression coefficients $\beta_{Lag,k}$, $\beta_{Price,k}$, $\beta_{Shares,k}$ for k = 1...10.

16/26

Decomposing Equity Pay



The largest fraction of variation is explained by lagged equity pay. After lagged equity pay, variation in price returns explains the next largest fraction of variation in equity pay, up to 28% at a ten-year horizon.

Section 4

Dynamics of Equity Pay:

Firms managing equity pay more "actively" than their leverage ratios.

Decomposing the Growth of Equity Pay

We apply the following decomposition to tie the growth rates of equity pay into *Price effect* and *Shares effect*:



where P_t is the stock price and N_t is the number of granted shares to high-skilled employee. We estimate the following regressions for each k = 1, 2...5

$$\ln \frac{P_{it}}{P_{it-k}} = \alpha_t + \beta_{Price,k} \times \ln \frac{P_{it}N_{it}}{P_{it-k}N_{it-k}} + \epsilon_{it},$$

$$\ln \frac{N_{it}}{N_{it-k}} = \alpha_t + \beta_{Shares,k} \times \ln \frac{P_{it}N_{it}}{P_{it-k}N_{it-k}} + \epsilon_{it}.$$

"Active" Changes in Shares Granted

Panel A. Price Effect									
k = 1	k = 2	k = 3	k = 4	k = 5					
0.409	0.434	0.434	0.434	0.434					
	Panel B. Shares Effect								
k = 1	k = 2	k = 3	k = 4	k = 5					
0.585	0.562	0.564	0.563	0.564					

"Active" Changes in Shares Granted

Panel A. Price Effect k = 1k = 2k = 3k = 4k = 50.409 0.434 0.434 0.434 0.434 Panel B. Shares Effect k = 1k = 2k = 3k = 4k = 50.585 0.562 0.563 0.564 0.564Panel C. Price Effect (CEO) k = 1k = 2k = 3k = 4k = 50.043 0.106 0.140 0.164 0.180 Panel D. Shares Effect (CEO) k = 1k = 2k = 3k = 4k = 50.957 0.894 0.860 0.836 0.820

Welch (2004) Regression for Equity Pay

- ▶ Welch (2004): changes in prices are primary "known" driver of capital share dynamics.
- ▶ Firms managing equity pay *more actively* than capital structure.

$$\frac{P_{t+k}RS_{t+k}}{P_{t+k}S_{t+k} + D_{t+k}} = \alpha_0 + \alpha_1 \cdot \frac{P_tRS_t}{P_tS_t + D_t} + \alpha_2 \cdot \frac{P_{t+k}RS_t}{P_{t+k}S_t + D_t} + \epsilon_t, \tag{1}$$

If changes in equity pay share of total firm value are mainly driven by stock price movement, *α*₁ should be close to zero and *α*₂ should be close to one.

	k = 1	k = 2	k = 5	k = 10
	(1)	(2)	(3)	(4)
$\frac{P_t RS_t}{P_t S_t + D_t}$	0.175^{*}	0.017	-0.045	-0.093
- 1-1 + - 1	(2.013)	(0.192)	(-0.657)	(-1.280)
$\frac{P_{t+k}RS_t}{P_{t+k}S_t+D_t}$	0.397***	0.341***	0.085	0.003
174	(4.581)	(4.154)	(1.272)	(0.051)
Observations	41864	36371	25532	14237
R^2	0.803	0.745	0.701	0.732
t statistics in	naronthag	20		

t statistics in parentheses

*
$$p < 0.10$$
, ** $p < 0.05$, *** $p < 0.01$

Welch (2004) Regression for Equity Pay

In addition, we can run the following regression

$$\frac{P_{t+k}RS_{t+k}}{P_{t+k}S_{t+k}+D_{t+k}} = \alpha_0 + \alpha_1 \cdot \frac{P_tRS_t}{P_tS_t+D_t} + \alpha_2 \cdot \frac{P_tRS_{t+k}}{P_tS_{t+k}+D_t} + \epsilon_t.$$
(2)

• If firms are actively managing shares granted, α_2 should be large and close to one.

	k = 1	<i>k</i> = 2	k = 5	k = 10
	(1)	(2)	(3)	(4)
$\frac{P_t RS_t}{P_t S_t + D_t}$	0.100***	0.061***	0.036***	0.024**
- 1-1 + - 1	(4.429)	(5.039)	(4.160)	(2.116)
$\frac{P_t RS_{t+k}}{P_t S_{t+k} + D_t}$	0.877***	0.900***	0.899***	0.871***
T THE T	(34.081)	(68.537)	(92.052)	(39.269)
Observations	43153	36806	25879	14504
<i>R</i> ²	0.943	0.920	0.879	0.831
t statistics in	naronthos	26		

t statistics in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01

Managing Equity Pay

Sort firms into quartile based on equity pay levels, and run regression

$$y_{it} = \alpha + \rho y_{it-1} + \beta \cdot (P_{it-1}/P_{it-2}) + \epsilon_{it}$$

- Equity pay persistence is slightly lower for high equity pay firms, while shares granted is slightly more persistent.
- ▶ High equity pay firms have a more active management of equity pay against returns.

	Equi	ty Pay	1	N
	AR(1)	Ret_{t-1}	AR(1)	Ret_{t-1}
Low	0.800	-0.609	0.808	-0.053
	(0.128)	(1.353)	(0.152)	(0.042)
Medium-Low	0.812	-1.430	0.862	-0.135
	(0.107)	(1.272)	(0.080)	(0.042)
Medium-High	0.775	-2.307	0.850	-0.263
	(0.125)	(3.067)	(0.062)	(0.051)
High	0.733	-7.156	0.854	-1.201
	(0.157)	(11.982)	(0.062)	(0.673)

Managing Equity Pay for CEOs

Instead, equity pay for CEOs tends to rise following a period of strong performance, indicating incentive driven nature of equity pay in the CEO compensation.

	Equ	uity Pay		Ν
	AR(1)	Ret_{t-1}	AR(1)	Ret_{t-1}
Low	0.277	593.829	0.108	3.364
	(0.153)	(438.298)	(0.098)	(198.510)
Medium-Low	0.441	416.260	0.302	1.821
	(0.071)	(139.827)	(0.078)	(12.624)
Medium-High	0.362	806.379	0.247	-15.717
	(0.108)	(199.697)	(0.098)	(25.441)
High	0.366	2,666.242	0.233	63.166
-	(0.140)	(1,328.874)	(0.176)	(303.307)

Equity Pay Quartiles: Subsequent Employment Growth



High Equity Pay Firms Experience Higher Employment Growth High CEO Equity Pay Firms Experience Lower Employment Growth

Equity Pay by Age Group: Time Series



Young Firms Increasingly Have Higher Equity Pay Beyond the C-Suite Old Firms Continue to Have Higher CEO Equity Pay

Conclusion

- Equity pay is ubiquitous, but varies widely across firms.
- Equity pay is a capital structure and compensation decision
- Compensation:
 - Equity pay seems more persistent and more actively managed than leverage.
 - City and industry peer effects (retention, participation constraints)
 - Risk sharing: Some insurance through granting policies

Capital Structure

- Firms "borrow" from workers
- Findings echo some findings from capital structure literature.
 - Initial values matter A LOT
 - Firm fixed effects/initial values hard to explain
- Equity pay in a capital structure framework

Section 5

Appendix

Model Setup

- Firms finance investment using equity or internal cash. No debt financing is assumed.
- Equity-pay as an internal financing tool is cheaper than regular external equity, but firms face a fixed cost to set up.
- At any point, firms decide to switch to equity financing with a high fixed cost.
- This model also captures the idea that equity pay is a financing tool that can also be used for employee retention.

Benchmark: No Equity Financing

We start with a firm that finances its investment using only internal cash flows and external finance. Firms produce using capital *h*, and pays wages *w* per unit of *h*:

 $\pi(z,h) = z_t h_t l_t^{\alpha} - w l_t$

 h_t is the average employee-level human capital/productivity. To introduce the turnover, we assume each period, firms randomly lose a fraction $\delta_{m,t}$ of h due to high-skilled employees leaving the firm.

$$I(h_t, h_{t+1}) = h_{t+1} - (1 - \delta - \delta_{m,t})h_t$$

Firm's earning:

$$d_t = \pi(z_t, h_t) - I(h_t, h_{t+1}) - \Phi(I_t, h_t),$$

where $\Phi(h_t, I_t)$ is the investment adjustment cost.

We assume firms incur a cost if financing $d_t < 0$ externally. The cost can be a function of the size of external finance $\lambda_{I(d_t < 0)}(-d_t)$. The value of a non-equity pay firm is

$$V_{NE}(z_t, h_t; w) = \max_{h_{t+1}} \left[d_t - \lambda(-d_t) + \beta V_{NE,t+1}(z_{t+1}, h_{t+1}; w) \right]$$

Equity Financing

Firms can substitute equity E_t for a fraction of the total wage bill. In addition, using equity pay will reduce the depreciation of human capital due to turnover $\delta_{m,t} = 0$ if the equity pay level is higher than an exogenous threshold $E_{m,t}$. Firms grant equity to employees. We denote the overall balance of equity granted to employees is G_t which follows the law of motion:

$$G_{t+1} = (1 - \delta_e)G_t + E_t$$

The earnings of the equity-pay firm are:

$$d_t^E = z_t h_t l_t^{\alpha} - (w - \frac{E_t}{l_t}) l_t - I(h_t, h_{t+1}) - \Phi(I_t, h_t) - \Phi^E(E_t, E_0, \frac{E_{m,t}}{l_t}) - E_{t-1},$$
(3)

where $\Phi^{E}(E_{t}, E_{0})$ is the adjustment cost of equity pay deviating from the initial level E_{0} . Trade-off:

- Costly adjustment, e.g. dilution
- Cheaper financing compared to external financing + retention

Option to Switch to Equity Financing

The value of the firm when allowing equity pay:

$$V_E(z_t, h_t, E_t; w) = \max_{h_{t+1}} \left[d_t^E - \lambda(-d_t^E) + \beta V_{E,t+1}(z_{t+1}, h_{t+1}, E_{t+1}; w) \right]$$
(4)

Each period, firms decide whether or not to become an equity-paying firm. By switching to an equity-paying firm, they need to pay a large cost upfront, *F*, and we assume this decision is irreversible.

$$V_t(z_t) = \max\{V_{NE,t}, V_{E,t} - F\}$$
(5)

Constructing Grant-Based Measure

We start with the following Law of Motion for the stock of reserved shares,

 $RS_{t+1} = RS_t + NRS_t - EXC_t - EXP_t$

Assume that all newly authorized shares are evenly granted over the next gp_t periods, and a constant fraction of existing grants are exercised or expire ($EXC_t = e \cdot RS_t$, $EXP_t = c \cdot RS_t$). Then,

$$RS_{t+1} = \underbrace{(gp_0 - e \cdot gp_0 - c \cdot gp_0)}_{\text{average remaining granting period}} \frac{RS_t}{gp_0} + gp_1 \cdot AG_t$$
$$NG_{t+1} \equiv AG_t + \frac{RS_t}{gp_0} = \frac{RS_{t+1}}{\underbrace{(1 - e - c)gp_0\omega_0 + gp_t\omega_1}}_{\text{weighted average granting period}}$$



Beyond the C-Suite: Medians and Inequality



Equity Pay Beyond the C-Suite Continue to Grow Growth in Inequality Driven by the Right Tail

acteristics	anuı			
	(1)	(2)	(3)	(4)
N_{t-1}	0.877***	0.872***	0.882***	
	(44.050)	(39.168)	(44.465)	
$P_{t-1}/P_{t-2} = 1$			-0.709***	
- 1-17 - 1-2			(-6.389)	
			, ,	
Cash-to-asset		1.302***		14.842***
		(3.155)		(8.889)
Cashflow-to-asset		-2.170***		-4.000***
		(-6.947)		(-2.957)
Louerage		0 742***		2 202***
Leverage		(4.2(0))		3.302
		(4.369)		(3.119)
Dividend payer		0.116**		-0.814**
		(2.289)		(-2.640)
Log Asset		-0.087***		-0.210*
206110000		(-5, 032)		(-1.779)
		(0.002)		(1.77)
Return volatility		0.773		8.458***
		(1.275)		(3.623)
Constant	0.346***	0.589***	0.351***	1.794
	(6.341)	(3.808)	(6.193)	(1.466)
Observations	43601	39943	42403	45243
R ²	0.833	0.831	0.833	0.073

Nt Dynamics: Firm Characteristics and AR(1)

t statistics in parentheses

Average Shares Granted for Shares-Granted Quartiles in Event Time



High Shares-Granted Firms do Manage Grants Down

- Autor, D. H. (2014). Skills, education, and the rise of earnings inequality among the "other 99 percent". *Science* 344(6186), 843–851.
- Caicedo, S., J. Robert E. Lucas, and E. Rossi-Hansberg (2016, April). Learning, career paths, and the distribution of wages. Working Paper 22151, National Bureau of Economic Research.
- DeAngelo, H. and R. Roll (2015). How stable are corporate capital structures? *The Journal of Finance* 70(1), 373–418.
- Edmans, A., X. Gabaix, and D. Jenter (2017). Executive compensation: A survey of theory and evidence. *The handbook of the economics of corporate governance* 1, 383–539.
- Eisfeldt, A. L. and D. Papanikolaou (2013, Feburary). Organization capital and the cross-section of expected returns. *The Journal of Finance 68*(4), 1365 1406.

Frydman, C. and D. Jenter (2010). Ceo compensation. Annu. Rev. Financ. Econ. 2(1), 75–102.

- Frydman, C. and D. Papanikolaou (2015, Dec). In search of ideas: Technological innovation and executive pay inequality. NBER Working Papers 21795, National Bureau of Economic Research, Inc.
- Gabaix, X. and A. Landier (2008). Why has ceo pay increased so much?*. *The Quarterly Journal of Economics* 123(1), 49–100.
- Gabaix, X., J.-M. Lasry, P.-L. Lions, and B. Moll (2016). The dynamics of inequality. *Econometrica* 84(6), 2071–2111.

- Hall, B. J. and K. J. Murphy (2003). The trouble with stock options. *Journal of economic perspectives* 17(3), 49–70.
- Hartman-Glaser, B., H. Lustig, and M. Z. Xiaolan (2019). Capital share dynamics when firms insure workers. *The Journal of Finance* 74(4), 1707–1751.
- Kaplan, S. N. and J. Rauh (2010). Wall street and main street: What contributes to the rise in the highest incomes? *The Review of Financial Studies* 23(3), 1004–1050.
- Lemieux, T., W. B. MacLeod, and D. Parent (2009). Performance pay and wage inequality. *The Quarterly Journal of Economics* 124(1), 1–49.
- Lemmon, M. L., M. R. Roberts, and J. F. Zender (2008). Back to the beginning: persistence and the cross-section of corporate capital structure. *The journal of finance 63*(4), 1575–1608.
- Oyer, P. (2004). Why do firms use incentives that have no incentive effects? *The Journal of Finance* 59(4), 1619–1650.
- Parsons, C. and S. Titman (2009, 01). Empirical capital structure: A review. *Foundations and Trends*® *in Finance 3*.
- Piketty, T. and E. Saez (2003). Income inequality in the united states, 1913-1998. *Quarterly Journal of Economics 118*(1).
- Piketty, T., E. Saez, and G. Zucman (2018). Distributional national accounts: methods and estimates for the united states. *The Quarterly Journal of Economics* 133(2), 553–609.

- Shue, K. and R. R. Townsend (2017). Growth through rigidity: An explanation for the rise in ceo pay. *Journal of Financial Economics* 123(1), 1–21.
- Song, J., D. J. Price, F. Guvenen, N. Bloom, and T. Von Wachter (2019). Firming up inequality. *The Quarterly journal of economics* 134(1), 1–50.
- Stokey, N. L. (2016, April). Technology, skill and the wage structure. Working Paper 22176, National Bureau of Economic Research.
- Sun, Q. and M. Z. Xiaolan (2019). Financing intangible capital. *Journal of Financial Economics* 133(3), 564–588.

Welch, I. (2004). Capital structure and stock returns. Journal of political economy 112(1), 106–131.