Managerial Attributes and Executive Compensation

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Guidelines

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Note: For the convenience of discussion, the No. of figures and tables in this slide are consistent with those in the original paper.

Overview

Research Background

- Executive compensation is influenced by observable and unobeservable firm and managerial characteristics.
- Unobservable factors, such as managerial skills and firm culture, remain underexplored.

Research Questions

- How do unobservable[1] firm and manager characteristics affect executive compensation?
- How does controlling for these unobservable characteristics impact[2] the interpretation of traditional explanatory variables?

Research Gap

- Little knowledge is known about the impact from unobservable firm and managerial characteristics.

1. "Unobservable" indicates information that is difficult to quantify or unavailable to the econometrician. The authors do not exclude the possibility that such "unobservable" information may be observed by other parties such as employers.
2. It is possible that some unobserved heterogeneities can change over time; the fixed effects model cannot capture such time-variant unobserved heterogeneity.

Research Objectives

- Investigate the role of firm and manager fixed effects in executive pay.
- Assess the impact of controlling for unobserved heterogeneities on estimates of traditional factors (e.g., firm size, job tenure).

Key Contributions

- Provides the first empirical study on the role of unobserved firm and managerial heterogeneities in executive pay.
- Shows that controlling for fixed effects helps mitigate omitted-variable bias in traditional explanatory variables like firm size and job tenure.
- Introduces the AKM method into finance to better separate firm and manager fixed effects, enabling more accurate analysis with larger datasets.

Findings

- Manager fixed effects explain a majority of the variation in executive pay.
- They found that compensation fixed effects are significantly correlated with management styles (i.e., manager fixed effects in corporate policies).

Empirical Methodology

Overview

1. **Three-Way Fixed Effects Model**
   - Human capital theory as motivation
   - Manager fixed effects (θ_i), Firm fixed effects (φ_j), Time fixed effects (μ_t)
2. **Estimation Methods**
   - Spell Fixed Effects
   - Mover Dummy Variable (MDV) Method
   - Abowd, Kramarz, and Margolis (AKM) Method

Three-Way Fixed Effects Model

- **Human Capital Model** (Becker, 1993; Mincer, 1974)
- Expected wage: $y_{it} = U_t \times HC_{it}$ (U_t: market rate for human capital; HC_{it}: human capital stock)
- Observable firm characteristics: W_{jt}, Observable manager characteristics: X_{it}
- Log wage equation:

$$\ln(y_{it}) = X_{it}\beta + W_{jt}\gamma + \varphi_j + \theta_i + \mu_t + \epsilon_{it}$$

- The model includes three fixed effects: φ_j (firm), θ_i (manager), and μ_t (time)

Addressing Omitted-Variable Bias

- **Problem**: Firm size and other factors may be correlated with manager and firm characteristics, leading to biased estimates.
- **Solution**: Separate fixed effects for managers, firms, and time to mitigate bias.
- **Benefit**: Provides consistent, unbiased estimates of coefficients β and γ.

Estimation Methods

1. **Spell Fixed Effects**: Controls for both manager and firm fixed effects together.
2. **Mover Dummy Variable (MDV) Method**: Focuses on movers to separate fixed effects.
3. **Abowd, Kramarz, and Margolis (AKM) Method**: Uses connectedness to identify fixed effects for both movers and non-movers.

1. Spell Fixed Effects Method

- **Definition**: Creates a dummy variable for each unique combination of manager and firm.
- **Model**:

$$\ln(y_{it}) = X_{it}\beta + W_{jt}\gamma + V_s + \mu_t + \epsilon_{it}$$

- **Limitation**:
  - Cannot separate firm and manager fixed effects.
  - Hence cannot reveal their relative importance.

2. Mover Dummy Variable (MDV) Method

- **Focus**: Separates firm and manager fixed effects for movers.
- **Challenges**:
  - Small sample: Relatively small number of executive job changes in most samples.
  - Sample bias: Movers may differ from non-movers.
  - Computational challenges in large datasets.

3. Abowd, Kramarz, and Margolis (AKM) Method

- **Group Connection**: Identifies firm and manager fixed effects through group mobility (Abowd, Kramarz, and Margolis, 1999).
- **Key Benefit**:
  - Allows separation of fixed effects for both movers and non-movers.
  - **Larger Sample**: Uses a connectedness sample, increasing model precision[1].

1. It can lever the small number of mover observations (i.e., managers who move across companies) to deduce information about nonmovers who work in firms that have employed at least one mover.

Comparison of Methods

Method	Sample Type	Identifies Manager & Firm Effects
Spell Fixed Effects	Full sample	Joint effect (cannot separate)
MDV Method	Mobility sample	Separated effects (only movers)
AKM Method	Connectedness sample	Separated effects (movers & non-movers)

Estimation Strategy of This Study

- Start by using the spell method in the full sample
- **Primary Method**: AKM method for separating manager and firm fixed effects.
- **Robustness Check**: Use MDV on mobility sample to validate results (robustness check).

Data

Sample Selection

- **Dataset**: Matched ExecuComp-Compustat panel (1992-2006)
- **Manager-level Data**: ExecuComp
- **Firm-level Data**: Compustat (annual accounting variables) and CRSP (stock returns)
- **Sample Size**:
  - 25,586 managers
  - 2,344 firms
- **Cleaning**: Removed observations with incomplete data
- **Managerial Mobility**:
  - 4.9% movers (1,256 managers)
  - 95.1% non-movers (24,330 managers)

Managerial Mobility

table1

Sample Description & Representativeness

- **Comparing Connectedness and Full Sample (Table2)**:
  - **Continuous Variables** (Panel A): Average and median comparisons
  - **Indicator Variables** (Panel B): Summary statistics comparison
- **Key Finding**:
  - Connectedness sample is **generally representative** of the full sample
  - Slight differences:
    - **Larger firms** in connectedness sample
    - **Better-paid executives** in connectedness sample
- **Control for Firm Size**:
  - Ensures representativeness in all other dimensions

Table 2
Summary statistics and sample representativeness of the connectedness sample

Panel A: Summary statistics and sample representativeness of continuous variables

				Average and % in each ExecuCompquintile				
Variable	Overall mean	Overall median	Overall SD	1	2	3	4	5
Total compensation$_t$ ($thousands)								
Universe	1873.19	902.28	2876.11	267.00	532.21	914.42	1673.45	5978.94
Sample	2217.79	1098.46	3188.49	272.02	535.15	917.98	1683.95	6108.61
Sample %				15.2	17.7	20.1	22.1	25.0
Salary plus bonus$_t$ ($thousands)								
Universe	666.73	453.04	659.30	185.72	313.43	456.92	698.24	1679.35
Sample	728.52	503.55	693.82	186.95	314.48	459.07	701.13	1685.77
Sample %				15.7	18.6	20.6	21.8	23.3
Equity-based compensation$_t$ ($thousands)								
Universe	950.45	252.69	2034.89	32.02		261.48	702.93	3723.89
Sample	1168.98	348.78	2285.71	31.67		265.28	709.05	3850.35
Sample %				34.2		19.3	21.7	24.8
Tenure$_t$ (years)								
Universe	10.06	8.16	7.81	2.12	5.71	8.20	11.66	22.60
Sample	9.88	8	7.93	2.06	5.78	8.28	11.65	23.02
Sample %				21.4	21.5	18.7	19.3	19.1
Leverage$_t$								
Universe	0.22	0.20	0.18	0.004	0.09	0.20	0.30	0.48
Sample	0.22	0.21	0.17	0.004	0.09	0.20	0.30	0.48
Sample %				17.9	20.3	21.4	21.5	18.9
Assets$_{t-1}$ ($millions)								
Universe	7481.59	1230.52	21137.99	168.44	511.38	1275.42	3635.52	31817.51
Sample	9609.73	1771.80	24084.04	178.54	513.38	1294.91	3640.77	33830.42
Sample %				14.6	17.6	20.3	22.7	24.8

(continued)

Table 2
Continued

				Average and % in each ExecuComp quintile				
Variable	Overall mean	Overall median	Overall SD	1	2	3	4	5
Market to book$_{t-1}$								
Universe	2.01	1.48	1.48	1.00	1.20	1.49	2.04	4.32
Sample	2.04	1.51	1.47	1.01	1.20	1.49	2.05	4.27
Sample %				18.7	19.6	20.5	20.5	20.7
Tangibility$_{t-1}$								
Universe	0.29	0.23	0.24	0.03	0.13	0.23	0.39	0.69
Sample	0.29	0.23	0.23	0.03	0.13	0.23	0.40	0.68
Sample %				18.8	20.9	20.5	20.3	19.4
Return on assets$_t$								
Universe	0.047	0.046	0.11	−0.084	0.020	0.047	0.082	0.171
Sample	0.047	0.046	0.11	−0.082	0.020	0.047	0.083	0.171
Sample %				20.7	19.5	20.0	19.8	19.9
Stock return$_t$								
Universe	0.19	0.12	0.52	−0.38	−0.06	0.12	0.31	0.95
Sample	0.18	0.11	0.51	−0.39	−0.06	0.12	0.32	0.93
Sample %				20.3	20.1	19.9	19.8	19.8
Stock return volatility$_t$								
Universe	0.44	0.39	0.21	0.23	0.31	0.39	0.52	0.77
Sample	0.44	0.38	0.20	0.23	0.31	0.39	0.52	0.77
Sample %				21.1	21.1	19.9	18.5	19.5

(continued)

Table 2
Continued

Panel B: Summary statistics and representativeness of indicator variables

Variable		Mean	Median	SD
CEO indicator$_t$	Universe	0.17	0	0.38
	Sample	0.17	0	0.38
Female indicator	Universe	0.046	0	0.21
	Sample	0.045	0	0.21
CEO chair indicator$_{t-1}$	Universe	0.66	1	0.47
	Sample	0.68	1	0.47
Dividend paying indicator$_{t-1}$	Universe	0.59	1	0.49
	Sample	0.59	1	0.49

Economic Importance

Determinants of Executive Compensation

Key Points:

- Regression of **log(total compensation)** on firm-level and manager-level variables.
- Firm-level variables: size, growth, stock returns, accounting returns, return volatility.
- Manager-level variables: tenure, CEO status.
- Year fixed effects to account for economic conditions.

Results:

- **Pooled OLS**: Adjusted $R^2 = 49\%$.
- **Firm Fixed Effects**: Adjusted $R^2 = 66\%$.
- **Manager Fixed Effects**: Adjusted $R^2 = 76\%$.
- **Firm + Manager Fixed Effects**: Adjusted $R^2 = 77\%$.

Table 3
Determinants of the level of executive compensation: Full sample regressions

	(1) Pooled OLS (No firm or manager fixed effects)	(2) Firm fixed effects (No manager fixed effects)	(3) Manager fixed effects (No firm fixed effects)	(4) Firm and manager fixed effects (using the spell method)
Log(assets)$_{t-1}$	0.37***	0.29***	0.22***	0.22***
	(51.29)	(21.64)	(23.08)	(21.43)
Market to book$_{t-1}$	0.15***	0.09***	0.09***	0.09***
	(19.22)	(13.43)	(19.24)	(18.68)
Stock return$_t$	0.20***	0.17***	0.17***	0.17***
	(19.47)	(18.45)	(27.95)	(27.83)
Stock return$_{t-1}$	0.04***	0.08***	0.08***	0.08***
	(3.81)	(10.19)	(14.72)	(14.28)
Return on assets$_t$	0.42***	0.31**	0.38***	0.41***
	(6.09)	(4.59)	(7.86)	(8.42)
Return on assets$_{t-1}$	0.31***	0.29***	0.31***	0.33***
	(4.90)	(4.77)	(7.35)	(7.66)
Stock return volatility$_t$	0.91***	0.03	0.19***	0.12***
	(15.64)	(0.42)	(4.23)	(2.63)
CEO chair indicator$_{t-1}$	0.08***	0.04***	0.02*	0.02
	(4.46)	(3.05)	(1.89)	(1.53)
Log(tenure)$_t$	0.03***	0.05***	0.04***	0.06***
	(4.41)	(10.61)	(7.35)	(10.23)
CEO indicator$_t$	0.89***	0.87***	0.32***	0.30***
	(95.10)	(99.13)	(23.14)	(21.26)
Female	−0.12***	−0.16***	N.A.	N.A.
	(−5.70)	(−11.66)		
Year effects	Yes	Yes	Yes	Yes
Adj. R^2	0.49	0.66	0.76	0.77
p-value for F-test that all fixed effects = 0	N.A.	.00***	.00***	.00***
N	112,546	112,546	112,546	112,546

Relative Importance of Different Factors

Key Findings:

- **Normalized Covariance** for Components:
  - Manager fixed effects: 44% (Most important).
  - Time-variant firm characteristics: 20%.
  - Firm fixed effects: 4%.
  - Time-variant manager characteristics: 4%.
  - Year effects: 9%, Residuals: 19%.

$$
\begin{aligned}
R^2 &= \frac{\operatorname{cov}(Ln(y_{it}), Ln(\hat{y}_{it}))}{\operatorname{var}(Ln(y_{it}))} = \frac{\operatorname{cov}(Ln(y_{it}), X_{it}\hat{\beta}+W_{it}\hat{\gamma}+\hat{\phi}_j+\hat{\theta}_t+\hat{\mu}_t)}{\operatorname{var}(Ln(y_{it}))} \\
&= \frac{\operatorname{cov}(Ln(y_{it}), X_{it}\hat{\beta})}{\operatorname{var}(Ln(y_{it}))} + \frac{\operatorname{cov}(Ln(y_{it}), W_{it}\hat{\gamma})}{\operatorname{var}(Ln(y_{it}))} + \frac{\operatorname{cov}(Ln(y_{it}), \hat{\phi}_j)}{\operatorname{var}(Ln(y_{it}))} \\
&\quad + \frac{\operatorname{cov}(Ln(y_{it}), \hat{\theta}_i)}{\operatorname{var}(Ln(y_{it}))} + \frac{\operatorname{cov}(Ln(y_{it}), \hat{\mu}_t)}{\operatorname{var}(Ln(y_{it}))},
\end{aligned}
$$

Economic Magnitude:

- A 1-standard deviation increase in **manager fixed effects** leads to a \$2.5 million increase in compensation.
- A 1-standard deviation increase in **firm fixed effects** leads to a \$1.9 million increase in compensation.

Table 4
Determinants of the level of executive compensation: Connectedness sample regressions and relative importance of different factors in determining compensation

Panel A: Regression results using the connectedness sample

	(1) Pooled OLS (No firm or manager fixed effects)	(2) Firm fixed effects (No manager fixed effects)	(3) Manager fixed effects (No firm fixed effects)	(4) Firm and manager fixed effects (using the AKM method)
Log(assets)$_{t-1}$	0.37***	0.30***	0.21***	0.21***
	(41.23)	(16.46)	(18.43)	(14.88)
Market to book$_{t-1}$	0.15***	0.10***	0.10***	0.10***
	(13.46)	(11.17)	(15.81)	(15.17)
Stock return$_t$	0.20***	0.18***	0.18***	0.17***
	(14.42)	(13.75)	(20.82)	(20.30)
Stock return$_{t-1}$	0.06***	0.09***	0.08***	0.07***
	(3.80)	(7.59)	(10.64)	(9.77)
Return on assets$_t$	0.40***	0.20**	0.24***	0.29***
	(4.65)	(2.23)	(3.72)	(4.24)
Return on assets$_{t-1}$	0.46***	0.31***	0.33***	0.36***
	(5.45)	(3.84)	(5.60)	(5.82)
Stock return volatility$_t$	0.91***	0.04	0.20***	0.10
	(12.05)	(0.38)	(3.23)	(1.60)
CEO chair indicator$_{t-1}$	0.09***	0.04**	0.01	0.01
	(4.20)	(2.46)	(1.01)	(0.46)
Log(tenure)$_t$	0.03***	0.03***	0.03***	0.05***
	(3.12)	(5.77)	(4.30)	(6.81)
CEO indicator$_t$	0.92***	0.90***	0.33***	0.30***
	(78.58)	(78.60)	(18.05)	(15.76)
Female	−0.14***	−0.17***	N.A.	N.A.
	(−5.10)	(−9.09)		
Year effects	Yes	Yes	Yes	Yes
Adj. R^2	0.49	0.64	0.73	0.75
N	65,421	65,421	65,421	65,421

(*continued*)

Table 4
Continued

Panel B: Relative importance of different components in determining compensation (using the AKM method to separately identify manager and firm fixed effects in the connectedness sample)

	(1) Mean	(2) SD	(3) $\frac{cov(\log(totalcompensation), component)}{var(\log(totalcompensation))}$ (% of the model R^2 attributable to particular components are in parentheses)
Log(total compensation)	7.08	1.07	–
Observable time-variant firm characteristics	1.96	0.38	0.20 (25)
Observable time-variant manager characteristics	0.16	0.13	0.04 (5)
Firm fixed effects	0.00	0.97	0.04 (5)
Manager fixed effects	0.00	1.12	0.44 (54)
Year effects	0.65	0.32	0.09 (11)
Residuals	0.00	0.47	0.19

Implications for Empirical Executive Compensation Research

OLS vs. Fixed Effects:

- Fixed effects (firm and manager) provide more accurate estimates than OLS.
- Coefficients in fixed effects model are 50% larger on average than in OLS.
- Hausman test rejects consistency of OLS estimates.
- Ignoring unobserved heterogeneity leads to biased estimates.

Implication:

- Unobserved firm and manager heterogeneity must be accounted for to avoid inconsistent or misleading results in executive compensation research.

Robustness Analysis

- **MDV vs. AKM Method**:
  - AKM method uses information on movers to estimate nonmovers' fixed effects, but limited movers may increase estimation errors.
  - MDV method, focusing only on movers, avoids this issue.
- **Findings**:
  - Main results hold in both MDV and AKM methods.
  - Manager fixed effects remain the most significant contributor to the R^2 (39%).

Table 5
Robustness tests

Panel A: Regression results using the mobility sample

	(1) Pooled OLS	(2) Firm fixed effects	(3) Manager fixed effects	(4) Firm and manager fixed effects (using the MDV method)
Log(assets)$_{t-1}$	0.36***	0.29***	0.23***	0.29***
	(31.24)	(12.22)	(21.91)	(6.18)
Market to book$_{t-1}$	0.18***	0.10***	0.09***	0.09***
	(12.01)	(8.40)	(9.54)	(4.14)
Stock return$_t$	0.20***	0.17***	0.16***	0.17***
	(8.18)	(8.87)	(9.05)	(6.14)
Stock return$_{t-1}$	0.08***	0.10***	0.12***	0.09***
	(3.18)	(5.78)	(7.14)	(3.62)
Return on assets$_t$	0.16	−0.09	−0.07	0.08
	(0.97)	(−0.80)	(−0.64)	(0.38)
Return on assets$_{t-1}$	0.47***	0.25**	0.37***	0.38**
	(3.02)	(2.20)	(3.59)	(2.04)
Stock return volatility$_t$	0.89***	0.15	0.36***	0.25
	(8.20)	(1.25)	(4.69)	(1.45)
CEO chair indicator$_{t-1}$	0.11**	0.06**	0.05*	0.05
	(3.31)	(2.23)	(2.38)	(1.22)
Log(tenure)$_t$	0.01	0.01	0.002	0.05***
	(0.42)	(0.62)	(0.23)	(2.55)
CEO indicator$_t$	0.88***	0.75***	0.35***	0.21***
	(27.60)	(33.56)	(13.41)	(4.34)
Female	0.20	−0.20*	N.A.	N.A.
	(0.33)	(−3.72)		
Year effects	Yes	Yes	Yes	Yes
Adj. R^2	0.46	0.63	0.65	0.71
N	8,692	8,692	8,692	8,692

(*continued*)

Table 5
Continued

Panel B: Relative importance of different components in determining compensation (using the MDV method to separately identify manager and firm fixed effects in the mobility sample)

	$\frac{\text{cov}(\log(\textit{total compensation}), \textit{component})}{\text{var}(\log(\textit{total compensation}))}$ (% of the model R^2 attributable to particular components are in parentheses)
Observable time-variant firm characteristics	0.23 (29)
Observable time-variant manager characteristics	0.03 (4)
Firm fixed effects	0.15 (19)
Manager fixed effects	0.31 (39)
Year effects	0.08 (10)
Residuals	0.20

Manager-Matching Concern and Robustness

- **Matching Issue**:
  - A manager's move may reflect a better match with a new company, potentially affecting compensation.
  - **Control**: Firm performance is accounted for in all specifications.
- **Subsample of Low Compensation Change**:
  - Subsample with minimal compensation changes (≤25%) confirms robustness.
  - **Findings**: Manager fixed effects still account for 68% of the R^2, reinforcing their importance.

Panel C: Regression results using the sample that includes only managers who have moved between firms with a change of compensation within ±25%

	(1) Pooled OLS	(2) Firm fixed effects	(3) Manager fixed effects	(4) Firm and manager fixed effects (using the MDV method)
Log(assets)$_{t-1}$	0.32***	0.09	0.12***	0.08
	(12.78)	(1.12)	(4.33)	(1.03)
Market to book$_{t-1}$	0.18***	0.11**	0.06**	0.09**
	(5.24)	(2.43)	(1.99)	(2.30)
Stock return$_t$	0.15***	0.09*	0.08*	0.07
	(2.91)	(1.69)	(1.72)	(1.15)
Stock return$_{t-1}$	0.07	0.08	0.09*	0.06
	(1.31)	(1.15)	(1.92)	(0.98)
Return on assets$_t$	0.18	0.13	0.16	0.34
	(0.52)	(0.36)	(0.56)	(0.93)
Return on assets$_{t-1}$	0.26	−0.03	0.13	0.06
	(0.82)	(−0.09)	(0.53)	(0.18)
Stock return volatility$_t$	0.97***	−0.48	0.07	−0.61
	(4.36)	(−1.01)	(0.36)	(−1.29)
CEO chair indicator$_{t-1}$	−0.02	−0.03	−0.05	−0.01
	(−0.34)	(−0.43)	(−1.15)	(−0.11)
Log(tenure)$_t$	0.04	0.04	0.04**	0.07
	(1.13)	(0.53)	(2.04)	(1.15)
CEO indicator$_t$	0.97***	0.48***	0.25***	0.18
	(14.19)	(3.77)	(3.37)	(1.56)
Female	−0.03	−0.02	N.A.	N.A.
	(−0.24)	(−0.06)		
Year effects	Yes	Yes	Yes	Yes
Adj. R^2	0.50	0.75	0.76	0.85
N	1,296	1,296	1,296	1,296

(*continued*)

Table 5
Continued

Panel D: Relative importance of different components in determining compensation (using the MDV method to separately identify manager and firm fixed effects in the sample that includes only managers who have moved between firms with a change of compensation within ±25%)

	$\frac{\text{cov}(\log(total\ compensation), component)}{\text{var}(\log(total\ compensation))}$ (% of the model R^2 attributable to particular components are in parentheses)
Observable time-variant firm characteristics	0.09 (11)
Observable time-variant manager characteristics	0.03 (4)
Firm fixed effects	0.03 (4)
Manager fixed effects	0.58 (68)
Year effects	0.12 (14)
Residuals	0.15

The Role of Managerial Attributes

- **Managerial Attributes and Compensation**:
  - Managerial fixed effects correlate with personal characteristics like education, gender, and experience.
- **Key Findings**:
  - Education has a significant positive relationship with compensation.
  - Personal characteristics only explain 1% of the variation in fixed effects.
  - Unquantifiable factors (e.g., CEO power, personality) likely play a larger role.

Managerial Fixed Effects in Management Styles

- **Managerial Styles & Compensation**:
  - Examining the relationship between fixed effects in compensation and corporate policies (R&D, capital investment, etc.).
- **Findings**:
  - Significant relationships between managerial fixed effects in compensation and corporate policy fixed effects suggest managerial traits influence both compensation and firm strategies.

Table 6
Manager fixed effects and observable managerial characteristics

Panel A: Frequency distribution of CEOs' highest degree			
Education (highest degree)	Frequency	Percent	Cumulative
Below bachelor	15	1.97	1.97
Bachelor	243	31.85	33.82
Non-MBA masters	80	10.48	44.30
MBA	225	29.49	73.79
PhD	102	13.37	87.16
Missing degree information	98	12.84	100.00
Total	763	100.00	–

Panel B: Results of regressing manager compensation fixed effects on CEO personal characteristics		
Dependent variable = manager compensation fixed effects estimated with AKM approach on connectedness sample	(1)	(2)
Education1	0.14***	–
	(2.63)	–
Education2	–	0.06***
		(2.75)
Year of birth	−0.004	−0.004
	(−0.73)	(−0.68)
Year of becoming CEO	0.004	0.004
	(0.85)	(0.81)
Female	−0.05	−0.05
	(−0.12)	(−0.13)
Constant	0.04	−0.85
	(0.00)	(−0.09)
R^2	0.01	0.01

Table 7
Relation between managerial fixed compensation effects and fixed policy effects

Coefficient estimates of regressing compensation fixed effects on policy fixed effects			
	(1) Manager fixed effects estimated using the AKM approach	(2) Manager fixed effects estimated using the MDV approach	(3) Change in pay based on the estimates in (1) ($thousand)
R&D	1.51***	0.94	180
	(9.15)	(1.53)	
Investment	0.41***	0.25*	258
	(10.65)	(1.77)	
Leverage	0.17**	0.15	57
	(2.49)	(0.58)	
Cash holdings	−0.09***	0.06	−66
	(−3.05)	(0.53)	
Dividend paying indicator	0.26***	0.20*	659
	(8.89)	(1.90)	
Dividend yield	1.66***	1.47	96
	(3.61)	(0.84)	

Limitations and Further Directions

Limitations:

1. **Cross-sectional Analysis**: Fixed effects approach may eliminate important variation, particularly in cross-sectional studies.
2. **Omitted-Variable Problem**: Can't address unobserved time-variant factors.

Key Areas for Exploration:

1. **Time-Variant and Interaction Effects**:
   - Incorporate time variation in firm and manager fixed effects.
   - Address omitted-variable bias from time-changing factors.
2. **Exploring Additional Managerial Factors**:
   - Investigate beyond education, birth cohort, and gender.
   - Factors such as talent, risk preferences, and personality traits.
   - **Potential Impact**: These factors are challenging but crucial for labor and financial economics.

Critique of the Study

- **Limited Contribution to Theory:**
  - The paper does not introduce new theoretical frameworks or concepts.
  - It mainly focuses on empirical analysis and methodological contributions.
- **Data Sample Limitations:**
  - Short time span may fail to capture long-term trends.
  - Must be sensitivity to sample changes or small data points, which may affect the robustness of the estimates.
- **Model Specification Issues:**
  - Fixed effects method does not fully address endogeneity concerns.
  - Hence, estimated coefficients may lack stability and reliability.

Thank You !