Why Do Specialist Managers Run Diversified Firms?

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Introduction

- ▶ Growing evidence on importance of manager characteristics for firm policies
  - ▶ Betrand and Schoar (2003), Kaplan, Klebanov, and Sorensen (2012), Graham, Li, and Qiu (2013)
- ▶ Overall, increasing demand for managers with general skills that are transferable across firms and industries (Murphy and Zabojnik (2004)).
  - ▶ How to define a specialist and generalist
- ▶ **Research question**: What type of managers should run conglomerate firms?

Look at Data Trends

▶ Approximately 43% of large conglomerates are run by specialist managers (35% in 1994, and over 47% in 2006)
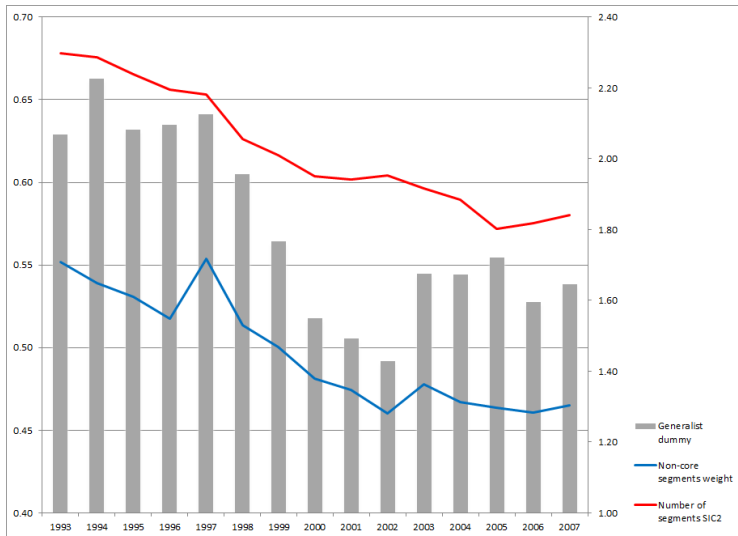
# Why So Many Specialists? Possible Explanations

- ▶ **Governance failure or managerial entrenchment**
  - ▶ Most diversified firms probably started as standalones, were run by specialists, who later captured boards
  - ▶ If this is the case, conglomerates run by specialists should have worse performance.
- ▶ **Managerial talent is scarce, supply-side factors dictate firms' choices**
  - ▶ Unlikely to explain as managers at large become more generalists
- ▶ **Specialists require smaller compensation**
  - ▶ Custodio, Ferreira, and Matos (2013) document a generalist premium of 19%
- ▶ **Specialists are better at running core lines of business, firm characteristics change over time**
  - ▶ Indeed, firms are becoming more focused

Model Overview

- ▶ A conglomerate with 2 divisions, manager has 2 units of capital to invest (1 in each division, or 2 and 0)
- ▶ A division can be **productive** (cash flow of π or 0) or **unproductive** (cash flow of $\theta\pi$ or 0).
    - ▶ Productivity is perfectly observable by manager, but not by shareholders.
- ▶ Probability of any division to be productive is z.
- ▶ Manager can exert effort to improve the chance of getting high cash flow at a cost c.
- ▶ Manager is risk-neutral and can be a **generalist** or a **specialist**.
    - ▶ Generalist equally good at running projects in both divisions
    - ▶ Specialist is better at running projects in well-matched division.

$$p_{hh} > p_h > p_l > p_{ll}$$

Model Chart
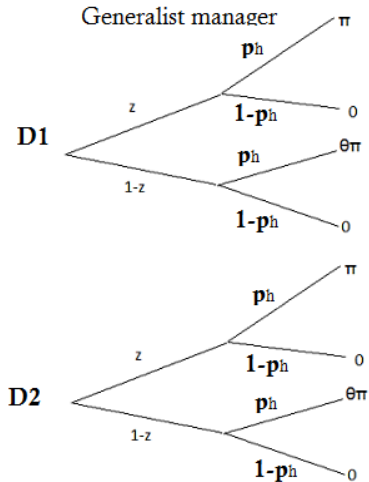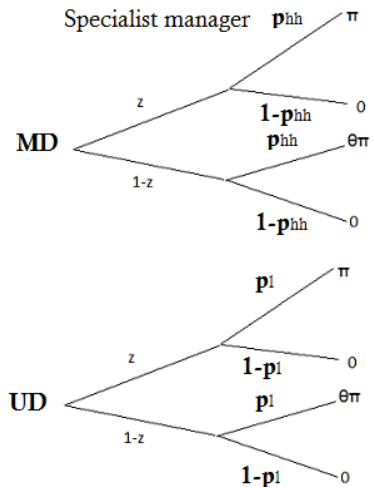
Principal Problem

- ▶ The principal has to decide 1) what kind of manager to appoint, 2) which compensation contract to give to the manager

- ▶ The principal maximizes expected profit of the firm net of manager's compensation costs.

- ▶ Main tradeoffs:

  - ▶ Specialist is more efficient at running core line of business, but less efficient at running other segments
  - ▶ Generalist is unbiased in his capital allocation problem, always allocates capital to most productive division
  - ▶ Incentivizing manager to apply effort depends on the type of the manager, hence different compensation costs

Optimal Contract

▶ We build on model of Laux (2001), who shows that it is more effective to compensate the manager based on success in multiple projects

▶ Since possible combined cash flow realizations are 2π, $2\theta\pi$, π, $\theta\pi$, 0, the contract can have payments to the manager of $w_{2\pi}$, $w_{2\theta\pi}$, w_{π}, $w_{\theta p}$, w_0.

▶ It is clear that $w_0 = 0$, and generalizing result of Laux (2001), we show $w_{\pi} = w_{\theta p} = 0$

Generalist Manager

▶ No need to solve capital allocation problem, since generalist is unbiased

▶ If at least one division is productive, generalist invests in this division. In order to apply effort, should have

$$p_h^2 w_{2\pi} - 2c \geq p_{ll}^2 w_{2\pi}$$

▶ If both divisions are unproductive, incentive compatibility constraint is

$$p_h^2 w_{2\theta\pi} - 2c \geq p_{ll}^2 w_{2\theta\pi}$$

▶ Thus compensation of the manager does not depend on productivity, only on whether projects are successful or not

$$w_{2\pi} = w_{2\theta\pi} = \frac{2c}{p_h^2 - p_{ll}^2}$$

Specialist Manager

- ▶ Providing incentives to exert effort requires a more sophisticated contract (5 IC constraints)

- ▶ Suppose, e.g., we give to specialist contract with $w_{2\pi} = w_{2\theta\pi}$. In which division will he want to invest capital?

  - ▶ Always in well-matched division (MD) since probability of success is higher there
  - ▶ But this division can be unproductive, so not always optimal

- ▶ Two major types of contract for the specialist can be chosen by the principal:

  - ▶ A contract that offsets specialist's bias for the well-matched division: Very expensive, paid more than generalist!
  - ▶ Contract that does not offset bias, specialist invests in whichever division he prefers: Cheaper than generalist!

Best Manager in a Firm

Proposition If $\theta > \overline{\theta}^S$ or $\theta < \underline{\theta}^S$, then a specialist manager is
preferred by the conglomerate.

- ▶ Intuition for case $\theta > \overline{\theta}^S$.

  - ▶ Productivity of divisions is similar, let specialist invest always
    in the well-matched division, his contract is very cheap

- ▶ Intuition for case $\theta < \underline{\theta}^S$.

  - ▶ When a division productivity turns out to be low, can forget
    about trying to induce effort, this removes one of the
    IC-constraints for the specialist, and his contract can again be
    cheap

Empirical Predictions

Prediction 1 Firms that have either very low or very high
dispersion in investment opportunities and also
smaller firms are more likely to appoint specialist
managers.

Prediction 2 If firms with very low or very high dispersion in
investment opportunities appoint generalists, they
perform worse.

Prediction 3 Firms run by specialists will be more focused.

▶ Two reasons: 1) Focused will profit more from appointing
specialist 2) Firms run by specialists will become more focused
over time since specialists will invest more in well-matched
division

Prediction 4 The generalist pay premium is higher in firms with
high dispersion of investment opportunities.

Data

- ▶ Panel of conglomerate-CEO-years during 1993-2007 drawn from Execucomp and Compustat Segments Database (5,171).
- ▶ General ability index (GAI) is defined as in Custodio, Ferreira, and Matos (2013) using Boardex data

$$GAI = 0.27X_1 + 0.31X_2 + 0.31X_3 + 0.22X_4 + 0.15X_5$$

- ▶ X_1 is the number of different positions a CEO held during his career
- ▶ X_2 is the number of firms where a CEO has worked
- ▶ X_3 is the number of industries at 4-digit SIC level where a CEO worked
- ▶ X_4 is a dummy variable, equal to 1 if CEO held a CEO position in a different firm before
- ▶ X_5 is dummy if CEO has worked in multi-divisional firm before.

Differences Between Specialists and Generalists

	Generalists	Specialists	Diff.	t-stat
Number of segments	3.136	2.917	0.219	7.22***
Num of SIC2 segments	2.069	1.910	0.159	6.49***
1-Herfindahl	0.553	0.533	0.020	3.01***
Total entropy	0.249	0.237	0.012	3.71***
Related entropy	0.102	0.114	-0.012	-3.32***
Non-core weight	0.504	0.478	0.026	3.41***
Excess value	-0.098	-0.093	-0.005	-0.40
Sales	5156	2765	2391	13.29***
Tobin's q	1.789	1.799	-0.011	-0.38
ROA	0.139	0.142	-0.003	-1.27
Stock return	0.139	0.143	-0.003	-0.27
Total compensation ($M)	5,539	3,014	2,524	11.84***
CEO tenure	7.61	8.44	-0.835	-3.89***
CEO age	57.7	55.5	2.191	10.83***
External hire	0.421	0.298	0.122	9.12***
MBA dummy	0.369	0.282	0.087	6.63***
Observations	2,927	2,244		

CEO Type – Conglomerate Matching

	(1)	(2)	(3)	(4)
Diversity	0.258***	0.196**	0.200**	0.156
	[2.890]	[2.066]	[2.108]	[1.359]
Diversity squared	-0.147***	-0.111**	-0.110**	-0.093*
	[-3.526]	[-2.488]	[-2.484]	[-1.920]
Size		0.262***	0.261***	0.263***
		[17.324]	[17.518]	[17.731]
Number of segments		0.027		
		[1.546]		
Number of segments (SIC2)			0.086***	
			[4.122]	
Total entropy				0.484**
				[2.390]
Related entropy				-0.565***
				[-3.616]
Tobin's q		-0.020	-0.015	-0.018
		[-1.037]	[-0.776]	[-0.932]
R&D		2.931***	2.987***	2.980***
		[5.196]	[5.293]	[5.281]
CAPEX		-1.968***	-2.064***	-2.027***

Total Compensation, CEO Type, and Diversity

	(1)	(2)	(3)
Generalist dummy	0.613***	0.160***	0.163***
	[12.483]	[3.202]	[3.272]
Diversity		-0.056	-0.057
		[-1.296]	[-1.322]
Generalist dummy*Diversity		0.065***	0.064***
		[2.627]	[2.614]
Number of segments			-0.021
			[-0.973]
Size		0.495***	0.499***
		[26.977]	[27.457]
External hire dummy		0.057	0.055
		[1.373]	[1.310]
MBA dummy		0.069**	0.069**
		[1.978]	[1.973]
CEO-chair dummy		0.173***	0.171***
		[3.522]	[3.549]
Tobin's q		0.148***	0.147***
		[5.680]	[5.669]

Conclusion

- ▶ We analyze the matching between CEO type and conglomerates.
- ▶ Interestingly, 43% of conglomerates are run by specialists, and the fraction increases overtime.
- ▶ Conglomerates are also becoming increasingly more focused.
- ▶ The model suggests that specialists are optimal for smaller, more focused conglomerates, and the ones that either have very diverse investment opportunities or very similar.
- ▶ Empirical results largely lend support to optimal matching, rather than corporate governance failure.