



# Why Did Japanese Corporations Choose the Holding Company System?

-The Degree of Business Maturity and the Degree of Need for Coordination-

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# Background

- **An important position as a new organizational type for Japanese corporations**
  - More than 13% , about 210 of approximately 1,700 companies listed on the first sections of the Tokyo Stock Exchanges as of Today
  
- **The factors to choose the holding company are still somewhat of an “enigma”**
  - A variety of other options also available:
    - The divisional system, the company/corporation system, spinoffs, etc.
  - Limited previous studies
    - Focusing on early 2000s
    - The factors not related “business”

# What is “Holding Company” in Japan?

## ■ A Pure Holding Company and

A Holding-Operating Company (Operating Company)



## ■ A Pure Holding Company is...

- A firm whose main business is to control the business of another firm through share ownership
- Prohibited by the Anti-Monopoly Law after World War II and possible with the revision of the Law in 1997

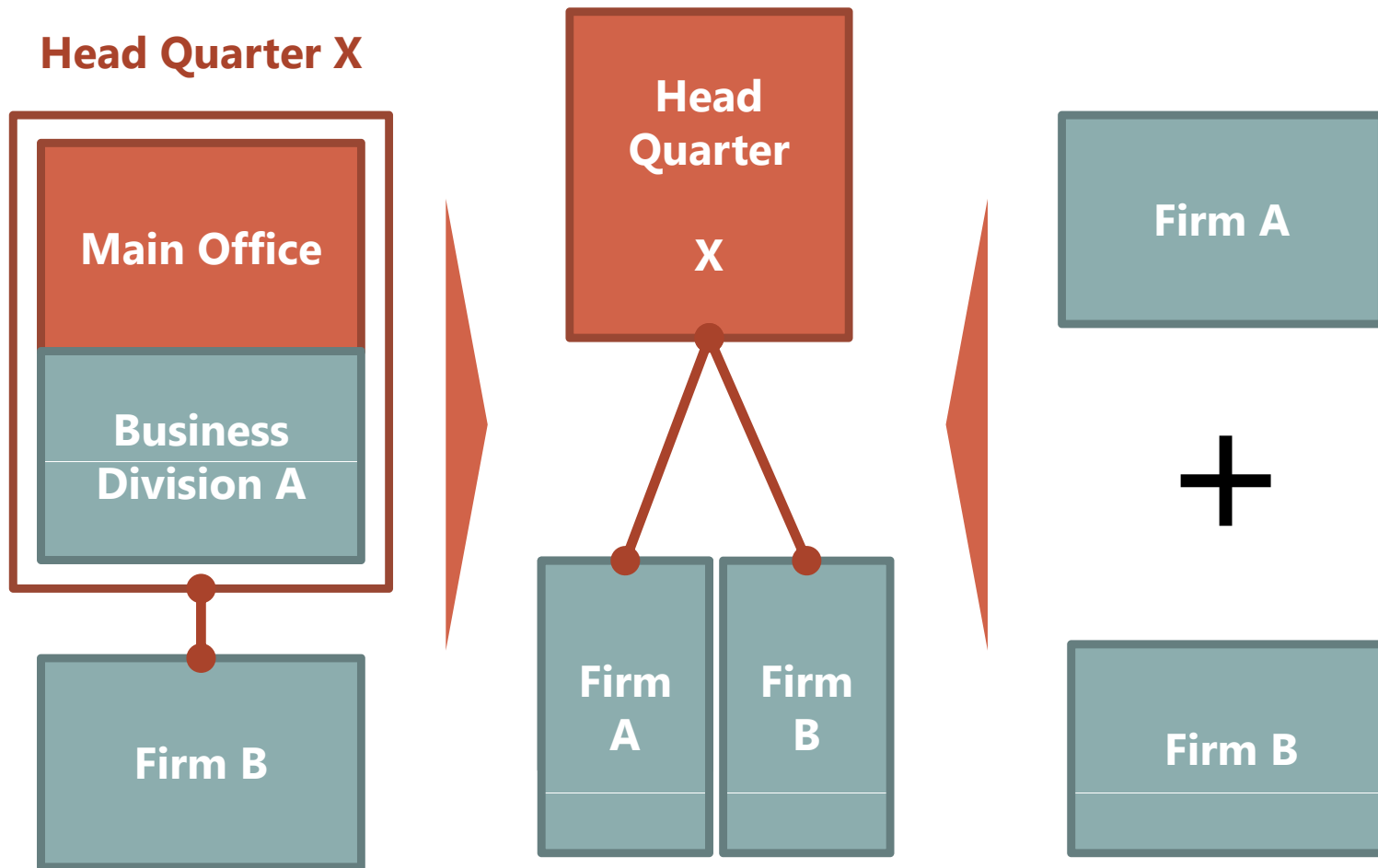


# Classification by Motives

Focus

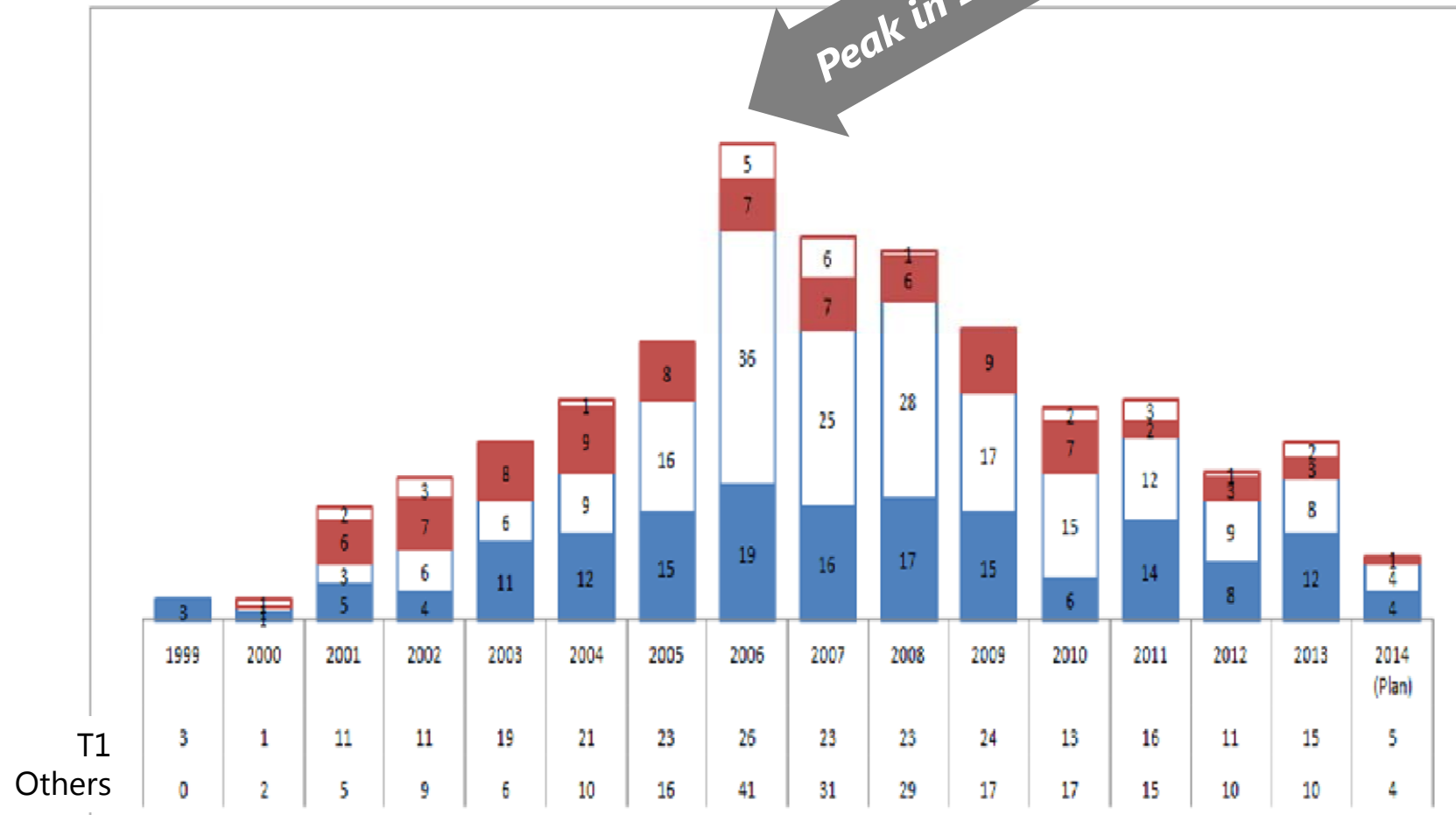
■ For Internal Reorganization :70%

■ For Integration :30%



# Annual Increase

Peak in 2006



- Reorganization firms listed on 1<sup>st</sup> section of Tokyo Stock Exchange
- Reorganization others
- Integration firms listed on 1<sup>st</sup> section of Tokyo Stock Exchange
- Integration others

# Distribution by TSE industry code/motives

TSE Code	TSE	Reorganization Total		Integration Total		Non-holding company Total		Total #
		#	Share	#	Share	#	Share	
50	Fishery, Agriculture, and Forestry		0.0%	1	20.0%	4	80.0%	5
1050	Mining	1	14.3%	1	14.3%	5	71.4%	7
2050	Construction	2	2.1%	2	2.1%	90	95.7%	94
3050	Foods	10	14.9%	4	6.0%	53	79.1%	67
3100	Textiles and Apparel	6	15.4%	1	2.6%	32	82.1%	39
3150	Pulp and Paper	1	9.1%	2	18.2%	8	72.7%	11
3200	Chemicals	6	5.0%	1	0.8%	114	94.2%	121
3250	Pharmaceuticals	3	8.1%	1	2.7%	33	89.2%	37
3300	Oil and Coal Products		0.0%	2	18.2%	9	81.8%	11
3350	Rubber Products		0.0%		0.0%	11	100.0%	11
3400	Glass and ceramic products	1	3.4%		0.0%	28	96.6%	29
3450	Iron and steel							
3500	Nonferrous metals							
3550	Metal products							
3600	Machinery							
3650	Electric appliances							
3700	Transportation equipment							
3750	Precision instruments							
3800	Other products							
4050	Electric power and gas							
5050	Land transportation							
5100	Marine transportation							
5150	Air transportation							
5200	Warehousing and harbor transport							
5250	Information and telecommunications							
6050	Wholesale trade							
6100	Retail trade							
7050	Banking							
7100	Securities and commodities futures	7	36.8%	1	5.3%	11	57.9%	19
7150	Insurance	2	33.3%	3	50.0%	1	16.7%	6
7200	Other financial business	1	5.9%		0.0%	16	94.1%	17
8050	Real estate	3	6.7%	1	2.2%	41	91.1%	45
9050	Services	13	13.1%	3	3.0%	83	83.8%	99
9999	others		0.0%		0.0%	34	100.0%	34
<b>ALL Total</b>		<b>144</b>	<b>8.4%</b>	<b>70</b>	<b>4.1%</b>	<b>1,495</b>	<b>87.5%</b>	<b>1,709</b>

The internal reorganization type of holding company : 8.4%  
**but varied by industry**

- > 30% for industries such as securities and insurance,
- No holding company in 10 industries

# ESTIMATION OUTLINE





# The goal of this Research

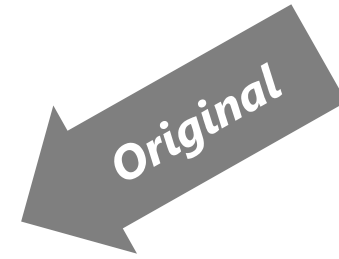
To find the answer for....

## **Under What Circumstances Will Firms Choose The pure holding company structure?**

- Focusing on the companies those aimed to promote “internal reorganizations”

# Estimated Factors

**New** Variables related "Business"



**The degree of need for**

- 1. Restructuring of the business portfolio**
- 2. Internal organizational coordination**

From Previous Studies

- 3. Diversification**
- 4. Group formation**
- 5. Mimetic isomorphism(following competitors)**

# Target of analysis

Sample size: about 1,500 firms

- listed on the First Section of the Tokyo Stock Exchange from 1999 to the end of October 2012.
- the 110 firms that have choose or plan to choose the holding company system
- Others that have not chosen, or are not planning to choose the holding company system,

## Exclude

- Finance related firms
- The firms abandoned the holding company structure and reverted to operating companies.
- The firms chosen the holding company system for integration

# Estimation Results by the Logit Model

## Significantly positive

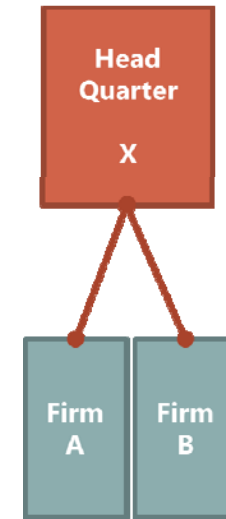
1. **High** degree of need for restructuring of the business portfolio by firm
2. **Low** degree of need for Internal organizational coordination by firm
4. **High** level of group formation by firm
5. **High** level of Mimetic isomorphism by industry

## Not positive

3. Diversification

# Conclusion

A firm would choose  
***the pure holding company structure***



## When...

- a firm needs to restructure its business portfolio.
- a firm doesn't require internal organizational coordination.
- a firm takes a high level of group formation.
- a lot of competitors have already chosen the pure holding company structure.

# HYPOTHESES AND VALUABLES



# The goal of the Research

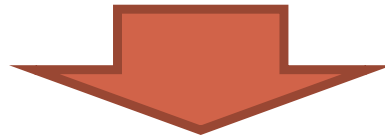
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## **Under What Circumstances Will Firms Choose The pure holding company structure?**

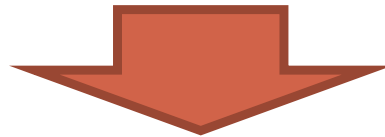
- Focusing on the companies those aimed to promote “internal reorganizations”

## What Circumstances? : Hypothesis 1

When a firm under ***difficult*** circumstances  
*to grow with existing business portfolio*



A firm ***needs to restructure*** its portfolio  
by M&A or the selling off of business



A firm will choose a "***pure holding company structure***"  
which has flexibility to reorganize business portfolio.



# Explanatory Variables for Hypothesis 1

**Factor: The degree of need  
for restructuring of the business portfolio**

## Explanatory Variables

The degree of

**1. Market maturity**

**2. Technological maturity**



# Variables Approach

**Step1:** Set the degree of maturity

**by TSE industry category(33 industries)**

## Market Maturity



*The growth rate and standard deviation from 2005 to 2011*

Market Maturity	High (1)	Low (0)
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Growth%	Low	High
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SD	Small	Big
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## Technological Maturity

*The R&D ratio*



Tech. Maturity	High (1)	Low (0)
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R&D Ratio	Low	High
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# Variables Approach

## Step2:

Set the degree of maturity *by Firm*

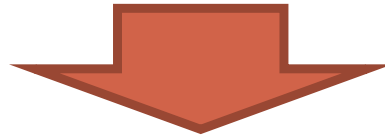
- **Weighted** average by recalculating sales by TSE industry code and calculated the degree of maturity for each firm.

Business	Industry Code	Market	Technology	Sales%
A	#29	1(High)	0(Low)	30
B	#16	1(High)	1(Low)	70
<b>Firm X</b>		<b>1</b>	<b>0.7</b>	<b>100</b>

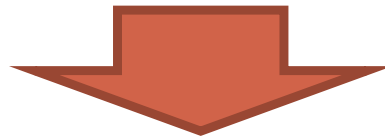
- Ranging continuously from 0 to 1
- The expected sign was positive.

## What circumstances?: Hypothesis 2

When a firm doesn't need  
***" internal organizational coordination "***



A firm selects ***"decentralized organization"***



A firm will choose a ***"pure holding company structure"***  
that offers the greatest degree of decentralization in  
Japanese organization structures.

## Background of the Hypothesis 2

### **Belenzon et al. (2013)**

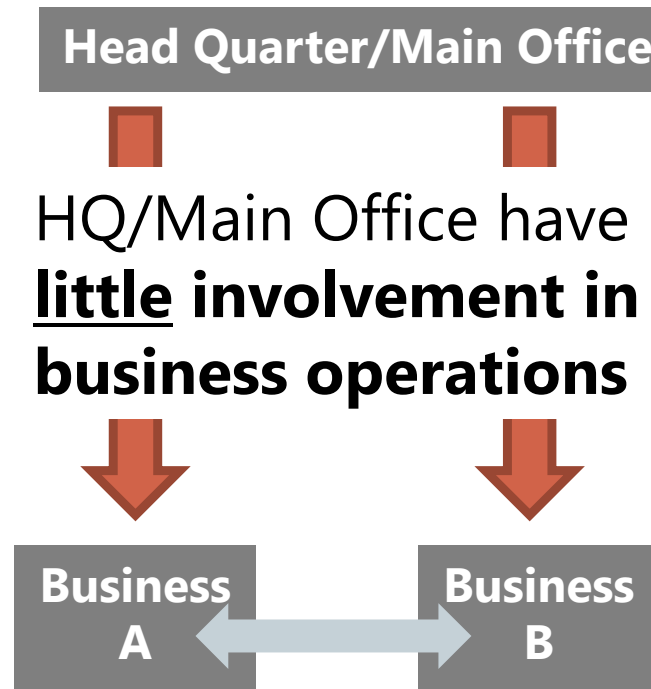
- The firm's organizational choice is related to ***the characteristics of the businesses and the associated technologies.***
- When there is a need for some type of internal organizational coordination, firms choose a centralized organizational type.
- When there is no need for this coordination, they choose a decentralized organizational type.

# Circumstance of “Low” Internal Coordination

Under the circumstance of ***the business environment keep changing***

## ***Delegate***

the authority of business operation to adopt change immediately



Explanatory Valuable

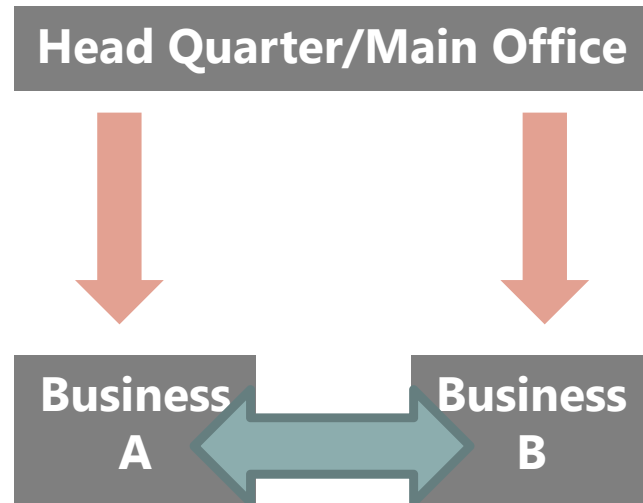
The degree of

**Business environment change**



# Circumstance of “Low” Internal Coordination

Under the circumstance of ***not complex technologies for production /commercialization***



Between business divisions, firms in the corporate group, **little technology related internal organizational coordination**



Explanatory Valuable

The degree of **Technological complexity**

# Variable for Hypothesis 2

## Step1:

Set the degree *by TSE industry category(33 industries)*

### Business Environmental Change

The average years of "research and development period" in 2011



Biz. Change	Rapidly (1)	Slow (0)
Years	Short	Long

### Technological Complexity

The industries of the firms that got patents in more than 4 areas:



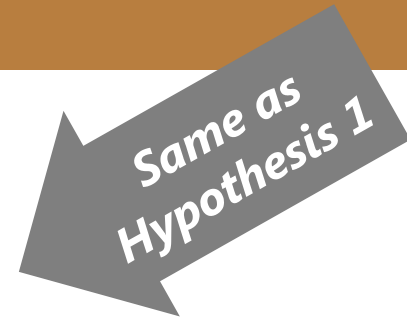
Simple (1)	Complex (0)
others	Electric, Transport machinery, chemical, precision instrument, other manufacturing



# Variables for Hypothesis 2

## Step2:

Set the degree of maturity *by Firm*



- **Weighted** average by recalculating sales by TSE industry code and calculated the degree of maturity for each firm.
- Ranging continuously from 0 to 1
- The expected sign was positive.

# Estimation Model (Logit Model)

$Y_t =$

$F$  ( $MKTG\_L_{t-1}$ : Market Maturity



$R\&D\_L_{t-1}$ : Technological Maturity



$TECH\_SIMPLE_{t-1}$ : Technological Complexity



$LIFE\_SHORT_{t-1}$ : Business Environmental Change



$1-HH_{t-1}$ ,  $NUM\_SEG_{t-1}$ : Diversification

$RCON_{t-1}$ : Group formation

$R\_APIONEER_{t-1}$ : Mimetic isomorphism

$CONTROL$  ( $LOG\_AST_{t-1}$ ,  $ROA_{t-1}$ ,  $AGE\_O\_1949$ , Year Group Dummy)

# Conclusion

**A firm would choose  
“the pure holding company structure”**

**When...**

- **A firm needs to restructure its business portfolio.**
- **A firm do not require internal organizational coordination.**
- a firm took a high level of group formation.
- a lot of competitors had already chosen the pure holding company structure.