

CEO Successor Characteristics and Issues of the Japanese Management System: A Case of the Pharmaceutical Industry

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Abstract

This study tried to figure out the issues of the Japanese management system through chief executive officer (CEO) characteristics in the pharmaceutical industry. Comparing 164 CEOs in US, European and Japanese firms from 2001 to 2018, the result illustrated that most of firms promoted their CEOs internally, however, in Japanese firms, one third of the CEOs were selected from the former CEO's family members or an executive who was parachuted from parent firms. In addition, it took over 22 years to be selected as a CEO in Japanese firms, which made the oldest new CEOs and retiring CEOs in the three regions. As for CEO performance, the result indicated that the older the CEO that was selected, the lower the performance, and the longer industry tenure, the lower the performance. These results suggested that the way to select a CEO successor in Japanese management system should be reconsidered to survive in the global market by competing with US and European firms.

Keywords: CEO Succession, CEO origin, Japanese Management Structure, Pharmaceutical Industry

(1) Introduction

The Japanese economy has not been doing well for a while. Since the early 1990s after the asset bubble burst, most of the industry in Japan has suffered a slow growth. The 1990s is called the Lost Decade for Japan, and in the 2000s, the situation is still not optimistic.

Japanese style management has led to complicated problems recently. The life time employment, seniority rules, consensus decision-making and heavily saturated domestic market – innovations of the management are needed, however, the changes are not enough to correct the Japanese economy.

At that time when the Japanese industry needed to catch up with the industry in other nations, such as in Europe and USA, there were clear directions and goals of what to produce, develop and how to be efficient to achieve goals. Business owners concentrated their capital to manage and develop firms to grow. There was no need to have their own will to find goals at that time.

After the asset bubble burst, Japanese firms have had a hard time to keep lifetime employment. Some financial institutions went bankrupt, and foreign stock ownership ratio increased. The cross-shareholding system in

Japanese firms started to be eliminated. Temporary worker's market got bigger, the market of full-time workers with full benefits and the contracted workers without benefits got mixed up. People have been having a hard time to have full benefits as a full-time worker as before.

Leveraging the mobility of the labor market, the organization is now facing the time to change. To gain talented workers, firms need to have options to give out benefits not only to full-time workers but also to temporary contracted workers.

The way to raise the capital from the financial market has changed. Following the change, fair evaluation of employee has started to be required, not like the lifetime employment system that never needed fair evaluation. Therefore, although it is still a part of the change, the Japanese style management is facing a time to be reorganized.

Considering this situation that Japanese firms are facing, this study compares the management of firms in Japan and other regions of the pharmaceutical industry. Pharmaceutical firms are longer-lived, compared with the ones in other industries. Therefore, it is a lot easier to keep the Japanese style management compared with a fast moving industry, such as information technology (IT), services and consumer goods.

In contrast, the investment towards research and development (R&D) of the pharmaceutical industry is enormous, and there is a big chance of development failure. In this

sense, it is hard for Japanese pharmaceutical firms to survive competition if they keep the traditional Japanese style management. They are required to communicate more often with investors to raise capital, and to acquire firms internationally to expand their business.

The competition of the market gets severe. It means that firms need the better chief executive officer (CEO)¹ to manage strategy and the firm. They need to be a management professional. If Japanese firms keep their CEO as a traditional firm owner, the growth and development of Japanese pharmaceutical firms will not happen in the future.

This issue can apply to any kind of industry in Japan that needs to expand business internationally, not only to the pharmaceutical industry. The objectives of this study is to identify the characteristics of the management structure of Japanese and Western pharmaceutical firms² through CEO characteristics, based on the indicators used in the upper echelon theory by Hambrick and Mason (1984).

In the upper echelon theory, Hambrick and Mason (1984) proposed that the firm performance and the strategic choice could be related with the characteristics of top management team. Their age, career backgrounds, educational levels, socioeconomic roots, financial positions, group characteristics were taken as the indicators, and the range of indicators were extended by many others after the theory presented.

¹ In Japanese firms, a chief executive officer can be called as a representative chairman or a president. In this study, the representative named in their homepage and the press release

is defined as a CEO in the Japanese firms.

² In this study, the firms in USA, Europe, Canada and Australia are categorized as Western.

Although Hambrick and Mason expanded the research object to the top management team of the firm, CEO is the final decision maker after all. The CEO characteristics obviously relates the firm's strategic choices that connects to the firm performance. Therefore, in this study, the CEO characteristics were studied.

This study is structured as follows. First, it reviews the literature of CEO successions, and the CEO characteristics in Japanese firms, then in Western firms. Second, it develops a framework of the empirical research to study CEO successor characteristics of the pharmaceutical industry both in Japanese and Western firms. Third, it presents the analytic data methodology and findings. Finally, it discusses the implications of this research.

(2) CEO successions in Japanese firms

Tanikawa (2015) examined the internal promotion system of Japanese firms, based on the hypothesis that Japanese firms choose their CEO internally unless they have a serious financial crisis or face globalization³. As a result, 70% of CEOs were chosen internally in 1,832 Japanese firms in 2014. In addition, 24.69% of CEOs were founders of the firm. Tanikawa predicted that internally promoted CEOs would decrease compared with 1950's, and it did, however the CEOs were still mostly chosen internally although Japanese firms were

expanding their facilities and market share since the 1950's.

CEO succession results would reflect the past conditions of the firm (Datta and Guthrie, 1994). Therefore, the condition of the Japanese firms might have not changed drastically for a while.

Mishina, Hino, Dan, Ashida, Ichinari and Wang (2010) examined CEO characteristics in Japanese, American and Taiwanese firms. It compared the CEO's age, gender, educational background, succession origin and functional background among the three countries. The result showed American and Taiwanese firms had a similar way to choose CEO's especially on their education. While the most of the CEOs in Japanese firms graduated from the brand-named universities and obtained only bachelor degrees, the most of CEOs in American and Taiwanese firms have a masters or doctoral degree, especially in business.

Mishina et. al. (2010) also examined 77 CEO backgrounds of 2009 both in Japanese and American firms. The result shows that one out of 44 Japanese CEOs were hired externally, while 15 out of 33 American CEOs were hired externally. The research concluded that Japanese firms need to reform their CEO succession system to make better use of organization ability.

³ The definition of internally promoted CEO is different between Japan and the other countries. In Japan, an internally promoted CEO usually entered the firm right after he/she graduated from the college (newly graduated – “Shin-sotsu”). The others who entered the firm after job hopping were not counted as an internally promoted CEO (Tanikawa, 2015). On the other

hand, in the Western studies, an internally promoted CEO means the CEO who were an officer of the hiring firm for more than one year prior to their appointment, and an external CEO means the CEO who had a prior history as an officer at another public firm, had at most one year as an officer at the hiring firm (Nagel, 2015).

Horiuchi (2019) researched educational backgrounds of 318 CEOs in 158 pharmaceutical firms among six international regions from 2001 to 2018. The result showed that only 7% of CEOs in Japanese firms had a degree in management while 20% of the CEOs in the other regions had at least one additional degree. It clearly showed that Japanese firms chose their CEOs not because of their management skill.

Mishina and Hino (2011) pointed out that Japanese firms tend to appoint their CEO at an older age. Many first CEOs, the founders, had a very long tenure. The successors consequently were older when they held the CEO position. To follow these kind of the CEO appointments, firms developed an older age promotion system. In the end, the experience of the CEO as top management became insufficient and it still continues without any change.

These studies showed that the Japanese firms rarely changed their way to choose a CEO since the high economic growth era of 1950's, while firms rapidly expanded their business globally since the 1960's (Akino, 1997).

(3) CEO successions in Western Firms

Lauterbach and Weisberg (1999) examined 165 top management successions in US firms during the period 1989-1991. The result showed that internal successions were more likely in larger firms, which had good economic performance, and offered top management positions, such as CEO, rather than managers.

Also, Lauterback and Weisberg (1999) found that external CEOs often performed better than internal successions when firms had poor performance. It concluded that internal successions weaken the firm, and it might lead

to agency problems even though they chose an optimal successor internally as their CEO.

Datta and Rajagopalan (1998) examined that 134 CEO successions in US manufacturing firms during the period 1977-1987. The result showed that CEOs with higher educational levels related to the industry product differentiation. If the industry growth rate was higher, the age of the CEO successor was lower. However, sample firms included any manufacturing industry, non-diversified, therefore the result did not indicate the history of firms, which might affect organizational inertia (Hannan and Freeman, 1984).

Furtado and Karan (1994) researched the relationship of a firm's performance and the origin of CEO successions. The result showed that external CEOs were hired when the firm had the poor accounting earnings, but this was limited to the small firms.

On the other hand, Georgakakis and Ruigrok (2017) researched 109 CEO succession events in large international European firms between 2005-2009. The result showed externally hired CEOs had the performance advantage when the three conditions came together. One was that the CEO and top management team had similar demographic elements, such as gender, age, and nationality. The other was that the CEO needed to have a variety of experience. The last was that the CEO should have been hired from a well-performed firm in a stable industry.

Thus, CEO characteristic studies in Western firms suggest the reason why a successor was chosen, the levels of the performance outcomes, and which CEO characteristics can produce a successful successor. In contrast, studies in Japanese firms

indicate the conditions of Japanese management systems rather than testing a CEO's performance or success to select a CEO. These studies of CEO characteristics in each region demonstrate a great difference in a theory of the management literature.

(4) Problems of Japanese pharmaceutical firms, and CEO successions

The main proposition of this study is to examine the characteristics of CEOs in the pharmaceutical industry of the world leading markets, in particular Western countries and Japan from 2001 to 2018. After the Japanese government announced their direction of promoting globalization of the market in 2013⁴, the surrounding environment of pharmaceutical firms in Japan changed drastically⁵.

Looking into annual securities reports, many Japanese pharmaceutical firms announced promotion of globalization in their business strategies. In 2014 and 2015, 45% of Japanese pharmaceutical firms announced expanding their business outside of the country⁶.

Announcing the globalizing strategies both for research and development and the drug sales, the question is whether the management system in Japanese firms could change. The selection of a CEO successor and required

characteristics represent an organizational decision (Datta and Rajagopalan, 1998).

The reason of why this study focuses on the Japanese management system is that the pharmaceutical market in Japan had been shrinking compared with the past, and would continue in the next decades due to an aging population and so on. The needs for internationalization had been identified since 1990's (Mahlich, 2007). According to "The Global Use of Medicine in 2019 and Outlook to 2023" by IQVIA⁷, the global pharmaceutical market will exceed \$1.5 trillion by 2023 growing at a 3–6% compound annual growth rates over the next five years while Japan's topline growth of -3 to 0%, and the medicine spending in Japan is expected to decline by -3 to 0% through 2023, largely due to the effect of exchange rates and the continued uptake of generics. To survive such an upcoming tough environment, a strong dominant logic is required, followed by a qualified CEO as top management (Bettis and Parahalad, 1995).

In this sense, the CEOs in these regions, Western countries and Japan, should be compared to find the better characteristics to advance in the industry on their own. To compare them, the CEO age, origin, firm and industry tenure are examined following these three hypotheses.

⁴ The Japan Revitalization Strategy (Cabinet Decision on June 14, 2013)

⁵ According to Data Book 2019 by Japan Pharmaceutical Manufactures Association, three of top eight Japanese pharmaceutical firms have over 60% overseas sales in 2017, which is increased by 15% to 20% compared to 2013.

⁶ The data was collected from the annual securities reports of 62 publicly listed Japanese pharmaceutical firms in 2014 and 2015.

⁷ IQVIA is formerly Quintiles and IMS Health, Inc., is an American multinational company serving health information technology and clinical research.

1. CEO Age

The aging population has been a problem in Japan since 1970's, and in 2018, the population aged 65 and over was 28.1 percent of the total population⁸. According to the report of Tokyo Shoko Research, the average age of CEOs in Japan was 61.73 in 2018, which was the oldest since the research was started in 2009. Also, it reports that there was a correlation between the firm performance and the age of the CEO. The older the CEO, the lower the firm performance became⁹.

Shimizu (2013) researched CEO ages and firm value of the 2209 Japanese firms of four years in 2001, 2004, 2007 and 2010. The result showed that there was a negative correlation between the age of CEOs and firm value, and the higher negative correlation if the firm had a higher percentage of foreign investors.

These studies indicated that the age of CEOs and the performance could be related negatively. This study examines the performance of each CEOs and their ages.

H1: The age of CEOs is negatively correlated with their own performance.

2. Internal Promotion

Zhang and Rajagopalan (2010) reported that there was no significant difference in firm performance between internal and external CEOs, but in a later year of tenure, there was a difference. External CEOs got a relatively lower performance in their later tenure, while internal CEOs kept the level of their performance continuously.

On the other hand, Zajic (1990) had empirical analysis and the result indicated that internal CEOs had higher-performing firms. However, the data of this study of CEOs and the firms occurred in 1987, so the study needs to be updated.

Therefore, CEO performance could be different depending on tenure, however an internal CEO could perform better.

H2: Internal CEOs performs better in their later tenure than External CEOs.

3. Firm Tenure and Industry Tenure

In this study, it takes the definition of the internal CEO as the CEO who transferred into the firm and worked in another position for a while, for more than one year prior to their appointment. It means that each CEO may have a different tenure length, both in the firm and the industry.

The CEOs should be open-minded regarding firm, however, they become close-minded as their tenures continue (Hambrick and Fukutomi, 1991). It indicates that if the CEO candidate stayed at the firm or the industry longer before being promoted to a CEO, the person may develop a close-minded strategy, which leads to the lower performance.

Karaevli (2007) examined that the relationship of the firm performance and external CEOs for 30 years in the airline industry and chemical industry. The result indicated that the "outsiderness" of the CEO did not affect the firm performance.

⁸ Statics of Bureau of Japan, <https://www.stat.go.jp/english/data/jinsui/2018np/index.html#a15k30-a> [2020/1/23 access]

⁹ 2018 nen Shacho no Nenrei Chosa (The CEO

age in 2018), Tokyo Shoko Research, https://www.tsr-net.co.jp/news/analysis/20190214_01.html [2020/1/23 access]

On the other hand, Richard, Wu and Chadwick (2009) reported that there was a positive relationship with CEO industry tenure and the firm performance, and a negative relationship with CEO firm tenure. They targeted the bank industry, and gained samples by questionnaires.

H3: The CEO's industry tenure has a positive relationship with the CEO performance.

(5) Methodology

In this study, classifying and typifying CEOs in each region based on the data, it tried to find out the management structure difference between Japan and Western countries. For the Western countries, it divided into two regions, USA (plus Canada and Australia) and European countries. Therefore, firms in three regions, Japan, USA and Europe, were compared. Then, it tested the hypotheses to find out any relationship between CEO successor characteristics and their performance.

1. Data and Sample

This study was based on 164 CEOs in 62 pharmaceutical firms that mainly handle molecular drugs¹⁰. They consist of nine US firms,

¹⁰ Mainline molecular pharmaceutical firms do not include biopharmaceutical firms because most of biopharmaceutical firms focus only on R&D, and they don't have manufacturing facilities.

¹¹ 20 European firms consist of four from Germany, three each from England, Ireland and Denmark, two from Switzerland, one each from Italy, Bulgaria, France, Finland and Spain.

¹² SPEEDA: Asia's Leading Platform for Analyses on Companies, Industries and M&A Deals, <https://www.ub-speeda.com>

one in Canada, one in Australia, 20 European firms¹¹ and 31 Japanese firms that were listed in SPEEDA¹². These firms were publicly listed, and had at least 20% of sales of prescription drugs (not in generic drugs), according to the SPEEDA industry categories. It means that prescription drug sales and R&D were the main business focus of each firm. This study focused on 18 years from 2001 to 2018, which spans the 2010 problem of the pharmaceutical industry¹³.

CEOs of each firm in 18 years were studied at S&P Capital IQ Platform¹⁴ (hereinafter referred to Capital IQ) and a firm's own website. The names of 164 CEOs were found, and data was collected about age of onset as a CEO, age of retirement as a CEO at the firm, their succession origins, their firm term and industry term, and their performance. In 164 CEOs, 74 CEOs were from Japan, 34 from USA, and 56 from European countries.

2. Measures

Age to Become a CEO: Most of the CEO's birth year was able to find over the internet by their names. The birth year was subtracted from the first year of tenure to find the age of accession to CEO of the firm.

¹³ Most of the drugs in the table were developed and launched in 1990's, which is the time of Japanese bubble economy. When we look at the years of patent expiry, it shows the expiries happened right before and after 2010. That is called "2010 problem of the Pharmaceutical Industry" in Japan.

¹⁴ Capital IQ: A technology and financial services company that acts as the research division of Standard and Poor's, <https://www.capitaliq.com/>

Age to Retire as a CEO: The birth year was subtracted from the year of retirement as the CEO of the firm.

Succession Origin: By taking the definition in Western firms, an internal CEO was defined as one who had been employed by the firm for at least 2 years before becoming the CEO of the firm. If the CEO was hired just for the position, or became the CEO within a year since entering the firm, they were defined as an external CEO. Just for additional information, if the CEO was a family member of the former CEO, or parachuted from their parent firm, it was noted.

Firm Tenure: It is the number of years with the firm until they became the CEO since they were hired by the firm.

Industry Tenure: It is the number of years that the CEO had spent in the pharmaceutical industry.

CEO Performance: In this study, the compound annual growth rate (CAGR) for sales during the tenure of each CEO was used to examine CEO performance. Generally, stock prices are the central measure of CEO performance. However, stock prices can be influenced by various factors other than CEO's capability. Having the assets growth does not mean that the firm's stock price growth. Profit is always controllable even though operating profit.

The sales growth reflects CEO's strategy rather than the various market factors. It can

reflect the strategy such as mergers and acquisitions as the result of the performance. Since it is difficult to compare the CEOs in the large period, CAGR for sales is used in this study.

The performance of the CEO in 2000 would have been represented at the balance of 2001. This study made the balance of 2001 as the starting period of CAGR. CAGR was calculated as below.

$$CAGR = \sqrt[n]{(\text{Ending balance} \div \text{Beginning balance})} - 1 \quad n = \text{Number of Years}$$

To test the hypotheses 1-3, a correlation was established for describing the relationship between two mutually numerical dependent variables. A multiple regression was used to measure the relationship of internal or external CEOs and the other variables.

(6) Results

1. Descriptive Statics and The Management Structure Difference by Regions

The first step in the analysis was to generate the descriptive statics and to compare the variables by regions. Table 1 shows the descriptive statics of the sample data. It clearly indicates that Japanese CEOs had the highest number across the variables. The CEOs in Japanese firms started their position at their older age, the oldest was at 76, and ends their position at the oldest in the comparison.

Table 1: CEO characteristics of the pharmaceutical industry: 2001-2018

	Age to Become the CEO				Age to Retire as the CEO				Firm Tenure				Industry Tenure			
	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.	Mean	S.D.	Min.	Max.
Total	53.06	7.80	32	76	61.59	7.13	42	81	15.78	14.53	0	42	21.10	13.04	0	56
Area Japan	55.27	8.87	36.00	76.00	65.41	6.55	42.00	81.00	22.61	14.80	0.00	42.00	24.50	14.31	0.00	56.00
USA	52.71	6.68	32.00	63.00	59.50	6.18	45.00	68.00	12.29	12.85	0.00	33.00	22.68	10.18	0.00	39.00
Europe	50.38	5.98	38.00	63.00	57.89	5.91	42.00	72.00	8.88	10.81	0.00	36.00	15.66	11.06	0.00	36.00

Table 2: Breakdown of CEO Origins by Regions

	Internal		External		Unknown	
	Sum	% /Total	Sum	% /Total	Sum	% /Total
Total(N=164)	119	72.6%	37	22.6%	8	4.9%
JPN	64		5		5	
Area USA	24		10		0	
Europe	31		22		3	

Table 3: The Detailed Breakdown of CEO Origins by Regions

	Internal	Internal & Family	Internal & Parachuted	External	External & Family	External & Parachuted	Unknown
Japan	45	14	5	3	1	1	5
USA	24	0	0	10	0	0	0
Europe	29	2	0	22	0	0	3

In Japanese firms, if the CEO was old at accession, he had the shorter tenure¹⁵. A few Japanese CEOs were promoted to the position over 69 years old, and retired after a few years. However, the average CEO tenure was the longest in Japanese firms when comparing the age to become the CEO and the age to retire as the CEO.

In contrast, the CEOs in European firms stayed in their firms and the industry for the shortest in these regions. The mean age to become a CEO was 50.38 years old, which was the youngest among three regions.

The mean age to retire as a CEO was 65.41 years old in Japanese firms while the mean of other two regions was under 60 years old. It is obvious that Japanese firms tend to have older CEOs, and they keep their position till they get around 65 years old. It might relate to the official retirement age of Japanese firms. They set the retirement age at 65 years old.

The mean of the firm tenure was different by each region. Japanese CEOs had the longest

firm tenure of 22.61 years. For the USA, 12.29 years, and the shortest was 8.88 years in Europe. This result indicates that Japanese firms preferred a CEO promoted internally as well as working for the same firm for a long time, which correlates to the age of accession and retirement as the CEO. If the three regions are compared, the USA firms appear to prefer CEOs who knew the firm well rather than being a new employee. In contrast, European firms had only about 8 years, which meant that no matter how long the person was in the firm, they had a chance to become a CEO if they had the necessary ability.

Regarding industry tenure, in Europe and the USA, it was at least 15 years of industry experience in the pharmaceutical industry. The means of the industry tenure was 22.68 in USA and 15.66 in Europe. It means that the CEOs needed around 7 to 10-years' experience in the industry before joining the firm, and spent another 8 to 10 years before becoming the CEO.

On the other hand, Japanese CEOs had the almost same firm and industry tenure. It means

¹⁵ No female CEO was found in Japanese firms

in the data.

that most of them did not work in any other firm nor the industry before becoming the CEO of their firm. Compared with USA and Europe, it took more than double to become the CEO.

Table 2 shows the breakdown of CEO origins. The Japanese firms had the most internal CEOs, and European firms had the most external CEOs. USA firms made their CEO profile available, therefore there was no unknown. It indicated that the firms communicated well to the stakeholders without hiding any career history of the CEOs.

Overall, most of the CEOs were internal CEOs. However, as Table 3 shows, Japanese firms were unique. There were 14 internal and family origin CEOs. It meant that the CEO's family member was working for the firm for a while, then they succeeded them in the CEO position after their relative resigned. Obviously, it indicates that most of Japanese firms still depend on family style business while firms need a strong presence for investors, in contrast to the way that European and USA firms were taking.

Thus, by observing the data of CEO origins, it shows the difference among these three regions. Japanese firms preferred CEOs who stay in the firm for a long time and promote them internally, and it takes more than 22 years on average. Accordingly, the age of the CEO was higher both to start and retire. US firms preferred CEOs who were in the same industry for more than 22 years on average, but firm tenure was half of the industry tenure. European firms preferred the CEOs with much shorter tenure both in the firm and the industry.

72.6% of CEOs were internally promoted, however, the characteristic itself was different among the regions. USA and European firm had

similar CEO successor origins, no matter if they were hired internally or externally, there was no relationship with the other stakeholders such as a family member and a parent firm. On the other hand, Japanese firms mainly hired CEOs internally but one third of the CEOs were related with the family and parent firms.

2. CEO Successor Characteristics and CEO Performance

Table 4 shows the correlations. There was a negative correlation between the age to become the CEO and CEO performance ($r=-0.229$). It means H1 was supported, the older the CEO, the lower the CEO performance although table 5 shows the age was not significant for CEO performance.

The other finding was that there was a negative correlation with industry tenure and CEO performance ($r=-0.178$). It indicated that the longer industry tenure, the lower the CEO performance, which did not support H3.

To test H2, the multiple regression analysis was used. Table 5 shows the result. It showed that there was no relationship with an internal, or an external CEO and the performance. Thus, H2 was not supported.

(7) Conclusion

This study classified the CEOs in three leading pharmaceutical markets, Japan, USA and Europe, and compared their characteristics. Also CEO performance was examined through the characteristics to find out any relationship with their performance.

The literature regarding CEO successions of each region was reviewed. The Japanese firms had not changed their way to select a CEO since the 1950's, and the analysis in this study

showed the exact same way persists in the 2000's, even in the pharmaceutical industry which was directed to expand their business internationally.

Table 4: Correlations

	1	2	3	4
1 Age to Become the CEO				
2 Age to Retire as the CEO	.484**			
3 CEO Performance	-.229**	-0.159		
4 Firm Tenure	.451**	.317**	-0.112	
5 Industry Tenure	.611**	.317**	-.178*	.626**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5: Multiple Regression Analysis Summary

Variable	B	Beta	p
Age to Become the CEO	-0.511	-0.275	0.150
Age to Retire as the CEO	-0.361	-0.148	0.266
Firm Tenure	0.328	0.296	0.205
Industry Tenure (before becoming CEO)	-0.142	-0.118	0.580
Internal	2.978	0.059	0.813
External	8.693	0.149	0.567

a. Dependent variable: CEO Performance

In contrast, the literature of Western firms mostly examined the CEO characteristics to be a successful successor. Taking some of the results of the studies, this study built hypotheses to examine them in the pharmaceutical industry in 2000's.

As a result, Japanese firms mostly chose older, internal CEOs with longer industry tenure, which reveals a lack of experience in other environments. Also one third of the CEOs were chosen from among the former CEO's family or stakeholders of the parent firm. The Japanese firms were continuously operated by someone who was close-minded. It might have worked well when the pharmaceutical industry targeted only domestic markets. However, in 2000's, the expansion to a global market was

deemed critical to survive among international firms.

On the other hand, when reviewing the analysis, there was no relationship with CEO origin and the performance. It meant that whether the CEO was internal or external was not a reason for low performance. Long industry tenure had a relationship with performance, therefore, the lack of the knowledge of the business outside the industry would be a reason of the low performance.

Growing firms expand the scale of the organization, and make functioning complicated. Therefore, the manager will not be able to manage the firm efficiently by expanding and increasing the complexity, if he/she who has involved himself/herself only in a specific

business. In short, a management professional is needed for the larger firms.

The competitive environment of firms affects the selection requirements of CEOs. Whether if it's an exclusive or oligopolistic market, a global or a domestic market, a competition in the small businesses or the adjustment for the rapid change in the environment that surrounded the firm, all of these issues are indispensable conditions to select a CEO, and the Japanese management system may not survive fully with their current approach. The result of this study contributed to reconsider the condition of Japanese management system in the global market.

(8) Limitations

There were limitations of this study. One was that it was limited to the pharmaceutical industry, while most of the industry in Japan faced the same situation of expanding into the global market.

Secondly, the hypotheses were tested by correlations and multiple regressions, however, the results did not show the casual relationship. This study tried to find any relationship among various CEO characteristics and the performance. The way to analyze the relationship can be researched more.

Thirdly, it did not compare business strategies such as expenditure for merger and acquisition and R&D, which is the most important business strategy in the pharmaceutical industry. Depending on their characteristics, the way to spend on the strategies may have a difference.

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