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Japanese corporate finance: What factors affect the financial decisions of Japanese firms? A survey result

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# JAPANESE CORPORATE FINANCE: WHAT FACTORS AFFECT THE FINANCIAL DECISIONS OF JAPANESE FIRMS?: A SURVEY RESULT

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# Japanese Corporate Finance: What Factors Affect the Financial Decisions of Japanese Firms?: A Survey Result

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## Abstract

In June 2005, a questionnaire survey was sent to 9000 companies in the Kansai Area (Osaka, Kyoto and Hyogo), the second largest economic block in Japan, with 2041 companies responding. This article introduces the results of this questionnaire survey. The greatest feature of this study is that, unlike previous works on traditional corporate finance, much information on unlisted companies is included. The dividend policy of Japanese companies, awareness of corporate governance, funding behavior, and bank selection behavior were analyzed. As a result, we found that being a consolidated subsidiary or a group member of an affiliation of companies greatly affects a company's financial activities, and that the capital adequacy ratio and size of the company are also important factors.

JEL Classification Code: G32, G20.

Key Words: Japanese small firms; Financial decision; Main banks; Dividend policy; Corporate governance.

# Japanese Corporate Finance: What Factors Affect the Financial Decisions of Japanese Firms?: A Survey Result

## 1. Introduction

Most research on corporate finance in Japan (e.g., Hoshi and Kashyap 2001, Kang and Stultz 1996) has been conducted only on listed companies and there are very few studies on unlisted companies due to the difficulty in obtaining data. However, according to a survey conducted by the Ministry of Internal Affairs and Communication in 2001, of 4,700,000 companies (including sole proprietorships) in Japan, there are 4,690,000 small-and medium-sized companies and only 13,000 large companies<sup>1</sup>. Also in terms of the number of employees, 29,960,000 (70.2% of the total 42,660,000 employees) work for small and medium-sized companies. In other words, without conducting an analysis of small- and medium-sized companies which constitute the majority of Japanese companies, it is impossible to understand the characteristics of Japanese companies or the Japanese economy. Therefore, an extensive questionnaire survey that covered small- and medium-sized companies is necessary<sup>2</sup>. Consequently, we conducted an "management survey of corporate finance issues in the Kansai Area" with the head offices of 9000 companies in the Kansai Area (Osaka, Kyoto and Hyogo Prefectures).

The gross production of the 3 prefectures in Kansai (FY2001) is JPY67.2 trillion in total, accounting for 13.4% of the total production in Japan, and the area is the second largest economic block in Japan after Tokyo. In addition, it is a common knowledge that there are many small- and medium sized companies in the area. However, since the failures of Kizu Credit Cooperative and Hyogo Bank in 1995, a number of small- and medium-sized financial institutions went bankrupt in the Kansai Area, and Sumitomo Bank (currently Sumitomo Mitsui Banking Corporation) and Sanwa Bank (currently the Bank of Tokyo Mitsubishi UFJ), city banks with head offices in Osaka, relocated their headquarters to Tokyo after reorganization. Another city bank, Daiwa Bank (currently Resona Bank) was nationalized, effective in 2003. In this way, the Kansai Area is also expected to be the area

<sup>&</sup>lt;sup>1</sup> "Small- and medium sized companies" are defined as companies with 300 regular employees or less (or, 100 or less for wholesalers and service businesses, and 50 or less for retailers and catering establishments) or, with a capital of JPY 300 million or less (or JPY 100 million or less for wholesalers and JPY 500 million or less for retailers, catering establishments and service businesses).

<sup>&</sup>lt;sup>2</sup> Yamori and Baba (2001) analyzed the results of a questionnaire survey with listed companies in Japan regarding their overseas listing strategies.

most affected by the impact of changes to the financial system across the country.

This article is divided into the following sections: Section II explains the summary of the questionnaire survey. Section III selects questions regarding the financial decision of the companies and analyzes how the answers to those questions are affected by the companies' attributes. Section IV is the conclusion.

# 2. Summary of the Management Survey of Corporate Finance Issues in the Kansai Area

# (1) Selection of Responding Companies

Companies managed in the Tokyo Commerce and Industry Research database were used as the parent population, and, after excluding certain types of industry such as public utilities, companies were classified into 4 groups based on the number of employees (1-20, 21-50, 51-100 and 101 or more). Next, 2250 companies were randomly selected from each group, for a total of 9000 companies to which the survey form was to be sent. In June 2005, the survey form was sent to the 9000 companies, and the responses from 2041 companies received by July 1 were analyzed in this paper. Response rate was 22.68%. However, some companies did not respond to each corresponding question, and a non-response was not included in the actual calculation of the figures and estimations, thus the number of the companies analyzed differs depending on the question.

# (2) Summary of the Survey Form

The questions could be roughly divided into 8 Parts. Part I asks about the attributes of the person who responded to the survey. Part II asks about the attributes of the responding company. Part III contains questions regarding overall management of the responding company. Part IV inquires about overall financial policies. Part V inquires about the relationship with the main bank. Parts VI, VII and VII contain questions regarding overall banking transactions, questions regarding methods of corporate assessment of small- and medium-sized companies by financial institutions, and questions regarding the credit guarantee system, respectively. Of these, the results of Part IV are mainly used for the discussion of this article.

# (3) Situation of the Responding companies

Table 1 shows the number of responding companies according to the number of employees. The survey forms were sent to 2250 companies in each of the 4 categories based on the number of employees according to the rules for selection. Therefore, the size of the responding companies in the table directly represents the level of response rate. As expected, there were fewer responses from small companies with 1-20 employees. However, as there were 372 responses from companies in this group, the opinions of a wide range of companies can be expected. Of the total responding companies (2020)

companies), the largest and smallest number of employees was 22,724 and 1, respectively, and the average number of employees is 147.9.

The number of valid answers to the question on listing status was 1969. Of these, 74 (3.8%) companies were already "listed or public". Therefore, the remaining approx. 1800 companies were unlisted. However, 40 of them replied that "they have concrete plans for public offering" and 160 desired to go public although they had no concrete plans.

Table 1
Distribution of Responding Companies by Number of Employees

1 ~ 20	21 ~ 50	51 ~ 100	101 ~	Unknown
372	554	574	520	21
18.2%	27.1%	28.1%	25.5%	1.0%

Note: Actual numbers and the percentages are shown in the upper and the lower rows respectively.

# 3. Analysis of the Questionnaire Results

This section discusses and analyzes the survey questions regarding the financial decisions of Japanese companies. However, the numbering of the questions below was left the same as those of the original survey form. In addition, the survey form was originally prepared in Japanese. The following questions were translated for the purpose of this article.

Q7 What is the percentage of your capital adequacy ratio (= Shareholders' Capital/Gross Assets on the balance sheet)? (Approximate figures are acceptable. Please provide the figures as of the end of the latest fiscal year.)

1. Capital adequacy ratio

%

2. Liability exceeding assets

Of 1811 valid answers, 78 companies (4.3%) answered that they had liabilities in excess of assets. The average capital adequacy ratio of responding companies which did not have an excess of liabilities was 33.2%, and the most common capital ratio for distribution was less than 20%, as shown in Table 2.

Table 2
Capital Adequacy Ratio

Total Number of	Less than	20% or more - Less	40% or more - Less	60% or more - Less	80% or
Responses	20%	than 40%	than 60%	than 80%	more
1715	675	444	321	178	97
100%	39.4	25.9	18.7	10.4	5.7

Q8. Please circle the appropriate number from the following lines which best describes your business achievement (profits before tax):

- 1. Posted profits for 2 consecutive fiscal years
- 2. Went from a deficit to a profit

- 3. Went from a profit to a deficit
- 4. Posted losses for 2 consecutive fiscal years

Profit conditions before tax as an indicator of business achievement were asked. 74.2% of the respondents answered that they had posted profits for two consecutive fiscal years, so the percentage of profit-making companies was 84.3% for the current fiscal year. Given the general slowdown in business in Kansai, this was rather surprising. This may be due to the assumption that companies who were willing to answer the questionnaire had a comparatively good management strength, or as the database of companies to which the questionnaire was sent did not cover all companies, companies with poor management strength were likely not to be included; and approx. 200 companies that did not answer this question might experience poor performance.

**Table 3**Status of Profit Before Tax

Total Number of	Posted profits for 2	Went from a	Went from a	Posted losses for 2
Responses	consecutive fiscal years	deficit to a profit	profit to a deficit	consecutive fiscal years
1987	1474	201	170	142
100%	74.2	10.1	8.6	7.1

Q9 Regarding the most recent dividend payment, did you:

1. Pay dividends

2. Did not pay dividends

According to the results of the questionnaire survey, 839 companies (42.7%) paid dividends, while 1125 (57.3%) did not.

There are many studies on corporate dividend policies<sup>3</sup>. For example, Gul(1999), Hayashi and Jagannathan(1990), and Kato and Loewenstein(1995) conducted studies on

<sup>&</sup>lt;sup>3</sup> Lease, et. al.(2000) made an extensive survey of studies to date.

Japanese companies. However, these studies only studied listed companies. Of course, it is well known that in a perfect capital market, dividend policy does not affect enterprise value. However, even in listed companies, most business managers believe that the dividend policy is an important issue for corporate decision-making. Unlike listed companies, the condition of a perfect capital market may not apply to unlisted companies but there are very few studies on unlisted companies.

Therefore, the kind of factors that determine payment or nonpayment of dividends for the companies which responded to this questionnaire survey, including a large number of unlisted companies, was investigated. A regression using a no-dividend dummy (NODIV) where 1 (one) is assigned as the dependent variable for responding companies that did not pay a dividend, and 0 (zero) is assigned for responding companies that paid dividends. Furthermore, in addition to listing status, the following various financial conditions of the companies were used as independent variables.

First is the condition where profits before tax occurred over the past two consecutive 2 fiscal years as asked in Question 8. Q08A2 is a dummy variable where 1 (one) is assigned to a company that went from a deficit to a profit (that is, companies choosing Answer 2 of Question 8) and 0 (zero) otherwise. Similarly, Q08A3 is a dummy variable where 1 (one) is assigned to a company that went from a profit to a deficit, and Q08A4 where 1 (one) is assigned to a company that posted losses for two consecutive fiscal years. Companies that posted profits for two consecutive fiscal years are used as a base, and the difference among these companies is shown as coefficients of these dummy variables. Since companies with deficits are likely to pay no dividend, these dummy variables are expected to be positive. Given the difficult financial situation, Q08A4's coefficient is expected to be the largest, followed by Q08A3 and then Q08A2.

Second, (although not described in this article) a dummy variable (Q10AA1) was included where 1 (one) was assigned to companies that answered "severe" to the question on latest funding and 0 (zero) to companies that answered otherwise. Since companies with difficulty in funding wish to avoid dividend payment as it represents an outflow of liquidity, the factor of this variable is expected to be positive.

Third, the latest sales growth (SGRW) was adopted as a measure to evaluate business performance. SGRW greater than 1 (one) represents sales during the latest fiscal year that exceed the results of the previous fiscal year. However, while some companies with growing sales do not pay dividends because they have a number of attractive investment opportunities, the likelihood to pay dividends also increases due to favorable business performance. As such, it is impossible to determine the sign of this factor in advance.

Fourth, the capital adequacy ratio (CAP) of a company was adopted 4. Since

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<sup>&</sup>lt;sup>4</sup> Companies which responded that their capital adequacy ratio exceeded 100 % were excluded, as they are suspected to be erroneous. For instance, in case of the analysis shown in Table 4, 12 companies were excluded from the samples due to this condition.

undercapitalized companies are likely to place priority on internal accumulation of capital, the CAP factor is expected to be negative.

Fifth, the size of the company was added as an independent variable. In general, the larger the company is, the wider the gap between business managers and shareholders is. However, it is not always clear whether this will increase or decrease dividends. Here, we used the natural logarithm of gross assets (ASSET) as a size variable.

Sixth, a company's association with a business group may influence its dividend policy. In this questionnaire we asked the company whether it is a consolidated subsidiary with a parent company, a company with a parent company but not a consolidated subsidiary (referred to as an "affiliated company"), or an independent company. Therefore, Q04A1 is a dummy variable where 1 (one) is assigned to a consolidated subsidiary with a parent company and 0 (zero) otherwise, and Q04A2 is a dummy variable where 1 (one) is assigned to an affiliated company and 0 (zero) otherwise. In other words, independent companies are used as the base. If a parent company desires to absorb funds from its subsidiaries, the consolidated subsidiary is likely to pay dividends, and the factor of Q04A1 should be positive.

Last, there is a listed dummy. While there is a difference in the implementation method of capital gains between listed and unlisted companies, in the case of unlisted companies, business managers often are major shareholders so corporate governance may work differently from listed companies. Therefore, we use a listed dummy (LISTED) where 1 (one) is assigned to a listed company and 0 (zero) otherwise.

In addition, due to the nature of dependent variables, the probit model estimation was also conducted. Since not all companies answered all questions, the total number of samples was 1517 or less.

The results of the estimation are summarized in Table 4. Except for SGRW (sales growth), A04A1 (subsidiaries) and LISTED, statistically significant factors could be obtained. That is to say, companies which are in deficit (namely, Q08A2, Q08A3, and Q08A4) are likely to pay no dividend, and companies finding difficulties in funding (Q10AA1) or with a lower capital adequacy ratio (CAP) are likely to pay no dividend<sup>5</sup>. Furthermore, smaller companies (ASSET) are likely to pay no dividend. In addition, though there was no difference in dividend policies between consolidated subsidiaries and independent companies (Q04A1), affiliated companies (Q04A2) were less likely to pay no dividends as compared to independent companies.

The LISTED factor was not significant even at the 10% level, and no difference was found between listed and unlisted companies. To confirm this result, cross terms between all explained variables excluding LISTED and LISTED were added and the

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<sup>&</sup>lt;sup>5</sup> Some companies reported positive but less than 1% capital ratio. We are afraid that they entered wrongly. So, we re-estimated the equation without companies reporting less than 1% capital ratio, and confirmed that the results remain qualitatively unchanged.

non-dividend equation was re-estimated. In other words, whether the size of each independent variables is different between listed and unlisted companies was investigated. However, no additional cross terms became significant. Therefore, listing status is not considered to be a key factor in dividend payment.

Table 4
Results of Non-dividend Function Estimation

1	
Coefficient	z-Statistic
4.312	11.213
0.430	3.192
1.028	6.354
1.045	4.564
0.649	5.809
0.036	0.235
-0.013	-8.451
-0.340	-12.125
-0.091	-0.965
-0.312	-2.409
-0.420	-1.515
	-797.732
	0.234
	0.234
	4.312 0.430 1.028 1.045 0.649 0.036 -0.013 -0.340 -0.091 -0.312

Total observations=1505.

Q15 Which of the following groups do you currently consider important as a stakeholder? And, which stakeholder will you emphasize from now? Please circle the appropriate number(s) from the following for your current situation and future plans.

- 1. General customers
- 2. Employees
- 3. Individual investors
- 4. Domestic institutional investors
- 5. Foreign institutional investors
- 6. Main Bank
- 7. Business partners
- 8. Affiliated company group
- 9. Owner
- 10. Management

11. Other ( )

To understand the basic stance on corporate governance, companies were asked about which stakeholder, present and future, was considered most important. Answers are shown in Table 5. For both questions, business partners were chosen as the most important stakeholders, followed by employees and general customers.

Difference in important groups is also quite interesting. Therefore, an analysis using the explanatory variables previously used to estimate the non-dividend function was conducted. The dependent variable of the first estimation is a dummy variable (Q15A1) where 1 (one) is assigned to companies that chose general customers as the current most important bodies and 0 (zero) to companies that did not choose general customers. Similarly, an estimation using the probit model in order to explain 11 variables in total, such as a dummy variable (Q15A2) where 1 (one) is assigned to companies that chose employees was also conducted.

The results of the estimation are summarized in Table 6. A number of variables were found to influence the choice of the most important stakeholder. Companies which recently had experienced difficulties in funding (Q10AA1) were likely to attach importance to main banks and affiliated company groups, and in contrast, are less likely to put a high priority on employees. This may be because companies with difficulties in funding need the support of financial institutions or affiliated companies, while cutting back on personnel.

A company with higher capital adequacy ratio (CAP) tends to attach importance to general customers but to place less importance on main bank. This may be because companies with a higher capital adequacy ratio are less likely to be dependent on financial institutions. The larger the size of the company (ASSET) is, the more likelihood it is to place importance on main bank. This result is surprising as smaller companies are expected not to have someone else to rely upon other than the main bank.

Whether the company is a consolidated subsidiary (Q04A1) or an affiliated company (Q04A2) has a significant influence in determining the most important group. In case of consolidated subsidiaries, importance is attached to affiliate company groups, and less importance is placed on employees, main bank, or business partners. Placing strong emphasis on affiliate company groups can be expected since important labor, financial and operational decisions are made by the parent company. This is almost the same for affiliated companies, and the only difference is that a number of affiliated companies answered that they place importance on the management.

Lastly, the listing status also had great influence in terms of which group is considered important. Listed companies are likely to focus on individual investors and institutional investors, and tend to place less value on employees and business partners.

**Table 5**Most Important Entity

	Present		Futur	е
	Number of responses	Percentage	Number of responses	Percentage
General Customers	863	46.2	882	47.6
Employees	908	48.6	942	50.8
Private Investors	20	1.1	51	2.8
Domestic Institutional Investors	22	1.2	24	1.3
Overseas Institutional Investors	5	0.3	4	0.2
Main Bank	239	12.8	208	11.2
Business Partners	999	53.5	961	51.9
Affiliated Company Group	123	6.6	129	7
Owner	118	6.3	89	4.8
Management	79	4.2	83	4.5
Other	35	1.9	34	1.8

Table 6
Decision Function of the Most Important Entity
<Attached to the back>

Q16 Please choose 3 from the following methods of external funding which you consider important, listing them in order of importance:

- 1. Procurement from the main bank
- 2. Procurement from financial institutions other than the main bank
- 3. Procurement from public-sector financial institutions
- 4. Institutional loans from municipalities, etc
- 5. Borrowing from a business partner (trade credits)
- 6. Short-term CPs
- 7. Long-term corporate bonds
- 8. Convertible bonds
- 9. Common stock
- 10. Subordinated bonds and preferred shares
- 11. Securitization of leases, credits and account receivables

12. A Pledge of goods in stock

13. Other

For the percentage of the most important item selected (Table 7), most companies, 2 out of 3, chose "procurement from the main bank", followed by companies which chose procurement from public-sector financial institutions.

A regression on the differences in funding sources by attributes of the companies was conducted. The following explanatory variables were used. Q16AF1 is a dummy variable where 1 (one) is assigned to companies that chose the "main bank" as the most important, and 0 (zero) to companies that chose otherwise. Similarly, Q16AF2 is a dummy variable where 1 (one) is assigned to companies that chose "procurement from financial institutions other than the main bank" as the most important and 0 (zero) to companies that chose otherwise. Other variables were similarly defined, and options 3 and 4 were grouped together since they both use a public source (A16AF3\_4) and options 5 to 10 were grouped together as financing from the market (A16AF6\_10). Furthermore, 11 and 12 were grouped together as they both are securitization (Q16AF11\_12). An estimation by the probit model was performed.

The results are summarized in Table 8. It is surprising that companies who posted losses for two consecutive fiscal years (Q08A4) placed emphasis on funding from the financial market, because information asymmetry is particularly large for such companies and funding from the market appears to be disadvantageous. Companies with higher sales growth (SGRW) tend to attach importance to funding from the financial market. Companies with higher capital adequacy ratio (CAP) are likely to procure funds from their main banks, and companies with lower capital adequacy ratio tend to focus on financial institutions other than the main bank and public financing.

Furthermore, the larger the company (ASSET) becomes, the more likely importance is attached to the relationship with the main bank, while the smaller the assets are, the more focus there is on public financing. Consolidated subsidiaries (Q04A1) are likely to place importance on trade credits and securitization rather than the main bank and public financing. Finally, for listing status, listed companies naturally place importance on funding from the financial market and are less likely to attach importance to the main bank.

Table 7
Important Financing Method

	1		2	2	3	3
Total	1785	100.0	1654	100.0	1444	100.0
Procurement from the main bank	1167	65.4	278	16.8	138	9.6
Procurement from financial institutions other than the main bank	130	7.3	669	40.4	298	20.6
Procurement from public-sector financial institutions	266	14.9	433	26.2	414	28.7
Institutional loans of municipalities, etc	42	2.4	115	7.0	192	13.3
Borrowing from business partners	20	1.1	9	0.5	21	1.5
Short-term CPs	5	0.3	9	0.5	12	0.8
Long-term corporate bonds	26	1.5	51	3.1	132	9.1
Convertible bonds	3	0.2	16	1.0	17	1.2
Common shares	31	1.7	23	1.4	40	2.8
Subordinated bonds and preferred shares	4	0.2	3	0.2	6	0.4
Securitization of leases, credits and account receivables etc	14	0.8	32	1.9	98	6.8
Pledging of goods in stock	0	0.0	3	0.2	14	1.0
Other	77	4.3	13	0.8	62	4.3

Table 8

Decision factor of the Most Important Financing Method

<Attached to the back>

Q17 What is your plan for borrowing from financial institutions? Please circle the appropriate number:

Plan to decrease borrowings
 Unchanged go to Q18
 Plan to increase borrowings

Of 1804 valid responses, 1083 companies (60.0%) chose "plan to decrease", 598 chose "unchanged", and 123 chose "plan to increase". We examined what factors affected these borrowing policies.

As the dependent variable, we used a dummy variable (Q17A1) where 1 (one) was assigned to companies that chose "plan to decrease" and 0 (zero) otherwise. The explanatory variables are the same as those previously used in the estimation of the non-dividend factor. According to the estimation results, the only significant factors were Q10AA1 which represents difficulty in funding and Q04A2 which represents the status as

an affiliated company. In other words, only companies with difficulties in funding planned to *decrease* borrowings. This may be because these companies could not increase borrowings and be forced to pay back debts.

At the same time, another estimation using a dummy variable (Q17A3) where 1 (one) is assigned to companies that chose "plan to increase" and 0 (zero) otherwise as an dependent variable was also performed. According to the results, only the capital adequacy ratio (CAP) and affiliate companies dummy (Q04A2) were significant at the 10% level. In other words, companies with a higher capital adequacy ratio are less likely to choose "plan to increase borrowings". This suggests that companies with sufficient equity capital do not rely on external funds.

Table 9

Decision Function for Borrowing from Financial Institutions

Decision i unction i		Planning to decrease		increase	
Variable	Coefficient	z-Statistic	Coefficient	z-Statistic	
С	0.048	0.144	-1.582	-3.375	
Q08A2	-0.050	-0.410	0.010	0.053	
Q08A3	-0.148	-1.103	0.066	0.334	
Q08A4	-0.277	-1.587	0.298	1.297	
Q10AA1	0.180	1.854	0.093	0.682	
SGRW	0.044	0.311	0.165	0.887	
CAP	-0.002	-1.034	-0.003	-1.453	
ASSET	0.020	0.817	0.001	0.015	
Q04A1	-0.098	-0.981	-0.072	-0.460	
Q04A2	-0.344	-2.833	0.295	1.810	
LISTED	-0.203	-1.095	-0.344	-1.001	
Log Likelihood	-911.599		-351.509		
McFadden		0.040		0.016	
R-squared	0.010		0.016		

Observations=1361.

Q17-1 If you chose "1. plan to decrease borrowings" in Q17, please select the first and the second most appropriate reasons from the following:

- 1. The borrowing burden is substantially heavy due to deflation
- 2. Funding costs have increased
- 3. Have an excess of cash reserves but no new investment opportunity
- 4 To raise stock price
- 5. Borrowings are not good

- 6. To reserve borrowing capacity in preparation of a new opportunity
- 7. Under pressure to repay borrowings from financial institutions
- 8. Limits have been placed on credits by banks

Valid responses for this question were 975(1<sup>st</sup>) and 838 (2<sup>nd</sup>), respectively. As shown in Table 10, most companies chose "to reserve borrowing capacity in preparation of a new opportunity". 555 companies, representing approx 60% of the total, chose this as the first or the second answer. A questionnaire survey of US companies by Grahan and Harvey (2001) also reported that there was emphasis on financial flexibility among debt policy factors. This can be seen as a common tendency between Japan and the US. As shown in Table 10, this is followed by "having an excess of cash reserves but no new investment opportunity" and "the borrowing burden is substantially heavy due to deflation".

Table 10
Reasons to Decrease Borrowings

	1		2	
	Number of	%	Number of	%
	responses		responses	
The borrowing burden is substantially heavy	196	20.1	102	12.2
due to deflation				
Funding costs have increased	61	6.3	62	7.4
Having an excess of cash reserves but no new	229	23.5	119	14.2
investment opportunity				
To raise the stock price	10	1.0	10	1.2
Borrowings are not good	190	19.5	185	22.1
To reserve borrowing capacity in preparation of	250	25.6	305	36.4
a new opportunity				
Under pressure to repay borrowings from	25	2.6	19	2.3
financial institutions				
Limits have been placed on credits by banks	14	1.4	36	4.3

Q18 To what extent do you agree with the description: "it is ideal to operate business without owing debts"? Please circle the appropriate number:

- 1. Strongly agree
- 2. Somewhat agree
- 3. Hardly agree 4. Totally disagree

Theoretically, as long as the investment opportunity produces a higher rate of earning than the interest payable, borrowing money is favorable. However, as borrowings increase, the company will be strapped with interest repayment issues. In Japan, which traditionally maintains a lifetime employment system, business managers shun the risk of corporate failure. Of 1878 responding companies, "strongly agree" ranked 28.6%, "somewhat agree" 60.1%, "hardly agree" 9.9%, and "totally disagree" 1.3%. It can be seen that most companies believe that operating business without owing debts is ideal.

A regression using the ordinary least-squares method was conducted. In the

estimation, the results of the 4-scale assessment on the extent of agreement with the description: "it is ideal to operate business without owing debts" is a dependent variable. As a result shown in Table 11, significant factors were companies' size (ASSET) and the capital adequacy ratio (CAP). As the large-scale company factor became significantly positive, it could be seen that large-scale companies do not always believe that it is ideal to operate business without owing debts. It is quite natural that large-scale companies do not agree with the irrational description which completely denies owing debts, as they should have more financial expertise. On the other hand, the coefficient of the capital adequacy ratio was significantly negative. This means that companies with higher capital adequacy ratio strongly maintain business operations without owing debts. This suggests that such orientation toward no debt business management is shown in actual practice.

Table 11

Extent of Agreement with the Description: "It is ideal to operate business without owing debts"

Variable	Coefficient	t-Statistic
С	1.578	9.861
Q08A2	0.097	1.597
Q08A3	0.021	0.320
Q08A4	0.022	0.271
Q10AA1	-0.069	-1.458
SGRW	0.072	1.067
CAP	-0.004	-5.230
ASSET	0.027	2.289
Q04A1	-0.047	-1.028
Q04A2	0.035	0.580
LISTED	0.074	0.811
Adjusted		0.023
R-squared		0.023

Observations=1414

Q20 Do you plan to use direct finance?

1. No
2. Yes go to Q21

254 companies (13.1%) answered that they "plan to use" direct finance, while 1678(86.9%) answered "no". A regression was performed using a dummy variable (Q20A1) where 1 (one) is assigned to companies that "do not plan to use direct finance" and 0 (zero) to

companies that "plan to use" direct finance as an dependent variable, and the explained variables are the same that have been previously used to represent the attributes of companies. The results of the estimation are shown in Table 12.

Significant variables were the capital adequacy ratio (CAP), the consolidated subsidiary dummy (Q04A1) and listed dummy (LISTED). The capital adequacy ratio was significantly positive, and, similar to question Q18, it could be seen that companies with higher capital adequacy ratio were reluctant not only to indirect but also direct finance. The consolidated subsidiary dummy is also significant as consolidated subsidiaries may not raise funds for themselves. The listed dummy was significantly negative, signifying that most listed companies are willing to use direct finance.

Table 12
Analysis of Attributes of Companies Which Do not Intend to Use Direct Finance

Variable	Coefficient	z-Statistic
С	0.962	2.389
Q08A2	-0.073	-0.494
Q08A3	0.000	-0.001
Q08A4	-0.002	-0.008
Q10AA1	-0.061	-0.531
SGRW	-0.300	-1.864
CAP	0.008	4.255
ASSET	0.014	0.481
Q04A1	0.918	5.301
Q04A2	0.255	1.572
LISTED	-0.678	-3.261
Log Likelihood		-527.023
McFadden  P-squared		0.066
R-squared		

Observations=1462.

Q20-1 If you chose "1. no" in Q20. Please circle appropriate number from the following choices that describes the main reason why you do not plan to use direct finance:

- 1. Have sufficient equity capital
- 2. Funding needs are met by indirect financing (from banks, etc)
- 3. Unsuitable for small scale/short-term funding
- 4. Not familiar with direct finance
- 5. Other ( )

Of 1678 responding companies that did not plan on using direct finance, 1616 companies replied to this question. Most companies, 52.4%, answered that their "funding needs are met by indirect financing", followed by "sufficient equity capital" (23.3%), "not familiar with direct finance" (12.3%), "unsuitable for small scale/short-term funding" (6.6%) and "other" (5.4%).

In order to analyze selection determinants, a regression analysis was conducted by the probit model. The dependent variable Q20AB1 is a dummy variable where 1 (one) is assigned to companies that chose "we have enough equity capital" as "1" and 0 (zero) otherwise. Similarly, except for the "other" option at the bottom, Q20AB2, Q20AB3 and Q20AB4 were defined in the same way.

The results are summarized in Table 13. Most companies facing difficulties in latest funding(Q10AA1) cite "unsuitability in size or funding needs" and unfamiliarity as reasons. It is easily understood that companies with a higher capital adequacy ratio chose "sufficient equity capital". Large-scale companies are more likely to answer "needs met by indirect finance". In addition, large-scale companies are less likely to answer "not familiar with direct finance". Graham and Harvey(2001) pointed out, in their questionnaire survey conducted on US companies, that there is a correlation between the size of a company and its financial knowledge and that this may be a factor in the company size anomaly. A similar possibility can be pointed out in Japan. Finally, most listed companies answered that they had "sufficient equity capital".

Table 13
Reasons Why Direct Finance is not used.
<Attached to the back>

Q22 Do you have a cross-shareholding relationship with any business corporation or financial institution? Please circle the appropriate number in the answer column.

It is well known that cross-shareholding is quite common among listed companies in Japan, and cross shareholding constitutes the core of corporate grouping. There are many studies on cross-shareholding and corporate affiliation at the listed company level (e.g., Osano, 1996; Flash 1996). However, there are few studies on mutual shareholding of unlisted companies.

According to answers to Q22, 258 (14.1%) out of 1835 companies answered that they had cross shareholding relationships with business corporations, and 127 (7.0%) out

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<sup>&</sup>lt;sup>6</sup> However, it is notable that this analysis is conducted only on companies which did not plan to use direct finance.

of 1815 companies with financial institutions. More companies have cross shareholding relationships with business corporations than with financial institutions.

To consider what kind of firms tend to have cross shareholding relationships, we estimate the equation, using a dummy variable (Q23AA) where 1 (one) is assigned to companies that said that they had cross shareholding relationships with business corporations and 0 (zero) to companies that answered "No" or "Don't know". As shown in Table 14, a smaller number of companies that posted losses for two consecutive fiscal years (Q08A4) had cross shareholding relationships, while most large-scale companies held shares mutually. In addition, listed companies, as well as affiliated companies are likely to have cross shareholding relationships. On the other hand, consolidated subsidiaries are less likely to have cross shareholding relationships.

A similar analysis was conducted on cross shareholding with financial institutions. In this case, it was also shown that a number of large-scale companies and listed companies have cross shareholding relationships with financial institutions. Furthermore, it is notable that the coefficient of consolidated companies dummy (Q04A1) is significantly negative, while that of affiliated companies (Q04A2) is not significant. In addition, listed companies more likely have cross shareholding relationship with financial institutions.

Table 14

Determinant for Cross Shareholding

	Cross shareholding with Business		Cross shareholding	g with Financial	
	Corporations I		Institutions		
Variable	Coefficient	Coefficient z-Statistic		z-Statistic	
С	-3.317	-7.168	-4.958	-6.952	
Q08A2	0.005	0.030	-0.256	-0.893	
Q08A3	-0.152	-0.842	-0.072	-0.273	
Q08A4	-0.637	-2.104	0.148	0.497	
Q10AA1	0.017	0.128	0.065	0.352	
SGRW	-0.155	-0.755	-0.334	-1.013	
CAP	0.002	1.264	0.001	0.259	
ASSET	0.190	5.932	0.301	6.328	
Q04A1	-0.253	-2.043	-1.365	-3.936	
Q04A2	0.491	3.522	-0.329	-1.249	
LISTED	0.943	4.771	1.592	6.967	
Log Likelihood	-523.983		-239.597		
McFadden	0.134		0.369		
R-squared		0.134	0.363		

Observation=1406.

Q23 Do you currently have a main bank? Please circle the appropriate number:

1. Yes 2. No

One characteristic of the Japanese financial system that has been pointed out is the existence of a long-term stable relationship between the bank and the company, commonly known as the main bank relationship (Hoshi and Kashyap 2001). Generally speaking, the main bank is the largest lending bank and is also a major shareholder for the company. The main bank sometimes sends in directors to the company. However, such strict interpretation of a main bank was not defined prior to requesting an answer, and companies were asked whether they had "a main bank" without any limitations. As such, the idea of a main bank may differ slightly depending on the responding company, but the question took advantage of the questionnaire survey feature of corporate awareness rather than simple numeric values.

As a result, of 2015 valid answers, 1799 companies (89.3%) responded that they have "a main bank", while 216(10.7%) answered that they did not. The types of companies that have a main bank was examined by a regression model using a dummy variable (Q23A1) where 1 (one) is assigned to companies with a main bank and 0 (zero) otherwise.

According to the results of the estimation as shown in Table15, 3 variables, namely size, the consolidated subsidiary(Q04A1) and the affiliated company (Q04A2) variables were significant. A significantly positive coefficient was obtained for the size variable, meaning that large-scale companies are likely to have a main bank. On the other hand, coefficients of Q04A1 and Q04A2 are negative, meaning that for consolidated subsidiaries and affiliated companies, they do not have main banks because their parent companies carry out the financial function.

**Table 15**Attributes of Companies that have a Main bank

Variable	Coefficient	z-Statistic
С	0.910	2.243
Q08A2	0.183	1.052
Q08A3	-0.170	-1.047
Q08A4	-0.286	-1.426
Q10AA1	-0.011	-0.087
SGRW	-0.086	-0.532
CAP	-0.003	-1.568
ASSET	0.065	2.154
Q04A1	-0.781	-7.478
Q04A2	-0.381	-2.551
LISTED	-0.193	-0.770
Log Likelihood		-481.792
McFadden		0.064
R-squared		0.004

Observations=1509.

Q24 Please circle the appropriate number of the business category of your main bank:

- 1. City bank
- 2. Trust Bank/now-defunct Long-term Credit Bank
- 3. Regional Bank
- 4. Second-tier Regional Bank
- 5. Cooperative Bank (Shinkin Bank)
- 6. Credit Cooperation
- 7. Foreign Bank
- 8. Government-affiliated Financial Institution
- 9. Other (

Regarding the business category of the main bank, 1085 (61.6%) companies chose city banks, followed by 284 (16.1%) for Regional Banks, and 259 (14.7%) for Cooperative Banks. Only a few companies chose others, 58 (3.3%) for Government-affiliated Financial Institutions, 53 (3.0%) for Second-tier Regional Banks, 7 (0.4%) for Credit Corporations and 1 (0.1%) for Foreign Banks. City banks have a high share because city banks such as Sumitomo, Sanwa, Daiwa and Taiyo Kobe had held head offices in Osaka and Hyogo, where this questionnaire survey was conducted. Also, since many second-tier regional

banks in Kansai went bankrupt, their share is slightly lower.

Next, how companies chose the business category of their main banks was examined. Here, options were sorted and a regression was conducted for 3 explained variables: a dummy variable (Q24A1\_2) where 1 (one) is assigned for companies whose main bank is a major bank (city, trust and long-term credit bank) (that is, companies that answered 1 or 2) and 0 (zero) otherwise; a dummy variable (Q24A3\_4) where 1 (one) is assigned for companies whose main bank is a local bank (regional or second-tier regional bank) and 0 (zero) otherwise; and, a dummy variable (Q24A5\_6) where 1 (one) is assigned for companies whose main bank is a cooperative financial institution (credit bank or corporation) and 0 (zero) otherwise.

The results are shown in Table 16. Status of recent profits (Q08A2, Q08A3 and Q08A4) did not influence the selection of the business category of the main bank. This is natural because main bank relationship is long term. Companies facing difficulties in funding are more likely to choose cooperative financial institutions as their main bank. The causal relationship may be reversed here; since asset assessment of major banks is strict, companies with weak financial condition may choose cooperative financial institutions as their main bank. In fact, companies with higher capital adequacy ratio choose a major bank as their main bank, and, in contrast, companies with lower capital adequacy ratio choose a cooperative financial institution as their main bank. Large-scale companies are likely to choose a major bank and in contrast, smaller companies choose a cooperative financial institution. Companies with higher sales growth often may choose cooperative financial institutions as their main banks because most of them are in relatively early stages of growth. Lastly, consolidated subsidiaries and affiliated companies often choose a major bank as their main bank. This is probably because they choose the same bank as their parent company.

Table 16

Type of Banks Chosen as the Main bank

	Major Bank		Local Bank		Cooperative Financial Institution			
Variable	Coefficient z-Statistic		Coefficient	z-Statistic	Coefficient	z-Statistic		
С	-2.462	-6.376	1.032	2.558	1.465	3.079		
Q08A2	0.103	0.778	-0.001	-0.008	-0.229	-1.348		
Q08A3	-0.089	-0.609	0.070	0.448	-0.224	-1.131		
Q08A4	-0.081	-0.434	0.222	1.160	-0.205	-0.896		
Q10AA1	-0.338	-3.348	-0.058	-0.519	0.529	4.508		
SGRW	-0.175	-1.004	-0.064	-0.326	0.468	2.164		
CAP	0.007	4.126	-0.003	-1.937	-0.006	-2.848		
ASSET	0.236	8.504	-0.143	-4.942	-0.255	-7.153		
Q04A1	0.572	4.891	-0.397	-3.009	-0.567	-3.167		
Q04A2	0.334	2.420	-0.101	-0.681	-0.475	-2.303		
LISTED	0.449	1.483	-0.300	-0.999	-7.073	0.000		
Log Likelihood		-751.034		-608.992	-410.000			
McFadden		0.117		0.045		0.145		
R-squared		0.117		0.045	0.145			

Observations=1320.

# 4. Conclusion

This article analyzed the determinants of financial activities of Japanese companies based on the results of the questionnaire survey sent to 9000 companies in Kansai in June 2005. This questionnaire survey was quite extensive and response was received from 2041 companies including small- and medium-sized unlisted companies. The dividend policy of Japanese companies, awareness of corporate governance, funding behavior and bank selection behavior, were analyzed in this paper. As a result, the paper found that the status as a consolidated subsidiary or a group member of an affiliation of companies greatly influences the financial activities of a company, and that the capital adequacy ratio and the size of the company are also important factors.

However, this one-time questionnaire survey could not fully evaluate the meaning of the answers to each question absolutely. Furthermore, it is impossible to determine whether the results at this time are applicable to Japanese companies in general, or only to companies in the Kansai Area. Similar questionnaire surveys should be conducted on an ongoing basis to examine the impact of changes in the economic environment. In addition, it is also necessary to conduct a questionnaire survey in various regions in Japan as well

as overseas, in order to identify financial characteristics according to region. Finally, as pointed out by Graham and Harvey (2001), although such questionnaire surveys can solicit opinions from companies, there is no guarantee that their answers correspond to their actions. In this questionnaire survey, we often find that several answers are consistent with their actions. However, a further analysis of the actual actions of the companies is necessary in the future.

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Table 6
Decision Function of the Most Important Body

	Genera Custom	-	Employ	ees	Private Investor	S	Domest Institution	nal	Oversea Institution	onal	Main ba	ank	Busines Partners		Affiliated Compa Group		Owner		Manage	ement
Variable	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic
С	-0.582	-1.890	0.001	0.004	-2.299	-2.318	-1.799	-1.834	-4.265	-1.471	-2.314	-5.003	-0.032	-0.102	-2.696	-4.708	-1.738	-3.185	-0.569	-0.916
Q08A2	0.013	0.110	0.003	0.027	0.262	0.711	0.108	0.300	-6.728	0.000	0.183	1.198	0.105	0.903	-0.436	-1.819	-0.403	-1.590	-0.286	-1.114
Q08A3	0.022	0.172	-0.013	-0.101	0.429	1.250	0.032	0.074	-6.308	0.000	0.166	1.001	-0.068	-0.545	-0.162	-0.696	0.265	1.480	-0.422	-1.364
Q08A4	0.152	0.949	-0.136	-0.840	-18.881	0.000	-0.052	-0.092	-6.248	0.000	0.228	1.143	-0.016	-0.100	-0.074	-0.240	-0.171	-0.596	-0.292	-0.869
Q10AA1	-0.061	-0.661	-0.288	-3.107	-0.111	-0.274	-0.223	-0.551	-5.722	0.000	0.554	5.080	0.046	0.503	0.395	2.400	0.010	0.064	0.025	0.142
SGRW	0.193	1.470	0.088	0.667	0.264	0.814	0.025	0.063	-0.574	-0.322	-0.369	-1.623	-0.117	-0.850	0.082	0.453	-0.388	-1.309	-0.413	-1.152
CAP	0.003	2.137	0.000	0.192	0.006	1.278	0.004	0.913	-0.011	-0.864	-0.013	-5.891	0.000	0.051	0.004	1.463	0.002	0.980	0.002	0.699
ASSET	0.012	0.522	-0.004	-0.185	-0.063	-0.877	-0.079	-1.135	0.175	0.977	0.154	4.773	0.021	0.956	0.020	0.481	0.042	1.148	-0.069	-1.609
Q04A1	-0.125	-1.446	-0.245	-2.822	-0.574	-1.305	-0.150	-0.460	-6.796	0.000	-0.981	-5.500	-0.202	-2.354	1.616	12.317	-0.097	-0.660	-0.257	-1.294
Q04A2	-0.174	-1.486	-0.045	-0.386	-19.008	0.000	-0.009	-0.025	-6.926	0.000	-0.427	-2.284	-0.184	-1.582	0.970	5.393	0.280	1.675	0.361	1.994
LISTED	0.154	0.874	-0.502	-2.750	1.858	5.109	2.036	5.824	0.923	1.133	-0.401	-1.525	-0.726	-3.914	0.220	0.728	-0.788	-1.893	-6.058	0.000
Log likelihood	-1	031.658	-1	037.600	-69.542		-78.581		-14.856		-479.921		-1040.866		-282.399		-324.471		-222.956	
McFadden R-squared		0.007 0.013			0.319	0.317		0.315		0.135		0.012		0.256		0.027			0.044	

Observations=1521

Table 8

Decision Function of the Most Important Funding Method

	Main bank		Financial Institutions other than Main bank		Public financing		Inter-company credits		Financial market		Securitization	
Variable	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic
С	-0.355	-1.030	-2.276	-4.492	1.497	3.563	-2.774	-2.623	-2.721	-4.481	-3.862	-2.832
Q08A2	-0.059	-0.469	-0.367	-1.707	0.285	1.994	-0.024	-0.058	-0.445	-1.377	0.365	0.988
Q08A3	-0.067	-0.493	-0.284	-1.283	0.195	1.233	0.386	1.139	0.003	0.013	-0.040	-0.087
Q08A4	-0.249	-1.425	-0.437	-1.272	0.191	0.948	0.301	0.563	0.580	2.296	-6.149	0.000
Q10AA1	-0.105	-1.075	-0.087	-0.598	0.211	1.902	-0.094	-0.285	-0.096	-0.485	0.086	0.238
SGRW	-0.312	-2.042	0.208	1.167	-0.008	-0.043	0.418	1.773	0.392	2.149	-0.832	-1.200
CAP	0.002	1.396	-0.008	-3.138	-0.002	-1.229	0.000	0.063	0.001	0.223	-0.001	-0.254
ASSET	0.098	3.953	0.077	2.069	-0.210	-6.783	-0.050	-0.629	0.039	0.871	0.160	1.653
Q04A1	-0.527	-5.496	-0.011	-0.079	-0.693	-4.274	1.452	5.542	-0.268	-1.332	0.817	3.237
Q04A2	0.150	1.165	0.018	0.100	-0.263	-1.621	-5.352	0.000	-0.078	-0.332	-6.159	0.000
LISTED	-0.929	-4.970	-0.094	-0.352	-0.442	-1.010	-6.186	0.000	1.320	5.517	0.514	1.131
Log Likelihood	-850.754		-365.460		-518.996		-70.984		-216.332		-55.662	
McFadden R-squared	0.039		0.034		0.106		0.291		0.154		0.191	

Observations=1372.

Table 13
Reasons Why Direct Finance is not Used

	Sufficient ed	quity	Met by indir	ect finance	Unsuitable t scale / short financing		Unfamiliar		
Variable	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	Coefficient	z-Statistic	
С	-0.847	-2.039	-0.527	-1.457	-2.344	-3.829	0.758	1.476	
Q08A2	-0.007	-0.041	-0.298	-2.229	-0.014	-0.067	0.398	2.477	
Q08A3	-0.380	-1.994	-0.016	-0.112	0.164	0.775	0.330	1.903	
Q08A4	0.509	2.350	-0.521	-2.697	-0.663	-1.537	0.308	1.349	
Q10AA1	-1.195	-5.909	-0.341	-3.173	0.672	4.480	0.678	5.548	
SGRW	0.129	0.743	0.046	0.292	0.155	0.636	-0.570	-2.049	
CAP	0.020	11.369	-0.010	-6.493	-0.005	-1.722	-0.010	-4.392	
ASSET	-0.066	-2.205	0.098	3.783	0.051	1.147	-0.110	-3.095	
Q04A1	0.732	6.974	-0.721	-7.411	-0.228	-1.321	-0.435	-2.710	
Q04A2	0.072	0.461	-0.052	-0.389	-0.082	-0.361	-0.138	-0.713	
LISTED	0.597	2.743	-0.553	-2.663	0.068	0.199	-5.990	0.000	
Log Likelihood	-551.152		-779.282			-239.774	-354.929		
McFadeen R-squared		0.203		0.081		0.068		0.166	

Observations=1228.