

Women Entrepreneurs' External Financial Access and Social Networks in Business Start-ups

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Summary

Social network is important for entrepreneurship especially by the business start-ups. I focused on the relationship between external financial access and social networks. The results of my original investigation by questionnaire reveal seven types of social networks exert an influence on the amount of external fund procurement. Women entrepreneurs can get less amount of fund than men. The result also reveal the influence type of social network which are “network of family members, relatives,” “network outside former workplace,” and “network of political party or religion” for women entrepreneurs, while for men the amount was higher than the overall average for “network of family members, relatives,” “network through children,” “network of hobby, etc.,” “network of school alumni,” “network of acquaintances, friends,” “network inside former workplace,” and “network with other entrepreneurs.”

Introduction

According to previous research, there is a tendency for businesses started by women to be concentrated in the consumer-directed service, retail, and eating and drinking establishment industries (National Life Finance Corporation Research Institute, 2003, p. 12) and to be smaller in scale than businesses operated by men (Tamura, 1995, p. 107).

These tendencies suggest the possibility that the human capital and tastes of women entrepreneurs themselves are exerting an influence. For example, it has been pointed out that women have not accumulated the work experience and knowledge necessary for starting and managing a business (Kazumi, 2006) and that the objective and interest of women in setting up a business is not business expansion but self-realization (Tamura, 1995, p. 114).

On the other hand, though, women who have started businesses themselves also say that they chose a business they could launch with little start-up money because of the difficulty of receiving loans from financial institutions and other sources. Generally speaking, in order to receive loans from private-sector financial institutions, assets are necessary as collateral, and a guarantor is required, too. However, many women do not possess real estate or other assets that might be used as collateral. In addition, spouses or other family members usually become guarantors, so single women in particular

have a hard time finding a guarantor. For this reason, in the case of women, whether or not they can procure funds other than their own can be a direct motivation determining whether or not they embark on setting up a business.¹

It has also been pointed out that the reason why women face difficulty in fund procurement is that their contacts for finding people who will lend them money---in other words, their social networks---are weak. Because they were not appointed to upper positions in their previous work, they were unable to get to know people with financial clout (Carter and Marlow, 2003). Of course, the possibility of procuring funds does not rest only in the extent of a person's social networks. There are various other factors involved as well, such as the feasibility of the business, its profitability and growth potential, the ability to compile a business plan that can indicate these features in a persuasive manner, and the skills of the entrepreneur. In the end, it is as a result of all of these factors that a woman is unable to gather the necessary amount of funds.

Although it is difficult to specify the factors that determine the success or failure of entrepreneurial activities, in recent years there has been research from various angles on the utilization of social networks in entrepreneurial activities and results of the social capital gained from it (Burt, 1992; Aldrich and Zimmer, 1986; Aldrich, 1995, 1997, 1999; Kanai, 1994; et al). Among these research results, some of them refer to the influence of social networks in external fund procurement.

In this paper I will focus on the relationship between external fund procurement and social networks and verify whether or not the utilization of social networks is effective in facilitating the procurement of external funds for business start-ups by women.

1. Actual State of Fund Raising by Business Start-ups

Surveys relating to the owners of business start-ups are implemented by various entities, including the central government, local governments, and chambers of commerce and industry. However, the only example I can find of a survey conducted with an adequate number of samples and continuously over a long period of time is that implemented annually since 1991 by the Research Institute of the National Life Finance Corporation (now the Japan Finance Corporation).

Of companies receiving loans from the nationwide branches of the former National Life Finance Corporation, the Fact-Finding Survey of New Businesses, a postal questionnaire, targets those companies that had been operating for less than a year at the time of the loan (including companies that have not yet been established). There are around 1,000 effective replies to this questionnaire every year.²

¹ According to the 2007 Fact-Finding Survey of New Businesses of the National Life Finance Corporation Research Institute, the ratio of respondents replying "became possible to procure funds (apart from personal funds)" as their "direct motivation for launching the business" was 8.0% for men and more than double that figure, 17.2%, for women (National Life Finance Corporation Research Institute, 2008, p. 242).

² The National Life Finance Corporation (now the Japan Finance Corporation) Research Institute compiles and issues the *White Paper on New Businesses* tallying and analyzing the results of the Fact-Finding Survey of New Businesses every year.

The merit of this survey is that it can be used to analyze in a detailed way the amount of funds that are generally necessary for starting a business and how those funds are procured by such factors as the attributes of the entrepreneur starting the business and the type of business. Therefore, using data from the FY 2007 Fact-Finding Survey of New Businesses, which is the latest available, and from the surveys from fiscal 1991 through fiscal 2005, I will give an overview of the actual state and trends of fund procurement by business start-ups.³ Incidentally, the former National Life Finance Corporation was a governmental financial institution that supplied loans for the plant and equipment expenses and working expenses necessary for operation mainly to individual entrepreneurs and small-scale business owners. Generally speaking, therefore, the targeted businesses are small enterprises. Also, the targets of the survey are businesses that received loans from the National Life Finance Corporation, so their use of loans as a method of fund procurement is a premise. It is necessary to take this sample bias into consideration.

1-1 Amount of funds for business start-ups

Bearing this sample bias in mind, let us now take a look at the amount of funds necessary for starting a business. In starting an enterprise, depending on the type of business, a shop or office might or might not be established. Also, the amount of funds necessary will differ greatly depending on whether the land and building of the shop or office is purchased or rented. The Fact-Finding Survey of New Businesses divides responses into two categories: the overall average cost of starting a business and the cost if real estate is purchased.

In the fiscal 2007 survey, the average cost of starting a business in the case of the purchase of real estate was ¥35.89 million (median ¥18 million), the average cost in the case of not purchasing real estate was ¥11.18 million (median ¥6.20 million), and the overall average cost was ¥14.92 million (median ¥7.24 million). By amount, 31.7% of the respondents answered “under ¥5 million” and 28.6% answered “over ¥5 million and under ¥10 million,” which means that 60% of the business start-ups involved relatively small amounts. Looking at the survey results chronologically, we see that the ratio of respondents replying “under ¥5 million” is on an upward trend and, in the Fact-Finding Survey of New Businesses, the cost of setting up a new business is getting smaller.

By type of business, as shown in Figure 1, the cost of starting an enterprise is by far the highest in “medicine and welfare,” where the average is ¥41.04 million, followed by “manufacturing” (average ¥14.04 million), “eating and drinking establishments and lodging” (average ¥13.70 million), and “services for individuals” (average ¥11.10 million).

Figure 2 shows a breakdown of start-up expenses. Although there are differences by type of busi-

This survey outline is taken from the 2008 edition.

³ From fiscal 1991 to fiscal 2005 the data of the Fact-Finding Survey of New Businesses was borrowed from the Social Science Japan Data Archive (SSJDA) of the Center for Social Research and Data Archives of the Institute of Social Science of the University of Tokyo for computing and analysis. I would like to express my appreciation to them.

ness, in general funds are used for machinery and equipment; internal and external construction work on shops, offices, etc.; and the purchase of a building (including newly constructed buildings and extensions). Businesses in which start-up expenses are high require expenditures on these items, and there is a strong possibility that these items will be expensive, so there is a consistency here.

Figure 1: Distribution, Median, and Average of Start-up Expenses by Industry (Overall),

Unit: %

	Under ¥5 million	¥5 million – under ¥10 million	¥10 million – under ¥15 million	¥15 million – under ¥20 million	¥20 million and over	Median (¥10,000)	Average (¥10,000)	No. of effective replies
Overall	31.7	28.6	15.7	5.7	18.3	724	1,492	840
Construction	62.7	20.9	11.9	1.5	3.0	400	544	67
Manufacturing	26.7	26.7	24.4	2.2	20.0	900	1,404	45
IT	55.2	17.2	17.2	3.4	6.9	400	799	29
Transportation	57.9	21.1	15.8	0.0	5.3	400	887	19
Wholesale	48.1	21.2	11.5	9.6	9.6	500	936	52
Retail	38.6	31.6	13.2	3.5	13.2	600	930	114
Eating and drinking establishments, lodging	15.6	37.6	17.7	10.6	18.4	900	1,370	141
Medicine, welfare	12.5	18.8	10.2	5.5	53.1	2,365	4,104	128
Education, study support	35.7	21.4	35.7	0.0	7.1	710	893	14
Services for individuals	27.3	34.3	18.9	7.0	12.6	750	1,110	143
Services for businesses	37.7	33.3	18.8	2.9	7.2	600	740	69
Real estate	38.5	38.5	0.0	7.7	15.4	500	1,094	13
Other	50.0	16.7	16.7	16.7	0.0	425	608	6

Source: 2008 White Paper on New Businesses, National Life Finance Corporation Research Institute (2008), published by the Small and Medium Enterprise Research Center.

Note: The data is from the FY 2007 Fact-Finding Survey of New Businesses (survey period: August 2007, number of effective replies: 918 companies).

Figure 2: Breakdown of Start-up Expenses (Average) Unit: ¥10,000

Purchase of land	81.4
Purchase of building (including new construction and extension)	275.8
Renting of land and building (including deposit, occupancy guarantee, etc.)	95.2
Internal and external construction work on plant, shop, office, etc.	256.2
Purchase of machinery, vehicle, furniture, equipment, etc.	355.4
Fee for joining franchise chain, guarantee	26.8
Working funds (stock purchase, personnel expenses, etc.)	401.0
Total	1,491.8

Note: Source and data are the same as for Figure 1.

1-2 Fund procurement activities

So how do entrepreneurs procure funds amounting to more than ¥10 million? Figure 3 shows the average amounts for each procurement source. Since the survey targeted businesses that had received loans from the National Life Finance Corporation, naturally loans from this corporation are the biggest source of procurement. This is followed by personal funds (¥4.224 million). Adding loans or investment from family members and relatives (¥1.375 million), this figure amounts to about ¥5.60 million. Loans from private financial institutions amount to ¥2.567 million.

Thus, it can be seen that with the exception of loans from the National Life Finance Corporation, personal funds are the largest source of fund procurement for starting a business. Although the figures are averages and therefore do not indicate the actual amounts of loans, it appears that because the average size of loans from the lending schemes of local governments, public organizations, and governmental financial institutions other than the National Life Finance Corporation is extremely small, the number of users is low. In addition, investment by venture capital and fund procurement from so-called business angels (loans or investment from individuals or corporations that agree with the business) are almost nonexistent or extremely small amounts. So it can be understood that these also are not functioning as suppliers of funds for the establishment of small-scale enterprises.

In fact, in the fiscal 2007 survey, looking at the distribution of replies to the question on “direct motivation for launching the business,” we see that 9.3% of the respondents answered “became possible to procure funds (apart from personal funds)” and 4.2% answered “able to accumulate personal funds.” When these two replies are combined, they followed “able to acquire the technology, knowledge, etc. necessary for independence” (31.3%) and “uncertain about future of previous workplace” (16.6%) in frequency. In other words, the possibility of fund procurement is a direct motivation for starting a business.

Furthermore, concerning “difficulties in starting the business,” the ratios of respondents saying that they had “considerable difficulty” in “preparing personal funds” and “fund procurement” were 28.2% and 28.6%, respectively, taking the first and second places ahead of “securing sales outlets” and so on. This shows that fund procurement is an extremely important issue in starting a business.

1-3 Differences between men and women in fund procurement

Generally speaking, it is said that businesses started by women are small in scale. Are there any special features concerning the state of fund procurement at the time of starting a business?

Although there are few research results analyzing business start-ups by women based on an adequate number of samples, replies from women entrepreneurs account for around 15% of the responses to the Fact-Finding Survey of New Businesses every year. This is the equivalent of about 150 responses. Thus, it is possible to make a substantial comparison of start-up expenses, expense items, fund procurement sources, and so on by gender.

First of all, in the FY 2007 Fact-Finding Survey of New Businesses, the average of total start-up expenses is ¥14.99 million for men and ¥15.16 million for women, which means that start-up expenses are a little higher for women. In terms of the median value, however, the situation is reversed at ¥7.45 million for men and ¥6.60 million for women. The reason for this is that in the distribution of responses women are concentrated in two categories, under ¥10 million and over ¥20 million. In addition, the average of start-up expenses for a company purchasing real estate is ¥37.64 million for men and ¥32.06 million for women. In the case of companies not purchasing real estate, it is ¥11.56 million for men and ¥9.23 million for women. In the case of companies purchasing real estate, as with the overall distribution, women tend to be concentrated in the two categories of under ¥5 million and over ¥20 million. But in the case of companies not purchasing real estate, women account for 74.2% of the total in the “under ¥10 million” category, so we can see that the emphasis is on small start-up expenses (Figure 3).

It can be supposed that this tendency is related to the special characteristics of the businesses in which women often start enterprises. Looking at the distribution of start-up enterprises by gender, we see that the top five businesses with a high ratio of women are services for individuals (27.0%), eating and drinking establishments and lodging (22.2%), medicine and welfare (21.5%), education and study support (21.4%), and retail (14.8%). Among these, average start-up expenses are highest for medicine and welfare and also high for eating and drinking establishments and lodging and services for individuals. However, services for individuals are diverse, ranging from hairdresser's and beauty salons, which require a lot of equipment and fittings, to wedding planners and interior coordinators, which do not have so much need for shop space and equipment. In the retail industry as well, recently there has been an increase in nonstore sales using the Internet, for example, so there are business patterns that do not require much start-up expense. These conditions appear to be causing the polarization of women's start-up expenses.

Figure 3: Distribution of Start-up Expenses (by Gender), Unit: %

	Under ¥5 million	¥5 million – under ¥10 million	¥10 million – under ¥15 million	¥15 million – under ¥20 million	¥20 million and over	Median (¥10,000)	Average (¥10,000)	No. of effective replies
(Overall)								
Men	31.3	28.0	16.7	6.0	18.0	745	1,499	700
Women	32.8	30.5	10.7	4.6	21.4	660	1,516	131
(Purchase of real estate)								
Men	8.7	21.7	12.0	10.9	46.7	1,750	3,764	92
Women	17.6	14.7	8.8	2.9	55.9	2,410	3,206	34
(No purchase of real estate)								
Men	34.7	28.9	17.4	5.3	13.7	665	1,156	608
Women	38.1	36.1	11.3	5.2	9.3	580	923	97

Note: Source and data are the same as for Figure 1.

Regarding the uses of start-up expenses and fund procurement sources, unfortunately the differences between men and women are not given in the *2008 White Paper on New Businesses*, which presents the results of the FY 2007 Fact-Finding Survey of New Businesses. Therefore, I have tallied and analyzed the individual data in the FY 2005 Fact-Finding Survey of New Businesses, which I have at hand. Instead of a simple comparison of averages, I examined the difference of the averages of two populations using the t score. The results are shown in Figure 4.

From this figure, we can see that in terms of the uses of start-up expenses, there are more women in the average amount for “internal and external construction work on plant, shop, office, etc.” and fewer for “working expenses.” Also, in terms of the amount procured by fund procurement source, there are fewer women in the average amount for “loans and investments from spouse, parents, siblings, relatives” and more for “other.” These are the four categories for which the estimated results of the differences in average scores by gender have a statistically significant probability of more than 95%.

Figure 4: Differences in Uses of Start-up Expenses and Procurement Source Amounts by Gender

		Average (¥10,000)	Standard deviation	t score	Significant probability
(Uses of start-up expenses)					
Purchase of land	Men	103.78	647.916	1.597	.110
	Women	48.46	376.520		
Purchase of building	Men	287.47	1336.686	-.869	.385
	Women	359.45	1996.520		
Renting of land, building	Men	99.94	239.360	-.930	.353
	Women	115.55	496.486		
Internal and external construction work on plant, shop, office, etc.	Men	236.99	530.092	-3.530	.000***
	Women	349.06	700.042		
Purchase of machinery, equipment, vehicle, furniture, supplies, etc.	Men	348.60	712.606	1.112	.266
	Women	304.54	632.834		
Fee to join franchise chain, guarantee	Men	32.46	183.781	1.431	.153
	Women	18.59	80.437		
Working funds	Men	417.3	760.312	2.659	.008**
	Women	308.77	471.637		
Total start-up expenses	Men	1526.53	2561.435	.150	.881
	Women	1504.42	2826.853		
(Fund procurement sources)					
Personal funds	Men	447.39	638.631	.243	.808
	Women	438.45	750.972		
Loans, investment from company executives, employees	Men	166.01	537.724	.257	.797
	Women	158.41	470.080		
Loans and investments from spouse, parents, siblings, relatives	Men	31.61	169.538	2.026	.043*
	Women	13.53	87.328		
Loans, investment from friends, acquaintances	Men	22.18	353.284	.828	.408
	Women	7.17	51.056		
Loans, etc. from corporations, individuals agreeing with the business	Men	42.93	506.109	1.110	.267
	Women	14.02	108.132		
Loans from the National Life Finance Corporation	Men	632.30	963.639	.317	.751
	Women	615.64	794.548		

Loans from local governments	Men	33.26	312.599	1.124	.261
	Women	14.91	141.957		
Loans from public institutions, governmental financial institutions	Men	34.04	340.527	1.644	.100
	Women	5.25	64.267		
Loans from private financial institutions	Men	237.36	1250.141	.314	.754
	Women	213.62	1771.362		
Investment from venture foundations, venture capital	Men	4.30	185.925	.386	.700
	Women	.63	12.296		
Lease, equipment bills, or loans from equipment suppliers	Men	74.24	705.374	-.567	.565
	Women	96.11	514.071		
Loans from franchise chain headquarters	Men	2.05	37.525	1.064	.288
	Women	.00	.000		
Other	Men	7.74	86.818	-2.142	.032*
	Women	38.14	595.074		
Total fund procurement	Men	1735.40	2681.901	.788	.431
	Women	1615.86	2827.962		

Source: Compiled from the FY 2005 Fact-Finding Survey of New Businesses, National Life Finance Corporation Research Institute.

Notes:

1. The degree of freedom for uses of start-up expenses is 2293; the degree of freedom for fund procurement sources is 2325.
2. Employs null hypothesis of $\alpha = .05$. The standard for statistical significance is $p < .001^{***}$, $p < .01^{**}$, $p < .05^*$.

Furthermore, let us look at the extent to which fund procurement is emphasized in starting an enterprise and the extent to which difficulties are experienced in fund procurement. Unfortunately, except for the basic items, the survey items in the Fact-Finding Survey of New Businesses are changed a little every year. In the fiscal 2007 survey the question about the “direct motivation for launching the business” included “able to accumulate personal funds” and “became possible to procure funds (apart from personal funds)” as possible choices, but these options were not available in the fiscal 2005 survey. Also, in the question on “difficulties in starting the business,” the fiscal 2007 survey asked about the degree of difficulty for each item, but the fiscal 2005 survey did not.

Looking at the trend of replies relating to fund procurement in the question about “direct motivation for launching the business” in the fiscal 2007 survey, we can see that although there was not much difference in the ratios of men and women replying “able to accumulate personal funds” (4.1% and 4.7%, respectively), there was a large difference in the ratios replying “became possible to procure funds (apart from personal funds,” with the ratio of women (17.2%) being more than double that of men (8.0%). It can be said, therefore, that for women the possibility of fund procurement other than personal funds, including funds from family members and relatives, is an important factor in determining whether or not to start a business.

2. Entrepreneur Activities and Social Networks

We can see that fund procurement is an important issue in starting a business. In particular, the procurement of funds other than personal funds is difficult when starting a business and is a factor in deciding whether or not to launch the business. While it is clear that the main fund procurement sources are governmental and private financial institutions, fund procurement from social networks, such as family members, relatives, and acquaintances, cannot be overlooked, either. So, what roles do social networks play in entrepreneur activities, including fund procurement?⁴ And are there any differences between men and women in the social networks that are utilized?

2-1 The role of social networks in entrepreneur activities

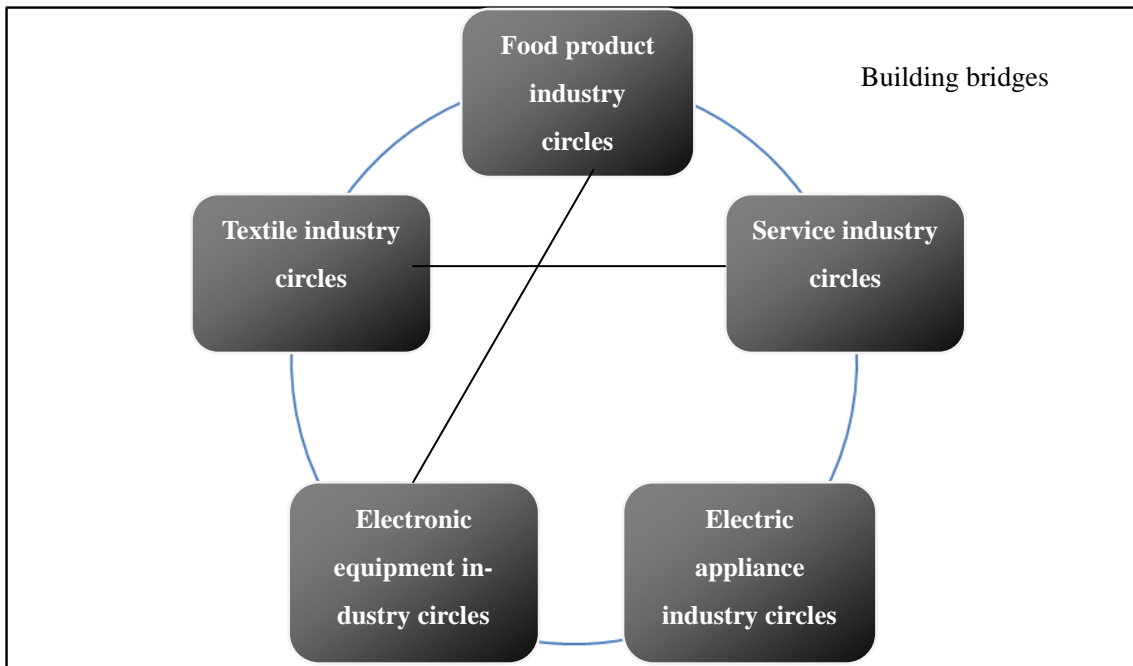
Entrepreneurs either create new businesses and build new markets through innovation or newly enter existing markets. Also, when launching the business, since a company that has just been established has a shortage of internal management resources, it is necessary to procure personnel, equipment, funds, and so on from outside. Procuring all management resources from the market is difficult, however, because it is highly unpredictable how a company that has just been founded is going to behave and that company is not going to be trusted. There are not many companies that will suddenly engage in spot transactions with strangers, or workers who will join unknown firms on their conditions. It is necessary to build trust.

As Yamagishi (1998) has pointed out, if uncertainty is high and opportunity costs (procuring management resources from a largely unknown partner) are high, the building of trustworthy relations is important. Social networks are essential as ties that increase the possibility of connectivity with external management resources in business establishment (Aldrich and Zimmer, 1986).

It was Burt who was relatively early in discussing the link between social networks and entrepreneurial activities. Analyzing the social structure that was advantageous in competition strategy, Burt said, *“I call the structural space between unrelated multiple network clusters a ‘structural hole.’ The less redundancy there is in the information that flows across the bridge linking them, the more varied is the information gained. Since profits can be monopolized by using the information that flows from multiple clusters that are joined together, it is a competitive advantage”* (Burt, 1992). Although this structural hole is similar to Granovetter’s weak ties (1973), rather than the weakness of the links, Burt emphasized the fact that there is no redundancy in the information. Burt argues that entrepreneurs are people who discover structural holes, engage in bridging, and find opportunities to start new businesses in an advantageous manner.

⁴ “Entrepreneurial activities” mean activities that create new values in the market and society through innovation. In this research, I focus especially on activities in the business field.

Figure 5: Conceptual Diagram of Structural Hole and Bridging



Note: Compiled by the author.

The diversity of the information that flows in social networks is important in entrepreneurial activities. Toshihiro Nishiguchi says that, even if efforts toward networking are made, there will be no development in close networks with a high contact frequency (in other words, neighborhood ties) and that it is important to obtain nonredundant information and opportunities by building bridges to distant worlds with weak links (long-distance exchange) (Nishiguchi, 2007).

This theory empirically applied Watts' theory of small-world networks. Watts defined small-world networks as "network areas in local clusters not connected with others that can be connected with any other point in just a few steps on average" (Watts, 2004, p. 93). In local clusters connections among members themselves are strong, but there are almost no opportunities to connect with others far away. However, if random networks between clusters are connected, the world becomes smaller in an instant, and it becomes possible to reach anybody. In other words, he suggests that the existence of weak ties promotes a connection of information and combination of management resources like never before and is advantageous in the creation of innovations and business opportunities.

2-2 Usefulness of social networks in fund procurement

Weak ties, structural holes, long-distance exchange, and small-world networks not only bring about business chances for entrepreneurs but also are useful in fund procurement. Baker cites the survey results of one organization suggesting that venture businesses can search for investors and secure funds through social networks comprising people who desire fund procurement and investors (namely, "business angel" networks) (Baker, 2000, p. 12). Aldrich also points out that fund procurement is obtained from networks with weak links (Aldrich, 1999, p. 70).

In addition, Aldrich has clarified the importance and state of social networks in entrepreneurial activities in numerous research results (Aldrich, 1999; Aldrich, Brickman Elam and Reese, 1997; Aldrich and Zimmer, 1986; Reese and Aldrich, 1995; et al). According to Aldrich, *“At the time of establishing a business, the personal networks of entrepreneurs---assemblies of people with direct links---exert an influence when they access social, emotional, and material support. All entrepreneurs use their existing social networks at the time of business establishment and build new networks in the process of acquiring knowledge and resources for the organization”* (Aldrich, 1999, p. 68). Furthermore, regarding the structure of social networks that are important especially in the business establishment phase, Aldrich writes, *“For the entrepreneur in the business establishment phase, strong ties and weak ties are maybe more necessary than contacts with strangers in order to mobilize resources in the initial stage of business establishment. Later, when the organization has achieved a certain degree of stability, spot transaction relations and contacts with strangers over a distance become more important”* (Aldrich, 1999, p. 69).

2-3 Social networks of entrepreneurs and gender differences

Aldrich has published numerous papers relating to gender differences in entrepreneurial activities. Several of them place the focus on themes relating to the social networks and gender of entrepreneurs. For example, in Aldrich, Brickman Elam and Reese (1997), he analyzes the kinds of networks from which male entrepreneurs and female entrepreneurs obtain advisors, mentors, and professional experts for legal matters, accounting, and finance. The ratio of female entrepreneurs utilizing advisors and mentors for legal matters is lower than that for men, but they receive advice and guidance in the other areas on a par with men. Also, relations with advisors and mentors concerning legal matters, accounting, and finance tend to be the same for both men and women. But with regard to professional experts, while the ratios for men are 25% strangers, 29% friends, and 42% work colleagues, the ratios for women are 29% strangers, 39% friends, and 32% family members.

Because of their lack of work experience, women are poor at finding professional experts among work colleagues and tend to frequently use social networks that are unrelated to business, such as friends and family members (Aldrich, Brickman Elam and Reese, 1997). Greve and Salaff (2003) reach the same conclusion, namely, women entrepreneurs use family networks more often than men. As the reason for this tendency, Greve and Salaff (2003) state that *“amid male-oriented business circles, it is difficult for women to expand their networks.”*

The differences in the networks of men entrepreneurs and women entrepreneurs are also evident in the gender distribution of the actors. While women account for about 10% of the actors in networks built by men, men account for 66% of the actors in networks built by women (Aldrich, Reese, and Dubini, 1989). Nearly 20 years have passed since this survey was conducted, but even though the ratio of women among all entrepreneurs has increased during this period, clearly it is still difficult for women entrepreneurs to enter networks of men entrepreneurs.

From these previous studies, it can be said that the networks built and utilized by women entrepreneurs tend to be somewhat different from those built by men. In particular, women typically utilize family networks more than men.

2-4 Business start-ups by women and problems in fund procurement

We have seen that in entrepreneurial activities social networks not only create business opportunities but also enable access to various management resources and the acquisition of expert support for the business. In particular, several previous studies show that women entrepreneurs utilize networks of family members and friends more than men.

However, an analysis of the Fact-Finding Survey of New Businesses shows that the amount of funds procured from family members and friends is smaller for women than for men. Does this suggest that social networks of family members and friends are not very useful for women in fund procurement at the time of business establishment? In the next section I would like to clarify what social networks are useful in the procurement of external funds for business establishment from data that I collected myself.

3. Survey Results and Analysis

This survey was carried out to clarify the actual condition and effects of social networks utilized by Japanese company owners. The survey targeted Japanese company owners (the company founder, successor, business successor). Essentially an entrepreneur is someone who starts a new enterprise through an innovation, but in the selection of survey targets, it was virtually impossible to confirm whether or not an innovation had been made, so I targeted company founders instead. In launching a new business, these days it is necessary to establish at least a little discrimination from other companies and to have access to business opportunities that others have not discovered, so the founding of the company itself can be seen as having included an aspect of innovation. Because of the sample limitation, it was impossible to completely exclude successors and business successors from the respondents, so these were included.

Using part of the results of the survey, I will attempt to analyze the relationship between external fund procurement and social networking in business start-ups by women entrepreneurs in Japan.

3-1 Outline of survey

The survey outline was as follows:⁵

Survey target: Of the companies in the COSMOS II corporate information database of Teikoku Databank whose representative directors are the company founders, I selected 1,500 companies operated by men and 1,500 companies operated by women in descending order in terms of the number of

⁵ In the implementation of this survey, I received a research grant from the Zengin Foundation for Studies on Economics and Finance to cover part of the expenses. I would like to take this opportunity to express my gratitude.

years since their founding. In consideration of differences in management patterns, I targeted companies excluding medical corporations, social welfare corporations, and educational corporations and unincorporated enterprises.

- Survey period: March – April 2008
- Survey method: Written questionnaire sent by post (anonymous)
- No. of effective replies: 325 (effective response rate: 10.8%)
- Main survey items: Type of business, amount of capital, number of employees, business performance, background to founding, issues at time of founding, amount of external funds procured, types of networks utilized at time of founding, types of networks built after founding, useful networks, merits gained from networks, attributes of the respondent

3-2 Outline of results

By gender, 56.8% of the respondents were men and 42.9% were women. Figure 6 shows the distribution of respondents by business. Most of the respondents belong to the category of “services (for businesses),” followed by wholesale, IT, and manufacturing. Compared with the Fact-Finding Survey of New Businesses, there were more businesses directed toward corporations. The average number of years since founding was 14.2 years, during which time the responding companies had generally expanded in scale. The average amount of capital at the time of founding was ¥10.731 million; the average amount of capital at present is ¥16.740 million. The average number of employees at the time of founding was 3.42 people; the average number of employees at present is 8.41 people. Furthermore, the amount of external fund procurement at the time of founding was ¥14.094 million on average.

Figure 6: Distribution of Business Types of Responding Companies, Unit: %

Manufacturing	Wholesale	Retail	Eating and drinking establishments, lodging	Services (for individuals)	Services (for businesses)	IT	Construction	Transportation, haulage	Real estate	Medicine, welfare	Other	Unknown
11.7	14.8	10.8	1.8	7.1	18.5	14.2	7.4	2.8	5.2	1.5	1.5	2.8

Source: Survey of the Social Networks and Business Activities of Entrepreneurs, 2008.

3-3 Fund procurement by gender and differences in social networks

The simple average amount of funds procured was ¥16.216 million for men and ¥11.345 million for women, meaning that the sum for women was about ¥5 million less than that for men. However, when I examined the population average scores, while estimating that there would be no difference in

the two population averages, I found that the statistically significant probability was not very high at 73.4%

Figure 7 shows the types of social networks utilized at the time of founding by gender. The types that women utilized more than men were “network of family members, relatives,” “network through children,” “community network,” and “network of hobby, etc.” Women do not utilize networks that they built in their former workplace before founding a company as much as men. The conceivable reasons for this are that women had fewer years of work experience before founding a company and women are often employed in clerical and other in-house positions, so they had few opportunities to build networks outside the company.

Regarding new social networks built after founding the company, although higher ratios of women cited “network of family members, relatives” and “network through children” than men, slightly higher ratios of men than women cited “network of hobby, etc.” and “community network.” Also, the ratio of men citing “network with other company owners in the same business” exceeded that of women by 12 percentage points, but there was almost no difference in the ratios selecting “network with company owners in other businesses.” The specific reasons for these trends are unclear. Maybe women find it difficult to build contacts in the same industry, or maybe women can acquire the necessary information and management resources in networks with company owners in other businesses.

Figure 7: Social Networks Utilized at Time of Founding and Social Networks Built After Founding , in %

Type of social network	At time of founding		After founding	
	Men	Women	Men	Women
Network of family members, relatives	35.2	40.5	11.7	15.6
Network through children, mothers	4.8	13.2	1.9	5.5
Community network other than the above	12.1	15.7	9.3	8.3
Network of hobby, etc.	15.2	19.8	11.7	8.3
Network of school alumni	27.3	24.0	14.2	15.6
Network of acquaintances, friends	53.3	47.9	30.9	31.2
Network inside former workplace	61.8	40.5		
Network outside former workplace	80.0	66.9		
Network of political party or religion	6.1	4.1		
Network with other entrepreneurs	38.2	36.4		
Network with other company owners in the same business			73.5	61.5
Network with company owners in other businesses			59.9	58.7
Network with professionals, such as accountants, lawyers			47.5	52.3
Network with public organizations and groups			29.6	33.9

Note: The percentages show the ratios of respondents who selected each network. Source: Same as for Figure 6.

Furthermore, many women build networks with professionals and networks with public organizations and groups. In the case of women, there are more owners who lack business knowledge than men, so after founding their companies they seem to feel the need to look for professionals, such as tax accountants and licensed social insurance consultants, and request management support. Public organizations also provide various management support schemes, and women apparently utilize these administrative services in order to make up for their lack of management ability.

3-4 Gender differences in utilization of social networks and external fund procurement

Next, I attempted to analyze what social networks are effective in external fund procurement. An overall analysis, including both men and women, showed that the average amount of fund procurement when the network was utilized exceeded the average amount when the network was not utilized for “network of family members, relatives,” “network of hobby, etc.,” “network of school alumni,” “network of acquaintances, friends,” “network inside former workplace,” “network outside former workplace,” and “network of political party or religion.” In particular, while the average amount in the case of utilizing a “network outside former workplace” was ¥15.144 million, the average amount when not utilizing this network was less than half of that figure at ¥7.743 million.

In the responses to my survey, differences could be seen in the average scores depending on whether or not the respondents utilized the network. Regarding differences in population averages, however, when I conducted measurement using the t score, although I obtained t scores adopting a null hypothesis, in all cases the statistically significant probability was less than 95%, so I cannot deny the possibility that the tallied results from the sample that I obtained this time are within the scope of error.

Comparing the amount of fund procurement at the time of founding with the overall average for each social network utilized at the time of founding, while for men the amount was higher than the overall average for “network of family members, relatives,” “network through children,” “network of hobby, etc.,” “network of school alumni,” “network of acquaintances, friends,” “network inside former workplace,” and “network with other entrepreneurs,” for women the amount was higher for only “network of family members, relatives,” “network outside former workplace,” and “network of political party or religion.”

I discovered that for both men and women the amount of external fund procurement is higher when they utilize a “network of family members, relatives” and “network outside former workplace.” Also, for men the amount of external fund procurement is higher when they utilize personal networks outside work, but for women, other than the above three types of networks, the amount is lower than the average. In particular, if the average procurement amount is 100, the figures for women are lower at 69.8% for “network through children,” 49.6% for “network of hobby, etc.,” 27.2% for “community network,” and 22.9% for “network with other entrepreneurs.”

These results show that while the utilization of social networks at the time of business start-up leads to the acquisition of more external funds for men entrepreneurs, in the case of women entrepre-

neurs, apart from a “network of family members, relatives,” “network outside former workplace,” and “network of political party or religion,” it cannot be said that the utilization of social networks plays a role in the procurement of external funds.

Figure 8: Utilization of Social Networks and External Fund Procurement (by Gender)

	Gender	Average (¥10,000)	Frequency distribution	Standard deviation
Network of family members, relatives	Men	1,850.7	57	3,711.48
	Women	1,187.1	48	4,934.10
Network through children, mothers	Men	2,471.4	7	3,849.98
	Women	342.9	14	481.53
Community network other than the above	Men	1,307.9	19	1,746.13
	Women	820.0	19	1,369.06
Network of hobby, etc.	Men	2,350.0	25	6,129.25
	Women	571.7	23	1,209.32
Network of school alumni	Men	2,045.3	43	5,179.12
	Women	979.6	27	1,576.16
Network of acquaintances, friends	Men	1,793.4	86	4,529.68
	Women	917.5	56	1,535.92
Network inside former workplace	Men	1,933.9	99	4,860.31
	Women	630.2	49	1,001.23
Network outside former workplace	Men	1,718.9	126	4,373.31
	Women	1,279.8	80	3,953.93
Network of political party or religion	Men	1,470.0	10	2,721.95
	Women	1,540.0	5	2,368.12
Network with other entrepreneurs	Men	1,658.4	58	3,400.88
	Women	874.5	44	1,322.53
Total average	Men	1,621.6	172	3,937.27
	Women	1,134.5	128	3,457.02

Source: Same as for Figure 6.

4.

Observations and Conclusions

I analyzed whether or not social networks utilized at the time of business establishment have an effect in the procurement of external funds. As a result, I understood that in the sample obtained in my survey the utilization or not of seven types of social networks do exert an influence on the amount of external fund procurement. It is unclear, however, whether the same differences can be seen in the population. In addition, although this is only an analysis of simple averages, I found out that while women only gain benefits from limited social networks in the procurement of external funds, men gain benefits in fund procurement from various social networks.

An analysis of the Fact-Finding Survey of New Businesses shows that women company owners decide whether or not to launch the business depending particularly on whether or not they can procure external funds, and women cite the procurement of external funds as the biggest hardship they felt at the time of business establishment. The Fact-Finding Survey of New Businesses targets those who have received loans from the National Life Finance Corporation, so respondents are people who have been successful in procuring external funds. It can be assumed that women company owners actually have an even harder time procuring external funds. And maybe those who have been unable to procure external funds in the end have given up on establishing a business.

The survey that I conducted myself showed that, on a simple average, at the time of business establishment women procure less external funds than men, but no statistical significance can be seen. The usefulness of social networks in fund procurement is limited, too. Since these results do not include replies from people who did not get as far as business establishment, the possibility cannot be denied that people who were unable to utilize social networks eventually found external fund procurement difficult and gave up on starting a business.

Conversely, men who start businesses procure a larger amount of external funds when they utilize various social networks. In particular, work-related social networks, hobby-related networks, and networks of school alumni exert a major influence on fund procurement.

From these results, it can be speculated that for women, as well as networks of family members and relatives, the utilization of business-related social networks, such as networks outside the former workplace, work effectively in the procurement of external funds at the time of business start-up. Therefore, it can be said to be important for women, who often lack business-related networks because of their work experience and job content, to build business-related networks when starting an enterprise.

Men can procure funds widely by utilizing various personal networks, such as networks of friends and acquaintances, in addition to business-related networks, and as a result they are able to procure more external funds.

Conclusion

The procurement of external funds is an important issue in the establishment of new businesses. Enterprises managed by women are often described in terms of “small birth, steady growth,” but in fact many owners are forced to limit the scale of their businesses to within the scope that can be covered by their own personal funds because they are unable to procure adequate funds.

The differences between men and women in entrepreneurial activities have not been studied very much in Japan. This time I put the focus on external fund procurement in my analysis, but a more diversified comparative analysis is necessary. This will be my research topic from now on.

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