The Image of Banks

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Introduction

The image of a store is an important factor which affects consumers' decision-making. Therefore, suppliers need to know their own images which consumers hold. It will be also the same in selection of a financial institution. Especially recently, a competition between financial institutions has been fierce because of financial deregulations, so, to know the images and make use of them is very important for financial institutions.

Here we report on a Principal Component Analysis (PCA) of 13 images of the financial institution. The resulting PCA shows potential variables and the contribution of each image.

Methodology

13 images are derived from the special investigation in 2008 of Nikkei NEEDS-RADER.[2] In that investigation, there is a question about several images of banks. Repliers can choose any number of images, if they think it is suitable for each bank. We use 13 images which are shown in Table 1.

Table 1　13 images

It is reliable.	A lot of advertisement
It is sociable.	Correspondence is good.
It is easy to consult.	Service etc. is attractive.
a scale −− large	Interest rates and a commission are good.
There are many branches.	Internet trading
CD, ATM fullness	High security
Sound management	

We adopt 14 banks which are shown in Table 2. Here we report on a Principal Component Analysis (PCA) of 13 images of 14 financial institutions. Because of the Eigen value and cumulative variance proportion, we projected all images unto the first two components, PC1 and PC2 (Table 3).

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[2] A period of implementation: from June 30, 2008 to July 11, Investigation area: less than 40km of metropolitan areas, Effective number of replies :795

Table 2 14 banks

Sample No	Bank	feature
1	Mizuho Bank (Mizuho)	Mega bank
2	Sumitomo Mitsui Banking corporation (Sumitomo Mitsui)	Mega bank
3	The Bank of Tokyo-Mitsubishi UFJ(Mitsubishi Tokyo UFJ)	Mega bank
4	Shinsei Bank (Shinsei)	
5	Regional Bank and 2nd Regional Bank(Regional Bank)	local
6	Japan Post Bank(JP)	
7	The Sumitomo Trust and Banking Company(Sumitomo Trust)	Trust bank
8	The Chuo Mitsui Trust and Banking Co(Chuo Mitsui Trust)	Trust bank
9	Mizuho Trust and Banking Co (Mizuho trust)	Trust bank
10	Mitsubishi UFJ Trust and Banking Co(Mitsubishi UFJ trust)	Trust bank
11	Seven bank (Seven)	Net bank
12	Sony Bank(Sony)	Net bank
13	Resona Bank and Saitama Resona Bank(Resona)	Sub mega
14	Credit Bank	local

Table 3

| Principal Component	Eigenvalue	Variance proportion (%)	Cumulative variance proportion (%)
1	6.65	51.19	51.19
2	3.13	24.04	75.23
3	2.13	16.35	91.58
4	0.52	4.02	95.60
5	0.25	1.93	97.53

Result and Discussion

Each eigenvector is shown in Table 4. Since all elements are positive, PC 1 can be called a collective strength. The weight of a scale, number of branches, sound management, and reliability are high. On the other hand, about PC 2, there are positive items and negative items. Positive items are composed of reliability, sociability, easiness to consult and so on. Negative items are composed of the fullness of CD-ATM, possessiveness to Internet trading, high security, profitable interest rate and fee, a scale and so on. From these things, positive axis shows a sense of closeness and negative axis shows a sense of profit. A 2-dimensional map of images is shown in Figure 1.

Table 4　Eigenvector

| images	PC　1	PC　2
It is reliable.	0.3596	0.0963
It is sociable.	0.1115	0.4337
It is easy to consult.	0.1144	0.4932
a scale -- large	0.3567	−0.0450
There are many branches.	0.3740	0.0683
CD, ATM fullness	0.3314	−0.1133
Sound management	0.3570	0.1146
Advertisement	0.3276	−0.2834
Correspondence is good.	0.3264	0.2675
Service etc. is attractive.	0.1333	−0.2248
Interest rates and a commission are good	0.0787	−0.1724
Internet trading	0.0566	−0.4871
High Security	0.3158	−0.2394

Figure 1　2-dimensional map of images
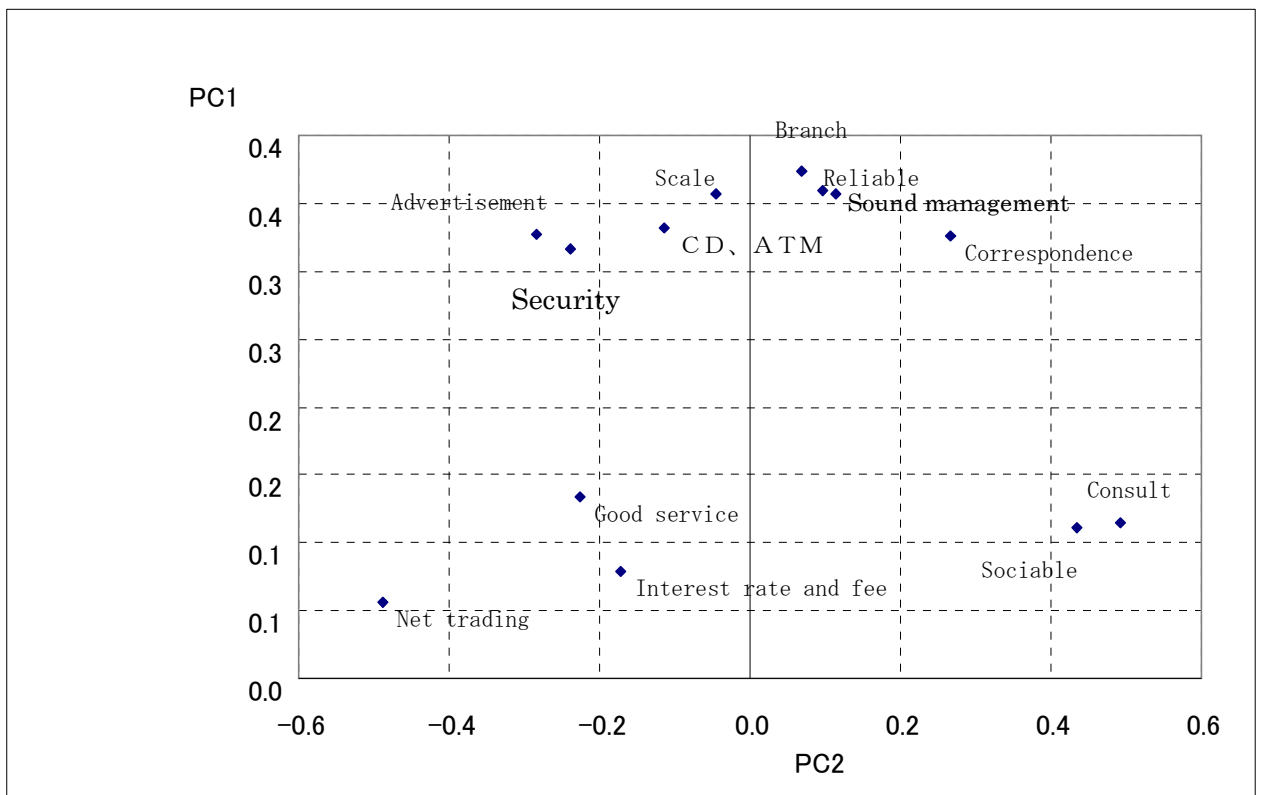
Principal Component　Scores of each bank are shown in Table 5. A 2-dimensional map

of banks is shown in Figure 2. It seems to be divided into 4 clusters. 3 mega banks are the first group (NO1, 2, 3). JP is second (No6), Shinsei, Seven, and Sony belong to the third group (NO4, 11, 12). The remainders are classified into the forth group. Although the collective strength of 3 mega bank and JP is relatively high, 3 mega banks have a sense of profit, but JP has a sense of closeness. Third group has a sense of profit. In forth group, there are banks which are dealing with trust business for many years and local banks. Their images are similar.

Table 5   Principal Component   Score

	Sample No	PC 1	PC 2
Mizuho	1	3.345	−0.893
Sumitomo Mitsui	2	2.655	−0.880
Mitsubishi Tokyo UFJ	3	5.200	−1.491
Shinsei	4	−1.555	−2.927
Regional bank	5	−2.017	2.118
JP	6	3.982	3.071
Sumitomo Trust	7	−1.175	0.227
Chuo Mitsui Trust	8	−1.691	0.309
Mizuho trust	9	−1.679	0.247
Mitsubishi UFJ trust	10	−0.612	0.349
Seven	11	−1.245	−1.509
Sony	12	−2.487	−1.982
Resona	13	−1.242	0.642
Credit bank	14	−1.478	2.720

Figure 2   2-dimensional map of banks
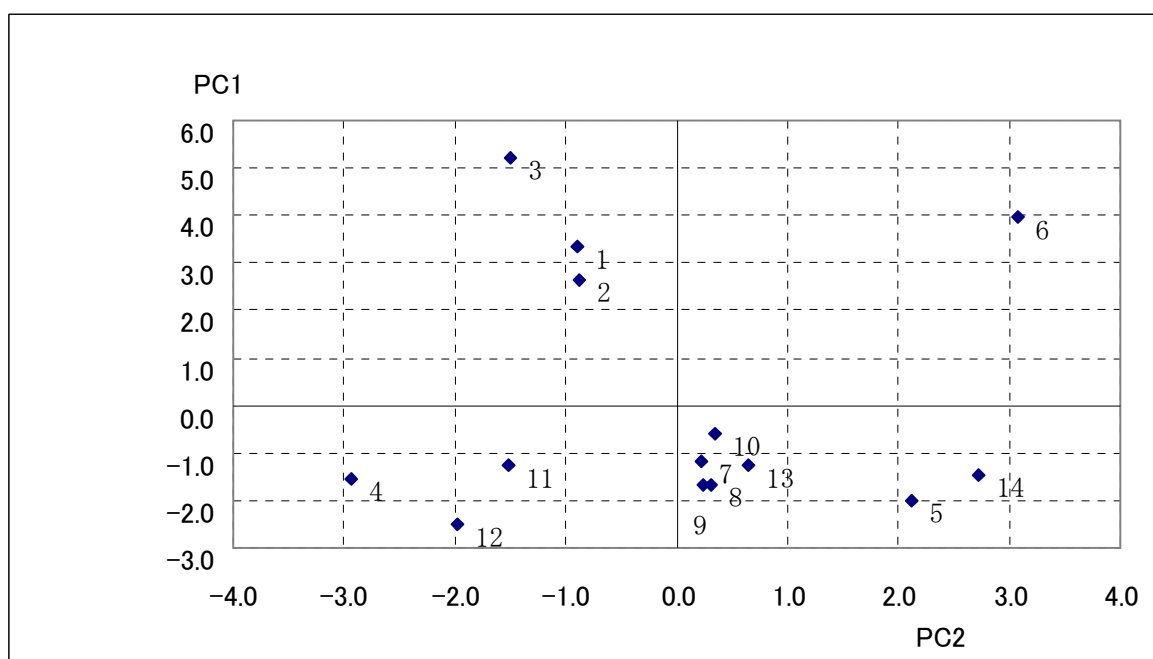
Comparison with replies about whether they would like which bank to use

There is another question in the same investigation. The question is about the financial institution which is wanted to use. The most popular banks are, in order, JP, Mitsubishi Tokyo UFJ, Mizuho, Sumitomo Mitsui, seven, Resona, regional bank and 2nd regional bank, Sinsei, and credit bank. Top 4 have big collective strength. We may say the collective strength is important when we select banks. It can be said that less than the 5th place is relatively highly evaluated in respect of a sense of profit or a sense of closeness. So for small banks, differentiation is important.

Comparison with an actual condition of banks

We also saw about an actual condition of banks. Since that investigation was conducted in June and July, 2008, we collected the accounting data of 11banks which were showed at the end of March 2008. The accounting data are as follows. Total assets, capital ratio, investment return of deposit and interest return of loan. Total assets can be compared with the image of the scale and capital ratio can be compared with the image of soundness. Investment return of deposit and loan can be compared with the image of profit. First of all, about the scale, many bank's ranks are suitable for images. But about JP, it has forth large image, but in actual, it is biggest. Shinsei Bank is ranked 11th in the image, but in actual, the rank is 8th. On the contrary, Seven bank is ranked 9th in the image, but in actual, it is smallest. Next, about sound management, JP and Seven have very high capital ratio. In the image, JP is surely ranked 2nd but Seven is ranked 10th. Finally, about the profitableness of interest rates and a commission, net banks, Shinsei Bank, and JP is coming to the higher rank in the image, and a mega bank continues with middle rank and a trust bank in it. Actually, about loan interests, JP has smallest interest and trust banks and Shinsei Bank continue. Loan interest of Sony is higher than other banks, so there is no advantage for bank user in respect of a loan. On the other hand, Sony offers the highest deposit interest and the next highest presenter is Shinsei Bank. This fact is close to user's image. Since Seven does not lend money, there is no data of loan interest. Deposit interest rank is also low 9th, so it is thought that Seven is evaluated because of its low commission.

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