ADVERSE SELECTION IN THE BUSINESS REHABILITATION MARKET: *CABINET OFFICE ORDINANCE ON THE DISCLOSURE OF CORPORATE AFFAIRS, ETC.* AND THE ANCHORING EFFECT ON THE DISCLOSURE OF CORPORATE INFORMATION

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ABSTRACT

Assumption: The decisions that financial institutions make regarding loans or disclosure of corporate information are not voted on directly. They develop until the "Cabinet Decree for Disclosure of Corporate Information" in the business regeneration market. Purpose: The purpose of this study is to examine information asymmetry in the business playback market and behavioral economics to consider the efficiency of the market. Approach: First, a statistical analysis of bankruptcy enterprise information data obtained from Teikoku Databank is conducted. Then, from the results of the analysis with respect to disclosure of corporate information, it is explained that the mooring (anchoring) and the deriving of initial information occurs because of behavioral economics, such as in Stiglitz and Greenwald's Towards a New Paradigm in Monetary Economic, Cambridge University Press, (2003), which discusses law and economics. Conclusion: To regenerate business, there is a way to push companies that were once bankrupt. Then, even though information is disclosed, initial anchoring allows decision making. Because this phenomenon has been observed as a behavior of an economic entity, it is a principle that financial institutions also apply in loan determination. Therefore, when asymmetry of information and anchoring are present, regardless of the presence or absence of corporate information, the market no longer functions and even government intervention cannot make it efficient

Keywords: Business Rehabilitation, Disclosure of Corporate Information, Anchoring Effect.

INTRODUCTION

In recent years, in the field of law and economics, a case wherein an assumption by conventional rationality is satisfied has been considered. Also, for justification and scope of legal intervention, a case wherein the assumption by cognitive limitations is not satisfied is discussed. Previously, studies focused on the effects of information disclosure, laws, and regulations. Jolls, Sunstein, and Thaler (1998), Stigler (l964), and Jarrell (1981) noted that forced disclosure by the Securities and Exchange Law did not give a profit to investors. In addition, Easterbrook and Fischel (1991) assumed voluntary information disclosure by companies and analyzed some of the cases. However, there is little discussion about companies' information disclosure in the business rehabilitation market. Therefore, this study regarding disclosure of corporate information in the business rehabilitation market, based on traditional law and economics, deepens the discussion by applying findings from behavioral economics.

In the business revitalization market, the so-called "zombie companies" remain on the market. Then, the credit is lost for the entire business playback market. Before long, the business revitalization market's function moves from credit to inefficiency, and there is the

possibility of the market itself getting extinguished. In the economics of information, this problem is referred to as adverse selection, and it has become an obstacle to efficient business regeneration. Based on the field of information economics, consider the findings of behavioral economics, especially, anchoring. I conclude that human beings, on the basis of given information and with an initial anchor, reach conclusions through a process. For example, even when the initial anchor is unrelated, the answer issued is based on the information given. In behavioral economics, this is treated as representative of heuristics.

Human beings, by the heuristic, companies that went bankrupt at least once, there is a tendency to think for sure that is a poor company. Then, even though the company information is disclosed as though the initial anchoring were pulled, it is difficult to adjust that decision making.

This phenomenon, because it has been observed as the behavior of an economic entity, is the principle that financial institutions also apply in determining a loan. Therefore, in this study, adverse selection alters the business market. I would like to discuss both credit problems and anchoring as regards corporate information.

It is difficult for small- and medium-sized enterprises to obtain credit from banks because of expenses necessary to evaluate creditworthiness as well as sunk costs. Therefore, when the main bank reduces credit to a company, other banks seldom make up for it. Thus, in a market with information asymmetry, disclosure of corporate information is extremely important.

In addition, despite attempts to regenerate businesses or to confirm the possibility of failure, banks need to learn more about the financial condition of their business partners. Teikoku Databank is a corporate information database that creates a credit profile and a score from a company's performance and work history. However, once bankrupt, a company's score is often underestimated.

In a market with adverse selection, disclosure of corporate information is very crucial. The disclosure forces companies to re-examine market mechanisms and institutional design. In view of these circumstances, policymakers are expected to make decisions on renewed business revitalization.

LITERATURE REVIEW
Balance of Financial Institution Loans and Industry Trends

In the Teikoku Databank were investigated for changes in "industry loans." there are major banks with 111 domestic lines (major banks: line 7 (※ 1) and 64 regional banks. The second regional bank line 40 (※ 2)) with dates of September 30, 2013, and 2014 (second-quarter financial results) and March 31, 2014 (full-year financial results) 3.

The following shows loan balances for the nine industries at the end of each period.
"The information and communications" and "finance and insurance" industries showed increased loan balances to "local governments". In particular, loans to the "information and communication industry" rose a remarkable 8.28%. On the other hand, "construction industry," "transportation industry," and postal industry" loans outstanding decreased.

In the future, private financial institutions (as described above), the government, and the Bank of Japan, are expected to work in close cooperation to continue to seek corporate revitalization and growth. To this end, while understanding the business conditions and needs

of trading companies, consulting is important for the resolution of management issues. In addition, institutions aim to take advantage of the guidelines in order to reassure management. It is desirable for loans to not depend on examinations based on collateral guarantees.

		111bank total		Mega bank		Regional bank		Second regional bank	
		Balance of outstanding loans	ratio of September, 2013	Balance of outstanding loans	ratio of September, 2013	Balance of outstanding loans	ratio of September, 2013	Balance of outstanding loans	ratio of September, 2013
Manufacturing industry	September, 2013	48677168	-	23155015	-	21515688	-	4006465	-
	March, 2014	48142706	-	23054056	-	21158175	-	3930475	-
	September, 2014	49193011	515843 / 1.06%	24061879	906864 / 3.92%	21197796	▲317892 / ▲1.48%	3933336	▲73129 / ▲1.83%
Construction industry	September, 2013	10703226	-	2770695	-	5727557	-	2204974	-
	March, 2014	10854310	-	2723364	-	5889909	-	2241037	-
	September, 2014	10609286	▲93940 / ▲0.88%	2712022	▲58673 / ▲2.12%	5698596	▲28961 / ▲0.51%	2198668	▲6306 / ▲0.29%
Information- and- telecommunications	September, 2013	3773481	-	2326357	-	1176179	-	270945	-
	March, 2014	4078954	-	2449801	-	1311926	-	317227	-
	September, 2014	4086007	312596 / 8.28%	2493598	167241 / 7.19%	1270155	93976 / 7.99%	322324	51379 / 18.96%
Transportation business, mail business	September, 2013	11829824	-	4720553	-	5738229	-	1371042	-
	March, 2014	11865339	-	4623531	-	5840135	-	1401673	-
	September, 2014	11755572	▲74252 / ▲0.63%	4521719	▲198834 / ▲4.21%	5787632	49403 / 0.86%	1446221	75179 / 5.48%
Wholesale business, retail trade	September, 2013	38184753	-	16445311	-	622971	-	4116471	-
	March, 2014	38560604	-	16603343	-	17811334	-	4145927	-
	September, 2014	38670286	485.533 / 1.27%	16582423	137112 / 0.83%	17937977	315006 / 1.79%	4149886	33415 / 0.81%
The finance business, the insurance business	September, 2013	29732965	-	20228920	-	7577905	-	1926140	-
	March, 2014	31369651	-	21443553	-	7861590	-	2064508	-
	September, 2014	31415886	1682921 / 5.66%	21399122	1170202 / 5.78%	7902549	324644 / 4.28%	2114215	188075 / 9.76%
A real estate business, goods rental service	September, 2013	56075940	-	25246069	-	24266575	-	6563296	-
	March, 2014	56780477	-	25156626	-	24902053	-	6721798	-
	September, 2014	57637870	1561930 / 2.79%	25099854	▲146215 / ▲0.58%	25691361	1424786 / 5.87%	6846655	283359 / 4.32%
Various service industries	September, 2013	28460054	-	10458051	-	13629880	-	4372123	-
	March, 2014	28722074	-	10473920	-	13800687	-	4447467	-
	September, 2014	28783130	323.076 / 1.14%	10555994	97943 / 0.94%	13851964	222084 / 1.63%	4375172	3049 / 0.07%
local authorities	September, 2013	25476259	-	3646923	-	17970877	-	3858459	-
	March, 2014	26370251	-	3666562	-	18676785	-	4026904	-
	September, 2014	26617969	1141710 / 4.48%	3267056	▲379867 / ▲10.42%	19220175	1249298 / 6.95%	4130738	272279 / 7.06%

Chart 1. Industry Loans by Financial Institutions

Source：Teikoku Data Bank (2015),the author has revised chart 1.

Significance and Challenges of Monetary and Financial Regulatory Policy

Monetary policy is treated as money supply in the field of macroeconomics. Financial regulation policy is considered part of applied microeconomics, notably regarding the safety and soundness of banks. These are interrelated, and policy plays an important role in their respective interests, because monetary and regulatory policy changes affect both macroeconomic activities and incentives for bank lending. Stiglitz, Greenwald (2003) point out the following:

"The behavior of financial and government authorities affects the entire system through the selection of banks, the choice of companies (as credit donors and producers) as a chain of credits "(p.149).

Once the banking system fails, it will result in higher social costs, due to the macroeconomic turmoil that accompanies it and bank relief due to government expenses. The following two points address the need for government intervention and ask the question "Why do banks engage in excessively dangerous lending?"
①Matching private and social expenses, when externalities lead to inappropriate lending practices.
②The role of the government as an insurer, as part of the risk mitigation system, which includes moral hazard problems.
If the regulatory authority has incomplete information and indirectly controls the bank, it becomes a principal/agent problem for ②. It is used for organizational mechanisms and regulatory design, and there is a purpose to regulatory policy, because of market failure. As an example, competition restricts loans to SMEs, lowers competition through bank consolidation and increases banks' profits.

Furthermore, discussions have taken place about market intervention, such as whether financial regulation is efficient. The conclusion is not entirely theoretical. Stiglitz and Greenwald (2003) point out the following:

"For example, restrictions trying to discourage bad loans are examples, as well as restrictions on lending to internal stakeholders, which also have the effect of prohibiting good lending. Asymmetric information issues (between borrowers and lenders) Is small for lenders for insiders, but the moral hazard problem-incentives to do bad lending-or loans under conditions not commensurate with the risk-will be greater The risk of the latter is more important than the world It is agreed upon (p.212)."

Since moral hazard cannot monitor the behavior of the agent who requested the client, the agent not make efforts that the client desires, and the agent may behave opportunistically. As described above, asymmetry of information may cause a problem with hidden behavior, because an agent's behavior is not being observed. This is because companies are unable to monitor the behavior of other companies, even when financial institutions make changes in loan terms, so companies are likely to take action, and the prospects for repayment are unlikely.

As a problem of information asymmetry, reverse selection by hidden information occurs. This means that a good company loses credibility due to the existence of a bad company, resulting in poor companies remaining in the market and excellent companies exiting the market. This happens because a company's quality and type are not disclosed. Therefore, disclosure of company information is important.

METHODOLOGY
Disclosure and Anchoring of Company Information

First, the disclosure of corporate information, and the difficulties of making decisions regarding corporate information and business rehabilitation are discussed. For fear of damage to corporate value, there is a possibility that an order for payment of surcharge will be issued unless disclosure is made. On the other hand, there is a potential impact on the shareholders

and investors of the decision-making if the disclosure. In this way, there is a problem with disclosure of corporate information.

A benefit of corporate information disclosure, which fills in the information asymmetry and the gap between companies and investors, is that investment costs are kept to an appropriate level. This is particularly important for companies with low profits. In addition, transaction costs, such as searching for information and monitoring, after the contract, can be reduced. Furthermore, externalities are considered to be sufficient for governments that make policies and plans.

On the other hand, losses caused by the disclosure of corporate information are not only administrative. Higher debt can be a factor in lower corporate earnings. Therefore, keeping disclosures costs low is important. This summarizes a cost-benefit analysis for information disclosure.

However, early disclosure of corporate information distorts decision-making. This is a phenomenon called "anchoring representativeness heuristic behavioral economics." In other words, corporate value and credit quality of bankrupt companies could be underestimated. Even if signaling is done as a company worthy of credit, there is a possibility that thoughts due to cognitive bias may distort decision making.

Thus, we seek to examine the effect of anchoring information disclosure. The experimental procedure to investigate anchoring is as follows. First, we ask the question: "what is the evaluation method for a bankruptcy company?." Although the evaluation method of a bankrupt company is unknown, regardless of the presence or absence of corporate information, corporate value would be underestimated.

We can use corporate information to confirm this phenomenon. Our corporate information is derived from 100 cases, extracted from the COSMOS2 database, owned by Teikoku Databank4. This file contains all national industries and is one of the largest Japanese corporate databases. It records 40 items in a corporate profile. The database evaluates companies using a 100-point scale from various viewpoints. such as the business performance and business history. Credit elements in item 9 of the credit questionnaire are considered. In this paper, the number of employees, the latest earnings to equity ratio (%), the latest sales figures (millions of yen), and the latest after-tax profits (thousands of yen) were included in the descriptive statistics. The sample size, the average value of each item, and the standard deviation is shown in Figure 2.

Descriptive statistics

	Average value (run official approval)	Standard deviation	N
Marks	45.88	9.416	100
The number of employees	223.92	963.967	100
The newest term performance capital-adequacy ratio (%)	20.96	28.57	100
The newest term performance sales (1 million yen)	29531.69	143930.64	100
The newest term performance after-tax income (1000 yen)	2681240.2	15689766.76	100

Figure 2. Descriptive Statistics of Bankruptcy File 100

In the experiment, descriptive statistics of Exhibit 2 determine decision-making in three stages:

Condition 1: to answer the question: "What is the score of the company."
① quality is certain, company information.
② quality is constant, non-disclosure of corporate information.
③ quality is certain, disclosure of corporate information, information for bankrupt companies.

Condition 2: to answer the question "What is the score of the company."
① quality is certain, company information.
② quality is constant, non-disclosure of corporate information.
③ quality is certain, disclosure of corporate information, information for bankrupt companies.

RESULTS

In Condition 1, the result of comparing the ①②③ with ② and ① a reverse selection is performed (p＜0.001). This is a result of the conventional theory. On the other hand, in ③ and ① quality is constant, but it is together until the disclosure of corporate information, whether or not the company is bankrupt. For decision-making, ① and ③ have changed. Regardless of the presence or absence of the disclosure of corporate information, corporate value is underestimated for bankrupt companies.

In Condition 2, by comparing the ①②③ evaluation of enterprise value can be observed. In other words, probability judgment by anchoring and underestimation of corporate value will be done as a result despite the fact that the environment in which reverse selection is not made is in place.

DISCUSSION
Efficiency of Future Business Revitalization

In the economics of conventional information, asymmetry of information, in particular for a solution to adverse selection, we have used signaling and screening. If market information asymmetry is present, financial institutions have to determine lending criteria. Financial institutions must decide whether or not to emit a signal to the corporate side, to determine the loan amount, taking into consideration a high or low ability to repay the loan Each economic agent signals in advance the credit formation of a trading partner. However, these techniques are somewhat difficult to apply in the business revitalization market. So, first of all, policy should be considered from the perspective of behavioral economics, to further efficiency.
As in Japan after the collapse of the bubble economy, banks faced non-performing loans, and the financial system was unstable. To address this bad debt problem, the government published a "Program for Financial Revival" in October 2002, which asked for the disposition of non-performing loans by small, medium-sized, and regional financial institutions, by strengthening relationships with borrowers. In that case, a major bank asked for disposal of bad loans, but for small and medium-sized local financial institutions, measures were adopted that aimed at solving the above problem by strengthening the relationship with the borrowing companies. In response to this, the Financial Services Agency announced an action program to enhance "relationship banking" and "relationship lending."

Relationship lending incorporates not only financial statement information but also takes into account growth and management of the business. Relationship lending benefits companies, especially in an economic downturn, because it gives them a secure source of funds and credit enhancement. For banks, smooth exchange of information stems the deterioration of business value. This mechanism allows financial intermediation at an early date and can avoid excessive debt (for more information, see Kato (2013), p.356).

A legitimate evaluation of corporate value is also important, because human judgments can be fallible. We also describe changes in the discount rate from both a short-term and long-term perspective. From behavioral economics we obtain the discounted present value calculation, which deals with the importance of time in economics. Consistent behavior of preference by index discount is time-consistent. . On the other hand, action preferences by hyperbolic discounting, if not done consistently, are time-aligned. The short term is present-oriented, and the long term is future-oriented. Therefore, it is impossible to obtain a valid evaluation for corporate value when the viewpoint is only short-term.

Furthermore, once the market falls into short-term thinking, there is a possibility that cascades may occur in the market regardless of whether or not the information is disclosed and whether the information is anchoring and may not reflect signals observed by individuals who are economic agents. it may not reflect the observed signals. Therefore, it's easy for adverse selection to be carried out. The market becomes inefficient, even when intervention by the government is performed. For policy planning, rules and regulations that take into account such reasonably economic agent's behavior and crowd behavior are desired.

CONCLUSIONS

In the fields of law and economics, the effect of information disclosure laws and regulations has been discussed. In Omri (2014), legal regulation is classified as follows. ①forced disclosure, the enactment of ②default rules, and compulsory regulation by ③substantive law. In particular, regarding the enactment of ②default rules, it is better to think of incorporating the libertarian-paternalism of Cass Sunstein, et al. As a result, ①is forced regulation by forced disclosure and ③substantive law, rather than maximization the social surplus, given that only the social costs of disclosure continue to increase, ②default based on the establishment of the rule, even as an alternative of ①and ② and the establishment of a reputable, private certification body to assess quality. In the future, a rating system to prove the quality and type of business of a company, and the introduction of fair trade, may abolish compulsory disclosure. If these bring the external economy into the information disclosure of companies in the business rehabilitation market, consider the adverse selection problem when the market is corrected. Using law and economics research, an incorporation of a behavioral economics approach is expected.

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FOOTNOTES

* 1. The Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, Mizuho
Bank, Resona Bank, Saitama Resona Bank, Shinsei Bank, Aozora Bank
* 2. Although the second regional bank has 41 rows, as of January 22, 2015 the data of the
Kansai Urban Bank Excluded because it is not disclosed
3. "Manufacturing industry" "Construction industry" "Information and communication
industry" "Transportation industry, Postal industry" "Wholesale business, Retail business"
"Financial industry, Insurance business" "Real estate business, Goods rental business ""
Various service industries, "and" local public entities ".
4. Corporate information is a bankruptcy file 100 cases extracted from the company outline
database COSMOS2 owned by Teikoku Databank. Bankruptcy file 100, the national all
industries, one of the largest corporate overview database Japan to record the corporate
profile of about 40 items. Scores, Teikoku Databank is the number of the company that was
evaluated by the 100-point scale from various viewpoints such as business performance and
business history of the company. This is what was scored a credit from the credit element of
item 9.

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