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Asset Based Lending (ABL) in Japan: The Implications of Establishing Inventory and Accounts Receivable as Collateral

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Abstract

Asset Based Lending (ABL) is a lending technology that uses business assets, such as inventory and accounts receivable, to secure a loan. ABL is an established form of lending in the US, but was only recently introduced to Japan.

Like all secured lenders, ABL lenders have the right to repossess and liquidate collateral. I argue that when business assets such as inventory and accounts receivable become collateral there is an additional role. This paper demonstrates through a case study that ABL increases the frequency of contact between lenders and borrowers. Because of this frequent contact with the borrower prior to and after the loan is made, ABL facilitates the lender in generating information about the creditworthiness of the borrower.

Furthermore, because the value of the collateral used in ABL is directly linked with the business of the borrower, properly monitoring the collateral helps the lender manage the credit risk. This is why ABL is an important lending technology for Japanese banks.

This paper articulates the unique characteristics of ABL and the implications they have for Japan's lending market by (1) discussing the role of collateral by reviewing related literature, (2) presenting a case study conducted with a Japanese regional bank, (3) comparing how regulators treat ABL in Japan and the US, and (4) concluding with policy recommendations to further promote ABL.

Keywords: Asset Based Lending, ABL, collateral, inventory, accounts receivable

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Introduction

What are the roles of collateral? Do they change with the type of asset used as collateral? These questions become relevant when a new asset class is introduced as collateral in the loan market, as has happened recently in Japan. Therefore, we have a unique opportunity to analyze and answer these questions.

Asset Based Lending (ABL) is a lending technology (Udell 2004) which uses business assets such as inventory and accounts receivable as collateral. I argue that, by properly assessing and monitoring the collateral, ABL can generate information about the creditworthiness of the borrower. This is a unique characteristic of ABL that is unavailable when real estate is used as collateral.

Collateral serves an important role in reducing the risk of the secured creditor by providing a priority claim to a specific asset. However, whether the expected value of the collateral can be realized is at the mercy of the market, requiring time and cost to liquidate the asset. Therefore, it is an established practice for bankers not to rely on the liquidation value of collateral as a primary source of repayment. Instead, successful banks are careful in selecting borrowers who can repay the loan by cash flow generated from their ordinary course of business¹. Banks, as financial intermediaries, are delegated the role to produce information about the creditworthiness of the borrower through screening and monitoring (Diamond, 1984). To perform such role, banks must understand the borrower's business in depth. In doing so, banks not only analyze the borrower's financial statements but must frequently contact the borrower to acquire and accumulate intimate knowledge. This is particularly true for small and medium size companies, who are "informationally opaque" (Udell, 2004, p. 15) compared to large and public companies.

Unfortunately, banks have not always behaved as they should. For example, Japanese banks relied excessively on unrealistic collateral values of real estate in the 1980s which ultimately led to a financial crisis. They learned the hard way that relying on a perceived liquidation value of collateral can be quite risky.

Monitoring real estate used as collateral does not produce relevant or timely information about the creditworthiness of the borrower. To begin with, lenders are not required to frequently monitor real estate; once or twice a year is considered sufficient in most cases. Furthermore, lenders are able to monitor real estate without actively involving the borrower. Excessive reliance on real estate not only culminated in an economic crisis from which Japan has not yet fully recovered, but also may have weakened the banks' ability to screen and monitor the borrower (Uchida 2010).

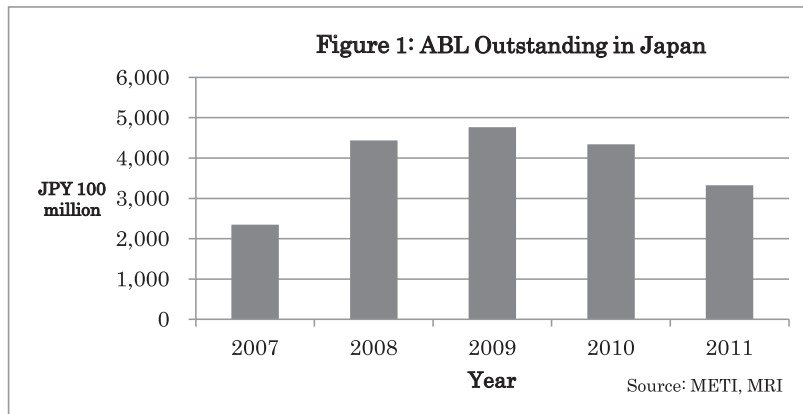
This paper seeks to contribute to the existing literature on collateral by demonstrating through a case study that ABL increases the frequency of contact between the lender and borrower in order to generate information on the creditworthiness of the borrower. Because ABL is new to Japan, it is possible to consider its effect by looking at the behavior of lenders

before and after its implementation.

Like all secured lenders, ABL lenders have the right to repossess and liquidate the collateral. This paper argues that when business assets such as inventory and accounts receivable become collateral there is an additional role. Since ABL requires the lender to frequently have contact with the borrower prior to and after the loan is made, ABL facilitates the lender to generate information with regard to the creditworthiness of the business. Furthermore, because the value of the collateral used in ABL is directly linked with the business of the borrower, properly monitoring the collateral helps the lender manage the credit risk. This is why ABL is an important lending technology for Japanese banks. As far as I know, this is the first empirical study that examines whether ABL increases the frequency of contacts between the lender and borrower in Japan.

Unlike Japan, ABL is well established in the US. The Commercial Finance Association estimates the overall US ABL market to total approximately USD 620 billion in loans outstanding in 2012 (Thomas 2013, November), which is equivalent to 20% of the corporate lending market.

The Japanese government has been promoting ABL for the last 10 years. According to the Ministry of Economy, Trade and Industry (METI), the outstanding balance of ABL in Japan is around JPY 400 billion, which is approximately 0.1% of the corporate lending market (Figure 1). Although the total market size is small, 184 financial institutions conducted 3,371 ABL loans in 2011 (MRI 2013).



This paper is constructed as follows². First, it discusses the role of collateral by reviewing related literature. Second, a case study conducted for a Japanese regional bank is presented to see whether ABL increases the frequency of contact between the lender and

borrower. Third, the paper reviews the process and policy measures regarding how ABL was introduced to Japan, and compares this with how regulators in the US treat ABL. The paper concludes with policy recommendations to further promote ABL.

I . Roles of Collateral

1 . Preventing Moral Hazard

Economists have been studying the function of collateral as an extension of asymmetric information theory. Akerlof (1970) and Rothschild and Stiglitz (1976) articulate a model in insurance defining the concept of moral hazard. Moral hazard refers to a contracting problem, where the actions of one party cannot be observed or disciplined by others. This problem is acute in the relationship between a lender and a borrower. Borrowers have the incentive to engage in opportunistic behavior at the lender's expense. Borrowers may use the money borrowed unproductively, or against the best interest of the lender. Therefore, prudent lenders find a way to prevent such conflict of interest with the borrower. The right to repossess and liquidate collateral gives lenders a viable threat to ensure that borrowers do not behave against the interest of the lender. This disciplinary role of collateral is the core concept in the theory of incomplete financial contracts.

From the perspective of the lender, Boot and Thakor (1994) created a model predicting that lenders will demand collateral to prevent moral hazard problems³. The model suggest that when information is less asymmetric between the lender and borrower, the need for collateral should be less. Berger and Udell (1995) conducted empirical research to test such a theory and found that borrowers who had long-term relationships with a lender were less likely to pledge collateral. Such theoretical and empirical research supports the general view of lending that when a borrower posts collateral, the bank becomes more comfortable and thus less conservative in approving the loan.

From the prospective of the borrower, Bester (1985) and Chan and Thakor (1987) established a model explaining that a borrower with less risk will use collateral to “signal” that message⁴. Subsequently, Boot, Thakor and Udell (1991) provided empirical research that supported this model.

In the unfortunate event when the borrower defaults and is unable to repay the loan, the lender can liquidate the collateral and thus mitigate its loss, while the borrower often goes out of business. Therefore, giving the lender a strong legal right to repossess and liquidate

the collateral is at the core of emphasizing the importance of protecting a creditor's right under bankruptcy procedures. As a result, traditional studies of collateral have assumed the significance of the liquidation value of collateral⁵.

2. Tradeoff

Manove, Padilla and Pagano (2001) argue that if a bank is protected by collateral, its incentive to exert effort in evaluating loans may be reduced, because it can recoup the value of the loan by seizing the collateral. If the bank is not protected by collateral, the bank evaluates the loan more carefully, because they do not obtain much if a firm's project fails. As a result, although a bank may be in a good position to evaluate the profitability of a planned investment project and the creditworthiness of the borrower, a high level of collateral may weaken the bank's incentive to do so. Thus, too much reliance on the loss mitigation role of collateral "may induce banks to be 'lazy' and screen credit seekers insufficiently" (Manove et al., 2001, p. 739). A tradeoff exists between preventing the borrower's moral hazard and giving incentive to lenders to screen borrowers.

Real estate is the predominant asset used for collateral. 84.5% of collateral is real estate in today's Japan (Bank of Japan, 2011)⁶. The Financial Services Agency (FSA) estimates that approximately 90% of collateral for secured lending for small and medium enterprises consists of real estate (FSA, 2013a). A solid legal framework to perfect the secured party's rights, combined with *ne teitouken*, a type of open-end mortgage, gives strong legal protection to the lender (Wagatsuma, 1978). They also provide a mechanism to convert the rise of real estate value to an increase in collateral value (Ohgaki, 2010).

Real estate has served well in deterring the borrower's moral hazard. Also, as long as the value of real estate was rising or stable, it provided excellent protection for mitigating losses to the lender in the event of a default. However, following Manove, Padilla and Pagano's (2001) argument, it may have discouraged lenders from appropriately screening the borrower. In addition, the concept or practice of monitoring collateral to gauge and manage the borrower's credit risk does not exist when real estate is collateral. In fact, real estate was considered ideal because its liquidation value was independent of the borrower's business condition. Once a loan secured by real estate is delivered, the bank should only be concerned about the liquidation value of the collateral. As Kubota (2008) points out, loss mitigation by liquidation has been the primary focus on the role collateral plays in Japan.

3. Liquidation vs. Information

Until recently, analysis of the role of collateral beyond the context of liquidation and preventing moral hazard for the borrower was not necessary in Japan where real estate was the predominant collateral used. Participants in the lending market, including lenders, borrowers and often regulators, have perceived the role of collateral under that premise.

However, legal scholars have questioned such views as overly simplistic. For example, Scott (1986) challenges the view that collateral only functions as an asset to be liquidated to mitigate loss on the defaulted loans by foreclosure. Instead, he asserts that “the cornerstone of any effective secured loan is monitoring the financial condition of the health of the borrower” through “frequent investigation of the condition, quality and maintenance of the collateral” (Scott, 1986, p. 946). Mann (1997) conducted empirical research from a legal perspective to question the “classic presupposition that the function of secured credit is to enhance the creditor’s ability to liquidate collateral” and concluded that “the creditor’s ability to liquidate the collateral and the origination of a secured loan is much looser than traditional analysis would suggest” (p.238).

Some economists have proposed that collateral can become a medium for communication between the lender and borrower. For example, Berger and Udell (1995) and Udell (2004) stress the information production value of collateral through intense monitoring by lenders, particularly when the collateral is accounts receivable and/or inventory. Mester, Nakamura and Renault (2007) provide empirical evidence that support Udell (2004) by conducting a case study with a Canadian bank that conducts ABL. Rajan and Winton (1995) provide theoretical support on the incentives of why banks conduct such monitoring activities. Berger, Frame and Ioannidou (2011) argue that the different roles and emphasis that collateral plays may depend on the type of asset used.

II. ABL in Japan – A Case Study

Does ABL enhance information production for the lender through the monitoring of collateral? If that is the case, the amount of contact between the ABL lender and borrower should increase. To test the hypothesis, I conducted a case study with a Japanese regional bank that wishes to remain anonymous. To my knowledge, this article is the first direct empirical test of the monitoring activities of a Japanese ABL lender. Even though the data come from a particular bank, given that the bank is a typical, regional bank with an asset

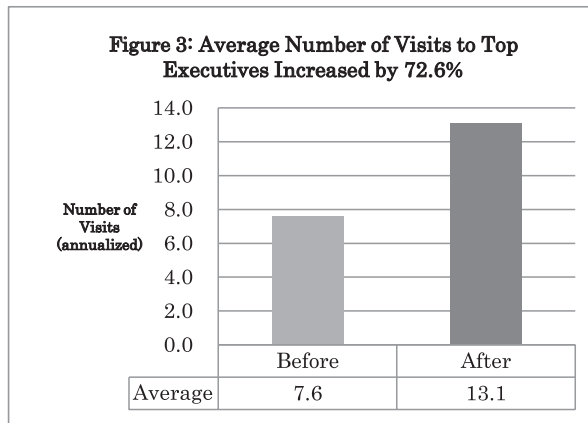
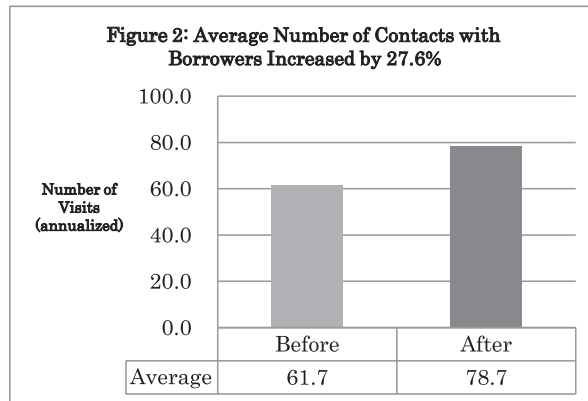
size of approximately JPY 4 trillion, the content is likely to broadly represent the impact ABL has on any Japanese regional bank's behavior.

I analyzed the bank's call report on clients that became borrowers of ABL and compared whether there were changes in the number of (1) contacts with the ABL borrower in general and (2) meetings with top executives (e.g., representative directors, owners of the borrower). The number of such contacts or meetings was annualized before and after the transaction for ABL began⁷. There were a total of 30 borrowers. New borrowers who had no relationship with the bank were excluded because a comparison was impossible. 21 semi-structured interviews were conducted by bank officers and executives who were responsible for the ABL business.

The results show that ABL clearly increased the number of contacts between the lender and borrower. The number of contacts in general increased with 22 borrowers (73.3% of total) and with 23 borrowers (76.7% of total) for top executives. Among the borrowers that had an increase in contacts or visits, the average number of contacts with borrowers increased by 27.6% (Figure 2), and a jump of 72.6% (Figure 3) observed for visits with top executives.

The interviewees consistently indicated that ABL required a deeper and more comprehensive understanding of the borrower's business, risk profile and operating cycle. In doing so, the lender had to expand beyond their usual contact points, which were typically finance and accounting departments, to communicate with manufacturing, administration, sales and planning departments. Furthermore, they had to meet with the top executives to comprehend the whole picture, resulting in a substantial increase in such meetings. The situation began from making a proposal on ABL and continued after the loan was executed by conducting a monitoring of the collateral, which required close contact and cooperation with the borrower.

The interviewees remarked that when real estate is used as collateral, an increase in contacts with borrowers in general or with top executives were rare. In fact, with real estate, banks conduct monitoring only once or twice a year which do not require any contact with the client. The bank simply renews the database to reflect the market price of real estate (which is disclosed in the public domain) and physically observe the collateral on its own.



This case study supports the hypothesis that ABL enables the lender to generate information about the borrower through screening prior to lending and by monitoring collateral after disbursement of the loan. The benefit of introducing ABL to Japan is to add another role for collateral – a medium of communication between the lender and borrower – in addition to its use for liquidation. Therefore, ABL should not be viewed simply as a secured lending where collateral is substituted by inventory and accounts receivable from real estate. When conducted properly, ABL could become a useful tool kit for the lender that has a role which real estate does not have. However, as we will see in the next section, the importance of monitoring the collateral to understand and manage the credit risk of the borrower was not clearly communicated to the market when ABL was introduced to Japan.

III. The Introduction of ABL to Japan

Because real estate has been the predominant asset used for collateral in post-war Japan, it was quite natural for the market, including lenders, borrowers and regulators, to have a fixed notion that the purpose of collateral is to mitigate losses when the borrower fails to meet its loan obligations and to deter moral hazard. Indeed, ABL does serve these purposes. However, looking back, the role that real estate lacks, i.e., serving as a medium for communication between the lender and borrower, should have been emphasized more clearly. Overly stressing the role of liquidation in ABL may have misguided market participants, including both banks and borrowers.

Policy Making

ABL was introduced to Japan in a coordinated, top down process led by the government. First, an overall strategy was announced, followed by recommendations from the deliberation councils (*shingikai*), and then legislative as well as regulatory changes were made.

Because Japanese banks were relying heavily on real estate as collateral, the collapse of the real estate market, which peaked in the early 1990s, hampered the lending capability of these financial institutions. The collateral in ABL was understood primarily as a substitute for real estate⁸. Table 1 summarizes the major policy measures on ABL.

Table 1: Major Policy on ABL

Year	Policy
2003	Measures for Strengthening the Function of Industrial Finance to Vitalize the Economy (Prime Minister of Japan and His Cabinet)
2004	Interim Report on the Sophistication of Financial Services and Increasing Supply of Risk Money (METI) Action Program for Facilitating the Function of Regional Financial Institutions (FSA)
2005	Law on Special Rules to the Civil Code Concerning the Perfection of Movables and Assignment of Receivables
2006	Report on the Promotion and Infrastructure Building of ABL (METI)
2007	Revision of the Inspection Manual for Deposit-Taking Institutions (FSA)
2011	Fund-Provisioning Measure to Support Strengthening the Foundations for Economic Growth through the Loan Support Program – Special Rules for ABL (BoJ)
2013	FAQ regarding ABL (FSA)

Comparison: How Japan and the US Regulate ABL

Japan - The FSA Bank Inspection Manual

In 2007, the FSA revised its inspection manual (FSA, 2012)⁹ and officially recognized inventory and accounts receivable as “ordinary collateral (*ippan tampo*)”¹⁰. The criteria on whether inventory or accounts receivable was deemed to be ordinary collateral was whether such assets were disposable from an objective perspective.

In accordance with the self-assessment guidelines (*Jiko Satei Beppyou 1 and 2*), the bank must take a two-step approach in calculating the required amount for write-offs and default reserves. First, the bank conducts borrower classifications (*saimusha kubun*) in accordance with the probability of repayment of each credit (*saiken*), including loans. Then, each credit, which has been subject to borrower classification, is categorized in accordance with the level of collectability (*saiken bunrui*). In the credit categorization process, which determines the amount for write-offs and default reserves¹¹, the estimated disposal value of the general collateral (*shobun kanou mikomigaku*) is taken into account (Horie and Arioka, 2012).

Such treatment is identical to when real estate is collateral. Likewise, throughout the revised inspection manual, there was no direct or indirect stipulation with regard to monitoring inventory and accounts receivable to understand and manage the creditworthiness of the borrower.

US - The OCC Comptroller's Handbook

The Office of the Comptroller of the Currency (OCC) is one of the key bank regulatory institutions in the U.S.¹² It has published the Comptroller's Handbook: “Accounts Receivable and Inventory Financing (ARIF)” (the “Handbook”), which provides a detailed explanation specifically dedicated to loans secured by such business assets¹³ (OCC, 2000). The principal concept in the Handbook is the monitoring of collateral. Because inventory and accounts receivable are directly related with the business condition of the borrower, by carefully monitoring the collateral, and “exercising the degree of control to manage and mitigate the risks” (p.2) the ARIF lender can effectively manage the creditworthiness of the borrower. Consequently, the Handbook devotes a detailed description to how to monitor ARIF loans. In contrast, there is less emphasis and explanation on assessing liquidation value (OCC, 2000, pp. 28-31).

Because of the nature of working capital, “receivable and inventory levels tend to fluctuate (p.28).” The intensiveness of monitoring and level of control that the ARIF lender

needs to exert depends on the creditworthiness of the borrower. The OCC supervises whether the ARIF lender is effectively monitoring the operating cycle of the borrower by examining the borrowing so that it “conforms closely to the buildup of inventory and collection of receipts as reported on the borrowing base certificates¹⁴” (p. 28). Lenders are expected to increase the intensiveness of monitoring as the creditworthiness of the borrower becomes weaker.

IV. Promoting “Information Collateral”

The most significant contribution that ABL can make in the Japanese lending market is to establish an understanding and practice to manage credit risk by adequately monitoring business assets, such as inventory and accounts receivable¹⁵. This is the antithesis of the existing notion of collateral, i.e., loss mitigation and prevention of moral hazard derived from the possibility of liquidating the collateral. Real estate has been effective in performing the existing role. To emphasize the difference, collateral used in ABL should be conceptually called “information collateral” in contrast to “liquidation collateral,” such as real estate.

Because the market has been heavily relying on real estate for collateral for too long, there is a possibility that Japanese banks may have become “lazy”, as defined by Manove et al. (2001), not sufficiently developing the practice and technology necessary to effectively screen and monitor the creditworthiness of borrowers. By focusing on the information generating aspect of ABL through proper monitoring of collateral, ABL can contribute to helping banks improve their skills in deeply understanding and managing their client’s creditworthiness, which is the essence of sound commercial banking.

Recent developments in Japan indicate that banks that have accumulated practical experience in ABL are convinced that they can generate information about the borrower by adequately monitoring the collateral. After investigating such practices, the Financial System Council (FSC), an advisory committee to the FSA, has been emphasizing the importance of monitoring in ABL.

The Council has been advocating that ABL, when used properly, should meet the goal of region-based relationship banking (*chiiki micchakugata kinyu*) in terms of “making possible the timely and adequate understanding of the enterprise value (of the borrower) through continuous and periodic monitoring” (FSC, 2007, p.9). Recently, in a working paper, it has reported on the activities of regional banks utilizing ABL as a means to mitigate the

asymmetric information between lender and borrower (FSC, 2012, pp. 20-21).

As an extension of these discussions, the FSA has issued a series of documents to promote the usage of ABL, emphasizing the function of collateral to facilitate better communication between the lender and borrower through monitoring activities (FSA, 2013a). In addition, it has published a paper to clarify the treatment of collateral for ABL in the Inspection Manual¹⁶ in the form of Frequently Asked Questions (FAQ). (FSA, 2013b).

In the FAQ, the FSA has indicated that collateral in ABL has a distinctive function to enable the lender to have a comprehensive understanding of the borrower, in addition to and independent of its role to mitigate loss via liquidation value¹⁷. Therefore, when the collateral in ABL is used to comprehend the creditworthiness and business of the borrower, by definition, it is not required to meet the conditions to be classified as ordinary collateral as defined in the Inspection Manual (Ikeda, 2013).

Some academics, including Berger and Udell (2002), argue that ABL should be categorized as a product for transactions lending¹⁸. However, as we have seen, ABL in Japan, particularly for regional banks, serves best when extracting the information value of collateral¹⁹. Therefore, ABL for regional banks in Japan is and should be used to enhance the relationship between the lender and borrower.

To further promote the role of “information collateral”, several measures need to be taken. First, the banks and regulators must understand that ABL is a unique lending technology that requires dedicated effort by professionals. Therefore, it is very important that a specialized team should be responsible for conducting ABL in banks to accumulate knowledge and knowhow. Such mechanism should not necessarily be complex, expensive, or time consuming. Unlike appraising the liquidation value of collateral, which will require professional service firms to do so, monitoring can be conducted by the banks themselves without paying expensive fees²⁰. Second, banks must quickly develop a monitoring infrastructure to detect deterioration of the borrower’s credit. Such an early warning system should be linked with an escalation mechanism for the bank to intensify its monitoring of the collateral and, as needed, actively intervene to rectify the situation. Third, banks, particularly regional banks, should share knowledge and best practices with regard to what specific aspects of collateral to monitor and how to do it. Currently, the banks are not yet confident with specifically what and how to monitor (including depth and frequency). The FSA, the Bank of Japan and industry associations (e.g., the Regional Bank’s Association) can contribute to sharing and accumulating such knowledge and techniques. Last but not least,

empirical research on ABL needs to be promoted to provide academic insight, as well as recommendations. Further studies should include a deeper analysis of monitoring collateral both from quantitative and qualitative perspectives. A better understanding and proper execution of ABL are critical for the development of the Japanese economy.

NOTES

- 1 Scott (1986) quotes a senior banker: "Banks are not pawn shops. No bank I know would make a loan against a basket of gold bricks if there was a good chance it would have to sell the bricks" (p. 944).
- 2 This paper will refer to documents that are originally written in Japanese. The official translations of such documents are used when they are available in the public domain. Otherwise, the translations are the author's own. Please note that the original authors have not officially authenticated these translations. Unfortunately, many Japanese government documents are not accompanied by an official English translation.
- 3 Referred to as the "ex post theory" of "lender selection effect" of collateral.
- 4 Referred to as the "borrower selection", or "ex ante effect" of collateral.
- 5 For example, the Oxford Dictionary of Economics elaborates on the definition of collateral: "If payments of interest and repayments of the principal are not made on time, in the last resort the lender can sell the collateral asset." Economists refer to this function as the "loss mitigation effect" of collateral.
- 6 Before the Second World War, tradable securities such as stocks and bonds were the predominant asset classes used for collateral (Goto, 1970).
- 7 "Before": Beginning date of the call reports until the prior day of the proposal to do ABL. "After": On the date of the proposal of the ABL to the last day of the call report.
- 8 Kinoshita (2004) pointed out that ABL can enhance the communication between the lender and borrower.
- 9 The content of the inspection manual has not materially changed from the 2007 version.
- 10 Technically, inventory was stipulated as a type of movable assets (*dosan*) and accounts receivable as claims (*saiken*) in the inspection manual.
- 11 Write-offs and default reserves negatively impact the profit of the bank.
- 12 The OCC was established in 1863 as an independent bureau of the US Department of the Treasury with a primary mission to charter, regulate, and supervise all national banks and federal savings associations" (OCC, 2012).
- 13 The OCC categorizes Accounts Receivable and Inventory Financing to four types, Asset Based

- Lending (ABL), Secured Financing, Blanket Receivable Lending and Factoring (p.6). What is called “ABL” in Japan is much broader than the OCC’s definition of ABL, and is equivalent to ARIF.
- 14 A document issued by the ARIF borrower representing the maximum amount that can be borrowed in terms of collateral type, eligibility, and advance rates.
- 15 This is in addition to the role of loss mitigation and preventing moral hazard through liquidation of collateral.
- 16 The immediate reason for the FAQ is that the Inspection Manual was being revised due to the termination of the SME Finance Facilitation Act.
- 17 Technically, when the lender fails to prevent the borrower’s credit from deteriorating in spite of monitoring the collateral and taking appropriate measures, the necessity to consider whether the collateral can qualify as “ordinary collateral” emerges.
- 18 Berger and Udell (2002) define ABL as lending that is principally based on the quality of the available collateral, not from information on the payment from cash flow of the borrower which can be generated through the relationship with the borrower.
- 19 OCC (2000) categorizes loans secured by accounts receivable and inventory into 4 types, demonstrating that there are variations for such loans. ABL as defined by Berger and Udell (2002) falls to the extreme case of such group which is probably best served by a finance company.
- 20 A thorough appraisal to determine the liquidation value conducted by a professional service firm costs JPY 2~3 million. Considering that the average size of ABL done in Japan is JPY 56 million, this is expensive.

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