

Differences between the Bank Payment Obligation and Letter of Credit in Global Settlement Method

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Abstract

Purpose – The bank payment obligation is a transaction method that combines the certainty of L/C transactions with the speed of remittance payments, so the main purpose of this study is to highlight the superiority of bank payment obligation, noting the difference between bank payment obligation and L/C transactions. In addition, we would like to examine how bank payment obligations can actually be applied to support various valuable proposals such as post-shipment and post-shipment finance according to the payment process.

Design/methodology – This study focused on literature based on data from ICC and SWIFT along with previous domestic and international studies. In terms of a research method, a literature review was adopted with electronic trade-related books and journals and policy-related reports from international trade-related agencies.

Findings – Unlike L/C transaction, BPO transaction verify the data inquiry process based only on the combination result of the established baseline and dataset. Accordingly, it is superior to L/C transaction in that there is no confrontation between the parties over the results of the inquiry, and clear transactions are possible according to the principle of proof after prepayment. In addition, unlike credit transactions, data inconsistency acceptance procedures confirm payment obligations in consideration of importers' intentions. As a result, as long as trade documents are in the hands of exporting countries, flexible document disposition is possible in response to the situation after payment, which is more advantageous than L/C transaction.

Originality/value – Specifically, from the importer's point of view, BPO transactions have the advantage of reducing the manpower required to prepare and review trade documents and processing transaction negotiations with exporters advantageously due to the strength of payment obligations. From the perspective of the exporter, it has the advantage of enabling rapid recovery of trade payments and reducing the risk of importer's cancellation of transactions or content change. From the perspective of participating banks, it is possible to strengthen relations with importer and obtain high commission income by increasing the role of bank reduced by reducing L/C transaction.

Keywords: BPO, Letter of Credit, SWIFT, TMA, UCP, URBPO

JEL Classifications: F10, G10, G20

1. Introduction

Today, rapid development of new technologies is leading to a new paradigm shift in international trade settlement methods. In addition, as simple and sophisticated system can now be established, the risk of trade settlement tends to be mitigated. Due to such technical changes, many changes in payment methods are becoming inevitable. One of institutions

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making effort to respond to such changes is the Society for Worldwide Interbank Financial Telecommunication (SWIFT).

The SWIFT established Trade Service Utility (TSU), which is an electronic settlement service platform, in 2007. In addition, the SWIFT completed the Transaction Matching Application (TMA), an electronic payment transaction application for data matching shared among banks and started operating it as an international standard in 2008. After matching the contents of the sales contract submitted by the importer and exporter to their respective banks within the TSU, the TMA checks the consistency between the matched contents and the actual shipping information entered by the exporter's bank into the system. If there is no problem with the consistency, the importer transfers the payment from his/her bank account to the exporter. In addition, since the Bank Payment Obligation (BPO) function was added to the TMA in March 2009, the BPO became to play the role of a trade settlement method in place of the Letter of Credit (L/C). Basically, the L/C requires high transaction fees, various related documents, and other expertise in preparing and reviewing documents. In addition, despite that the arrival of ships to destinations became quite swift thanks to the speedup of container ships, trade documents in the L/C are processed via banks as before, leading to the occurrence of so-called bill of lading's crisis where trade documents arrive later than the cargo.

The BPO has emerged as an alternative that can dispel this problem. If it is confirmed that there is no difference in the data on the sales contract submitted in advance to the exporter's bank and the importer's bank, the importer's bank will make payment for the trade business to the exporter's bank at the stage of confirming that the export information provided by the exporter matches the contents of the sales contract. In the case of the L/C, trade documents are delivered through banks, that is, from the exporter to a bank in the exporting country to the issuing banks, and then to the importer, and in this process, the banks assume payment obligation under the condition that the trade documents match the contents of the L/C. On the other hand, in the case of the BPO, trade documents are directly delivered between the exporter and the importer, while the data on the relevant transaction is provided to the banks and the banks make payment under the condition of data matching. In other words, since the BPO is an agreement between banks, it is carried out assuming a four-corner model in which the exporter, the exporter's bank, the importer, and the importer's bank participate.

The BPO is a swift and convenient new institutional alternative to trade settlement financing procedures and has the potential to change the global supply finance by resolving the cumbersome document management and implementation procedures under the existing L/C system. That is, it is a new payment method that has upgraded the traditional payment method to the next level by combining the payment guarantee, which is an advantages of the L/C, and efficiency and simplicity, which are the advantages of open accounts. It can also be effective in preventing fraud and improving transparency in the process of trade transactions. The BPO has an aspect that it has no regulation for document checking set forth under the uniform customs and practice for documentary credits and it has no function to exercise the security right on the bill of lading but has advantages such as the reduction of documents between the exporter and the importer, swiftness, and improved risk management in international trade transactions.

Meanwhile, in 2013, the International Chamber of Commerce (ICC) enacted the Uniform Rules for Bank Payment Obligation (URBPO). The URBPO provides common interface standards within the banking industry, strictly defines liability for payments mainly for

interbank transactions, and defines the BPO as a contract prepared by the bank among the bank, exporter, and importer.

Against this backdrop, this study aims to help those engaged in trade in terms of operation by examining the basis and characteristics of the BPO and comparing and analyzing procedural differences between the L/C and the BPO. The BPO is a transaction method that combines the certainty of L/C transactions with the swiftness of remittance payments. Therefore, the main purpose of this study is to highlight the superiority of the BPO, taking notice of the fact that the methods of trade communication are different between BPO and L/C transactions. In addition, this study will examine how the BPO can actually be applied to support various value propositions such as pre-shipment and post-shipment finances according to the payment process. In this study, BPO outline, BPO methods and procedures, and payment obligations of L/C transactions were compared and analyzed to look at future prospects. This can be explained as a difference from other previous papers. This study was conducted centering on literature based on data from ICC and SWIFT along with previous domestic and foreign studies.

2. The Use of the BPO

2.1. Overview of the BPO

2.1.1. *Foundation of the BPO*

The SWIFT devised the Trade Service Utility (TSU) in 2002 as a way to respond to the situation where the trend of international trade settlements was changing from the L/C system to the open account system. The TSU checks the consistency of data on trade documents and provides a workflow for the operational use by financial institutions. Therefore, the purpose of the TSU is to establish a foundation for interbank matching necessary for financial institutions to provide supplemented new services such as finance, risk mitigation, and information to support client companies. The TSU provides matching engines to determine whether data elements in trade documents submitted by two or more financial institutions are consistent. It was designed to enable banks to provide competitive services complementary to existing services provided to their clients (Chae Jin-Ik, 2011, 416). Therefore, the BPO is an irrevocable payment agreement of the obligor bank to the recipient bank under the condition that the baseline within the TSU is matched. The BPO means that the payment is guaranteed under the condition that the data are successfully matched with the baseline within the TSU.

Meanwhile, the Transaction Matching Application (TMA) was named as TSU's application within the URBPO established in 2011. According to the definition of terms in Article 3 of URBPO 750, "TMA means any centralized information matching reading device that is in charge of processing the TSMT messages received from participating banks, automatically compares the pieces of information contained in the messages, and sends resultant related messages to individual participating banks regardless of whether it is owned by any participating bank or not." During various processing steps within the TMA, the status changes according to information matching, changes in baseline information, status change requests, or time lapse.

The TMA transaction begins when an initial baseline information submission message is

received from the BPO obligor bank or the BPO recipient bank. The initial baseline information submission message may or may not include a BPO in the payment obligation entry section within the confirmed reference information. In addition, it is technically possible to establish a baseline using the data in the sales contract. In addition, if the BPO segment is blank, the BPO may add changes in conditions later with the consent of the participating banks.

When the first baseline submission message has been received, the TMA sends an approval message including the transaction identifier. The transaction may be terminated before establishment, and in order to terminate the transaction after establishment, the BPO obligor bank or the BPO recipient bank must submit a status change request message to the TMA. The TMA sends a status change request notification message to the BPO obligor bank and the BPO recipient bank, and if the other bank wishes to agree, the bank will send the status change request approval message to the TMA. Since joining the TMA is generally limited to financial institutions, TMA operators can determine eligibility criteria to manage members. Each TMA member bank should be familiar with the concrete operating requirements and notification period of the system. The TMA's data set submits trade documents to the TMA for matching with the baseline in accordance with the ISO 20022 TSMT messaging standard. Eventually, a data set may be submitted to match one or more baselines. Whereas previous electronic solutions run the electronic document interchange (EDI) standard, the TMA includes industrial standard regulations that can be implemented in any data matching application.

2.1.2. Characteristic of the BPO

TMA's BPO transaction has recently attracted attention as a transaction method similar to transactions using the L/C, a traditional trade settlement tool. This transaction adds a service called bank payment obligation (BPO) to transactions using an automatic trade data matching and automatic payment message transmission system called Trade Matching Application (TMA). Both BPO and L/C transactions are common in that they guarantee bank payments, but the methods of communications exchanged between the parties to payments are much different between the two.

First of all, looking at L/C, there is a big difference from BPO in that it is used for small and expensive product transactions and for transactions that do not necessarily require compliance with sales contracts or shipping documents. On the other hand, BPO has specialized characteristics for transactions that comply with contract conditions, transactions that meet quantity and delivery, and transactions that require financial stability. So, let's take a closer look at this. Looking at the characteristics of the BPO, first, the BPO is an irrevocable conditional payment agreement. Therefore, once opened, it cannot be canceled unilaterally and has the nature of contingent liabilities. Therefore, before a BPO is opened for a single transaction of a certain amount, an agreement on conditions specified in advance for consistency criteria are required (ICC, 2012). Second, it can be agreed on various payment conditions. That is, it is opened under the condition of payment at sight or deferred payments, and in particular, in the case of deferred payment conditions, support with supply chain finance is provided to importers and exporters along with opportunities for various financial transactions with participating banks. Third, in the case of the BPO, the globally recognized URBPO has been established that applies only among banks on a similar background to UCP 600 (Wells, 2014). In addition, the BPO is operated based on the TMA, which is a platform,

and its rule book (Wells, 2014). It can be used independently through all service providers provided by the TMA, a technical application for the BPO (IFC, 2016). Fourth, the BPO is a transaction between banks, and only banks are involved in resultant contracts. Therefore, importers and exporters do not have any particular rights directly in BPO transactions and thus a careful understanding of the rights and obligations they become to have in their relationships with their respective banks is required (Raketti, 2016). Fifth, since the BPO is operated based on electronic data, not paper documents, the original bill of lading is not sent through the bank. Therefore, the risk that may occur when the original bill of lading is sent directly to the importer or due to the same effect of the bill of lading with the waiver of rights in L/C transactions may be raised (Harada, 2013). However, in BPO transactions, the obligor bank can resolve the risk due to transport documents or related goods by establishing a pledge right on collateral through a separate agreement with the importer, who is the client.

Table 1. The Comparison of Major Payment Types

Payment method	Transaction type
L/C	New transactions with small transactions, high-value product transactions, transactions that do not necessarily require compliance with terms of sales contracts or shipping documents, transactions with trade finance, products with short product life cycles, and transactions with small and medium-sized exporters.
BPO	Transactions that comply well with contract terms, transactions that can keep the quantity or delivery date, frequent transactions, transactions that want to acquire products early, trade financing, financing time as fast as possible, transactions that want to stabilize trade finance or financing, overseas subsidiaries of small and medium-sized companies.
Remittance	Transactions between subsidiaries that can fully grasp credit, transactions with no problems with products and credit without claims, transactions with no problems with payment-related fees, and transactions with no problems with financing.

Source: Internal Records.

2.2. Utilization of BPO

2.2.1. Utilization at the side of the exporter

First, the exporter exchanges sales contracts and purchase orders with the importer to determine the details with each other. In addition, if it has been decided to do the transaction within the TMA and further use the BPO, the importer applies for the BPO directly to the TMA for the exporter. The importer's bank receives the request from the importer and enters the contents of the sales contract into the TMA as data. Then, importer's bank sends the contents to the exporter's bank, and on receipt of the contents, the exporter's bank contacts the exporter and informs the exporter that the BPO is attached through the TMA. The exporter make products according to sales contracts and ship them within the due date. When the notice of arrival has been received from the TMA, a copy of the bill of lading and a copy of the sales contract are submitted to the exporter's bank along with a commercial invoice. The exporter's bank enters the data of the sales contract into the TMA. For reference, the

TMA is stable in security because it is used by installing SWIFT's TMA system on a computer designated by the SWIFT.

If no discrepancy is found after the data were automatically compared in the TMA, the results will be transmitted from the TMA to the exporter's bank and the importer's bank at the same time. The exporter's bank enters data from the copy of the bill of lading and commercial invoice obtained from the exporter into the TMA. The TMA automatically checks whether there is any discrepancy between the sales contract and the data from these shipping documents, and the results are transmitted to both the exporting and importer's banks. Finally, when the exporter and the importer understand the data content, the trade transaction is concluded.

In the case of BPO transactions, exporters can receive trade financing if they want. In addition, if the exporter does not use the BPO, the importer can remit the payment after receiving the cargo. Whichever choice is made, payment from the importer will be quickened by the TMA compared to the previous methods. That is, not only payments are quickened, but also the stability of shipment can be secured and trade finance can be provided thanks to the BPO. In addition, the burden of preparing shipping documents that have been submitted by exporters to banks can be reduced and the efficiency of trade data management can be enhanced.

2.2.2. Utilization at the side of the Importer

Along with the digitalization of trade payments under the TMA, the importer can promote logistics reform and efficiency and manage supply chains in terms of both logistics and trade settlements. That is, electronic payments based on the TMA not only quicken the payments but also enable just in time import so that imported products can be procured in a timely manner.

The importer can flexibly decide between existing payment methods such as the L/C and payments by remittance according to the situation of the exporter. After a transaction relationship is established between the exporter and the importer, if the exporter understands how to use the TMA, the trust relationship will be improved. Furthermore, if a trustworthy inspection company and a trustworthy custom broker can be designated, the payment will be made safely after TMA matching. However, since the inspection company does not take the responsibility for shipping, it is desirable for the importer to designate the shipping company.

Having a reliable inspection company inspect goods before shipment is a prerequisite for smooth processing from the position of the importer because although the payment is made when no problem has been found in trade data matching at the TMA, there may be cases where the payment is made without checking the actual product. Of course, the payment may not be made until the product is checked at the port of arrival, but this will cause a delay in product acquisition.

Therefore, when an exporter ships a product, it is desirable for the exporter to request a local inspector designated in advance by the importer for inspection and receive an inspection certificate indicating that there is no problem in the quantity being shipped and the content of the goods. It will be more trustworthy if the exporter ships with this inspection certificate and the importer designate a trustworthy shipping company and makes an agreement with the exporter to use the ship of the shipping company.

In conclusion, digitalization by the TMA has great effects on quickening the trade settlement, convenience, and cost reduction. In particular, the purchase in the form the BPO

has advantages for both parties as exporters can recover export payments immediately after shipment, and importers do not have to pay import payments in advance. The L/C has a great effect in terms of that it is a risk aversion, but it involves large costs of humans and time for preparation and checking of trade documents. Meanwhile, the quickening of payments thanks to the TMA enables securing mobility in terms of goods leading to the strengthening of the management of the import and export supply chains.

Table 2. The SWOT Analysis of Bank Payment Obligation

Classification	Main Content
Strengths	<ul style="list-style-type: none"> • Electronic presentation of data – efficiency, paperless office; • Objective immediate matching – reduced discrepancy, consistency; • Can be added to the supply chain process at any time and any amount; • Focuses only on data relevant to support value proposition; • Better payment risk mitigation • Enhances trade transaction processing and reconciliation; • Creates transaction status visibility; • Standardized – BPO rulebook, ISO 20022 messages; • Legal obligated exporters.
Weaknesses	<ul style="list-style-type: none"> • New solution on the market, material marketing effort is needed to increase transaction volume and BPO acceptance; • Limited transaction history track record; • Requires new infrastructure in the banks; • Only few trade platforms handle TSU transactions for the time being; • No title documents in hand; • Full STP requires integration and process change on the customer side as well; • Transactional approach, does not deal with portfolio solution on the market, material marketing effort is needed to increase transaction volume and BPO acceptance;
Opportunities	<ul style="list-style-type: none"> • Creates new business opportunities for banks by converting open account trade to BPO; • Increase efficiency on both the customer and on the bank sides; • Potential settlement tool for B2B and B2C web portals; • It can automate escrow account services; • ISO 20022 standard • Scope to simplify the Trade Risk participation via electronic participation certificates, disclosure; • Reduces Cash Conversion Cycle
Threats	<ul style="list-style-type: none"> • Some existing bank revenues might be cannibalised; • Document oriented business culture both on the customer and on the bank side; • Potential legal concerns in certain countries – electronic data only, no documents; • Various alternative solutions for commercial risk mitigation in the open account space

Source: Internal Records.

Next, a SWOT analysis on BPO was conducted. Looking at the strengths first, there is the strength of paperless efficiencies through the electronic presentation of data. It also reduces discrepancies and inconsistencies and can be added to supply chain processes in any quantity. It can also mitigate payment risk and improve trade transaction processing and reconciliation. Looking at the weaknesses, marketing efforts are needed to increase BPO approvals, and new infrastructure is needed regarding banks. Also, for the time being, only a handful of trading platforms handle TSU trading. Also, the lack of ownership documents can be considered as a weakness. Next, we looked at the opportunities. BPO transformation can create a new business. There is an opportunity to increase efficiency on both the customer and bank side. There is also an opportunity to automate escrow account services. There is

also an opportunity to simplify trade risk participation through electronic participation certificates and disclosures. Looking at the weaknesses, the revenues of traditional banks could be eroded. In addition, potential legal issues may arise in certain countries.

3. Legal Relationships in the BPO

3.1. Relationship between the Exporter's Bank and the Importer's Bank

As a party to the BPO, the importer's bank issues the BPO and bears the conditional payment obligation to the exporter, and the exporter's bank becomes the beneficiary of the payment obligation as such. In BPO transactions, exporter's banks always act as recipient banks, but not only one importer's bank becomes obligor bank. In some cases, it is possible for a third bank other than the importer's bank to participate alone as an obligor bank or for multiple second obligor banks to participate.

3.1.1. *The Right and Obligation of the Importer's bank*

The exporter's bank shall accurately submit the details of goods, services, and performance of obligations received from the exporter to the TMA. The obligation of the exporter's bank to verify the authenticity of this information is the same as the obligation of the importer's bank to the importer. The obligation means the obligation to verify the authenticity of paper documents traded offline in L/C transactions, but it means the obligation to verify the authenticity of electronic documents sent online in BPO transactions. Participating banks, including exporter's bank, are not responsible for the authenticity of the information. However, if the exporter's bank simply trusts the baseline information and fulfillment information provided by the exporter and submits it to the TMA immediately without any verification process, the function to eliminate risks arising in the transaction process that goes through many steps may be lost.

Since the importer's bank should make the BPO payment when all the data required by the established baseline information have been submitted and matched in the TMA or when the data have been accepted although inconsistent data were submitted, the exporter's bank is placed in the position of the beneficiary of the payment in BPO transactions.

3.1.2. *Right and Obligation of the Importer*

As a party to the BPO, the importer's bank promises the exporters' bank a conditional payment obligation at the time when the baseline information and fulfillment information submitted to the TMA completely match with each other.

The importer's bank obligated to make payment may change the time of payment according to the type of the BPO. In the case of an immediate payment BPO, the importer's bank must bear the obligation to pay immediately to the exporter's bank, but in the case of a deferred payment BPO, the payment can be made at maturity after confirming the deferred payment obligation. The importer's bank's obligation to make payment as such arises when the BPO is included in the established baseline information or when the BPO is established through the procedure for changing the baseline information. In BPO transactions, the importer's bank always pays the price of goods to the exporter's bank not only in the simplest form in which the importer's bank acts as an obligor bank but also in the form in which a

second obligor bank exists separately in addition to the importer's bank. In L/C transactions, the opening bank, which is the importer's bank, promises to pay the price to the beneficiary, while in BPO transactions, the obligor bank, which is the importer's bank, promises to pay the price to the exporter's bank.

3.2. Relationship between the importer and the Importer's Bank

If an L/C should be issued according to the terms of payment under the trade contract, the importer requests the issuance of the L/C to his/her bank. The importer becomes an applicant, and the bank becomes an issuing bank, and an L/C issuance contract is established between the two.

In the case of the BPO, the importer provides the importer's bank with information on the sales contract concluded with the exporter in accordance with the BPO service contract concluded between the importer and the importer's bank. The importer's bank undergoes the procedure to extract the baseline information from the information on the provided sales contract and submit it to the TMA.

3.2.1. *Right and Obligation of the Importer*

In the case of an L/C, the applicant has the obligation to accept documents that strictly match the terms of the L/C and make the payment directly to the beneficiary by accepting and paying the bill of exchange. In the case of the BPO too, the importer must repay the importer's bank after the importer's bank makes the BPO payment to the exporter's bank. In BPO transactions, the importer provides the importer's bank with the sales contract information and then importer's bank makes the BPO payment to the exporter's bank. At this time, the importer becomes to have the obligation to repay the importer's bank. In addition, the obligation to pay fees incurred in the transaction process occurs at the same time and is borne by the importer.

In an L/C transaction, the applicant is obligated to deposit the payment funds into a separate account when requesting the issuance of an L/C of which the beneficiary is the exporter if the issuing bank requests the funds due to a lack of credit. In a BPO transaction, the exporter transmits fulfillment information to the exporter's bank and the TMA compares the information with the established baseline information in the TMA and the exporter sends the shipping documents to the importer only when the two pieces of information are found to match with each other through the comparison. Unlike L/C transactions, in BPO transactions, the bill of lading is sent directly to the importer and the exporter's banks so that the exporter and the importer's bank cannot exercise the right to property transferred for security because they cannot secure security. Therefore, the importer's bank cannot avoid the risk of credit management due to direct delivery of the bill of lading. The importer's bank may require the importer to submit guarantee fee or security to guarantee payment for the BPO issued by the importer.

In accordance with the BPO service provision contract between the importer and the importer's bank, the importer submits the contents of the sales contract to the importer's bank. In this case, when the importer gives the importer's bank the baseline information, the importer may provide a copy of the contract documents between the importer and the exporter, or a copy of the purchase order between the importer and the exporter per se. In addition, the importer may extract only core information from the purchase order and submit

the information electronically. As such, when the importer provides the baseline information to the importer's bank, an online method as well as an offline method can be used and this is another difference from the L/C transactions.

3.2.2. Right and Obligation of the Importer's Bank

Participating banks are obligated to confirm that the data transmitted to the TMA exactly match the data on goods, services, and fulfillment related to trade transactions received from importers or exporters. In addition, these banks are responsible for confirming that the data sent by them to the TMA remain unchanged from the data they received from their customers and other information sources. Paragraphs b and c of Article 9 of the UCP 600 stipulate that information must always match the information they received and this eventually means that the banks that provide information are obligated to verify the authenticity of the information. However, the UCP means the authenticity of documents, but it implies the authenticity of information in BPO transactions, which is the only difference. The obligation to confirm authenticity as such is limited to the obligation of participating banks, including importers' banks, to confirm the authenticity of the data received through telegraph and is not expanded to the obligation to investigate whether the information presented by the exporter's bank is based on false data and forgery of the exporter.

Under a BPO contract between the importer and the importer's bank, the importer transmits the baseline information to the importer's bank, and the importer's bank submits the information to the TMA to go through a confirming procedure to compare the information with the contents of the contract concluded between the exporter and the importer to see if the two pieces of information match with each other. The baseline information submitted to the TMA can be said to be an electronic message containing important information on international goods sales contracts between exporters and importers. Thereafter, at the time when this baseline information matches with the baseline information submitted by the exporter to the exporter's bank, this baseline information undergoes a process in which it is changed into the established baseline information. However, if the baseline information submitted by the importer to the importer's bank and the baseline information submitted by the exporter to the exporter's bank do not match with each other, the information may be resubmitted. If the pieces of information still do not match with each other, the transaction will be terminated.

3.3. Relationship between the Exporter and the Exporter's Bank

The BPO contract between the two parties is the same as the legal relationship between the importer and the importer's bank. In accordance with the legal relationship between the two parties, the exporter's bank submits the baseline information to the TMA to undergo the procedure to confirm the baseline information by comparing it with the baseline information submitted by the importer to the importer's bank. In addition, the exporter submits the fulfillment information to the exporter's bank and receives the payment from the importer's bank when the pieces of information completely match with each other in the TMA.

3.3.1. Right and Obligation of the Exporter

When the exporter's bank and the importer's bank submitted the contents of the sales contract to the TMA, respectively, and the results of comparison of the contents submitted

by the two banks indicate that the contents match with each other so the baseline information is confirmed, a BPO will be established.

Along with the foregoing, the exporter should ship the goods directly to the importer in accordance with the contract with the importer and should also prepare all shipping documents and send them to the importer. The exporter quickly provides such fulfillment details to the exporter's bank. The exporter's bank extracts fulfillment information from the fulfillment details received from the exporter and submits it to the TMA. There is no restriction on how the exporter provides fulfillment information to the exporter's bank. The exporter may provide a copy of shipping documents such as the commercial invoice, packaging list, and insurance documents to the exporter's bank, or may extract only key information from the shipping documents and submit it electronically. It is also possible to submit information using these two methods in parallel. In L/C transactions, only paper shipping documents are provided to the exporter's bank, which is distinguished from the foregoing.

The exporter provides the contents of the sales contract to the exporter's bank. After being provided with the contents of the sales contract, the exporter's bank undergoes a process of comparing the contents with the contents of the sales contract received by the importer's from the importer in the TMA to see whether the two contents match with each other or not. If no difference is found in the results of the comparison, the procedure to confirm the baseline information will be carried out.

3.3.2. Right and Obligation of the Exporter's bank

When a BPO contract has been established between the exporter and the exporter's bank, the exporter provides a copy or information of the purchase order to the exporter's bank. From this submitted content, the exporter's bank extracts only the baseline information and submits it to the TMA to carry out the procedure for confirmation. In this procedure, cases where the second obligor bank participates in the transaction and cases where the foregoing is not the case can be considered, respectively. First, in cases where the second obligor bank participates in the transaction, the baseline information will be confirmed only when the second obligor bank accepts its role and the baseline information will not be confirmed otherwise. If the baseline information is not confirmed, the exporter's bank and the importer's bank may agree with each other to change the baseline information or may have another bank to participate to play the role of the second obligor bank. If no action is possible, the transaction will no longer survive and will be terminated.

4. Comparison of BPO and Letter of Credit

4.1. Step-by-step Confirmation Procedure for BPO and L/C.

4.1.1. Confirmation Procedure for BPO

The system of the procedures for payment obligation between related parties in BPO transactions is as follows. In the first step, the exporter obtains and prepares various trade documents to fulfill the sales contract, submits the information to the BPO recipient bank to entrust the transmission of the information to the TMA. In order to determine whether or not the payment obligation is established, the TMA will later perform data matching, and the

relevant trade document information will be used as data for comparison with the established baseline at that time. In the second step, when the BPO recipient bank has received trade document information from the exporter, the BPO recipient bank enters the information into the terminal to transmit it to the TMA in the form of a data set. In the third step, when the TMA has received the data set sent from the BPO recipient bank, it immediately begins to compare it with the established baseline to determine between data match and data mismatch. If the data match has been approached, the payment obligation becomes valid. In addition, basically, the relevant decision is made by comparing each letter and phrase of the established baseline and data set. In the fourth step, when the TMA automatically compared the data set with the established baseline and made a decision, the matching report of the data set indicating the relevant result is immediately sent to both banks. The data set matching report is sent to the BPO obligor Bank and the BPO recipient Bank, but in BPO transactions, it is planned that the results will be transmitted from both banks to the exporter and the importer. Therefore, in fact, for the transmission to the exporter and the importer, the TMA delivers the matching report to both banks to notify the matching results between the data being compared and the baseline of the payment obligation. In the fifth step, when both banks have received the matching report of the data set transmitted from the TMA, the banks notify the result to the exporter and the importer. Through this series of processes, the original trade documents held by the exporter are sent directly to the importer at an appropriate time.

4.1.2. Confirmation Procedure for L/C Transactions

The system of the procedures for payment obligation for L/C transactions is as follows. In the first step, the exporter obtains and prepares trade documents by fulfilling the sales contract, and presents the original copies to the exporter's bank to entrust the transmission of the documents to the issuing bank. In order to determine whether or not to bear the payment obligation, the issuing bank checks the documents later, and the original trade documents are used as data for comparison with the terms of the L/C. In the second step, when trade documents are presented from the exporter, the designated bank (negotiating bank or paying bank) performs document checking to see whether the shipping documents satisfy the terms of the L/C. If the terms of the L/C are satisfied, the designated bank will buy the documents. The export price is often paid to the exporter in this step even in the case of an acceptance L/C or a usance L/C. Since the designated bank should collect the relevant fund from the issuing bank later, the designated bank establishes a collection plan by checking the documents. In addition, the judgment criteria for document checking are the uniform customs and practice for documentary credits (UCP) and the International Standard Banking Practice (ISBP). In the third step, if it is judged that the trade documents presented by the exporter meet the terms of the letter of credit, the designated bank pays the import price to the exporter as necessary and sends the trade documents to the issuing bank. Fourth, when the issuing bank receives shipping documents from the designated bank, it performs document checking to see whether the relevant trade documents meet the terms of the L/C. Although the documents checking work has already been carried out at the designated bank, the issuing bank decides whether its payment obligation is valid or not. In addition, since the UCP and ISBP are used as criteria for document checking, basically the same judgment as the results of the designated bank's judgment is made. If the shipping documents meet the terms of the L/C, the payment obligation will be valid and payment will be made to the designated bank later. Fifth, when the issuing bank has completed the checking of trade documents, the

trade documents are disposed of according to the results. If the trade documents meet the terms of the L/C, they shall be delivered after receiving payment from the importer as necessary.

Table 3. The overall process of L/C and BPO

	L/C	BPO
Workflow	Establishment of conditions → Change of conditions → Presentation of trade documents that meet the conditions → Waiver of the right to refuse a condition → Payment implementation	Establishment of baseline → Change of established baseline conditions → Match or miss match to established baseline condition with data set → Miss match's consent → Payment implementation
Issuance	L/C will normally be established at outset of a transaction	A BPO may be added at any time through a Baseline Amendment
Discrepancies	Release of documents may be withheld by the issuing bank pending receipt of waiver from the applicant	Mismatched may be accepted without delay through mismatch acceptance and role and baseline acceptance
Confirmation	L/C may be confirmed or unconfirmed	Confirmation of a BPO will normally be by way of a separate agreement between seller's bank and seller
Documents	Paper documents only	Data elements are extracted from paper documents

Source: Internal Records

4.2. Confirmation Method and Procedure for BPO and L/C

4.2.1. Comparison of Confirmation Methods between BPO and L/C

The UCP stipulates the promise of the issuing bank and can be defined as "L/C is a document in which the issuing bank promises payment to the exporter in exchange with documents that meet the terms of L/C based on the importer's request and instructions." According to the uniform rules for bank payment obligations (URBPO), the BPO can be defined as "the irrevocable and independent promise of the BPO obligor bank to pay or incur a deferred payment obligation and pay at maturity a specified amount to the BPO recipient bank following the transmission of all matching data sets required by the established baseline.

When the BPO and the L/C are compared, it can be seen that they have the common feature that they are payment obligations made by the bank issuing the BPO (BPO obligor bank) and the bank issuing the L/C (issuing banks). However, a difference is that whereas an L/C per se is a document for payment obligation by the issuing bank, in the case of the BPO, although there is an expression that the BPO is issued, there is no document such as an L/C. In addition, another difference is that in the case of L/Cs, the beneficiary of the payment obligation is the exporter, while in the case of the BPO, the beneficiary is the exporter's bank (BPO recipient bank). However, in the case of BPO obligation transactions, since a comprehensive special agreement on the BPO is made in advance between the exporter and the BPO recipient bank and a separate payment process is made based on the agreement, the same effect as L/C

transactions can be obtained. Therefore, the beneficiary of the BPO is the exporter's trading bank when strictly speaking, but the exporter can be also said to be the de facto beneficiary.

However, although both L/Cs and BPOs are payment obligations by banks, the requirements for payment obligations by banks to become valid are different. That is, in the case L/Cs, trade documents should meet the conditions and should be presented to the issuing bank, while in the case of BPO, the matching of the data set with the established baseline is all that is required. The established baseline here is the information of the so-called sales contract agreed between the exporter and the importer, and the data set is shipping-related information consisting of various trade documents. In order to meet the requirements for validation of the payment obligation according to the L/C and the BPO, respectively, the basic conditions termed L/C conditions and established baseline should be first established. In this sense, both the conditions of the L/C and the established baseline are the basis for payment obligation.

Meanwhile, although the BPO and L/C are different in terms of whether documents are necessary and requirements for validation of payment obligations, both have the common feature that they are payment obligations by banks. In addition, when seen from the aspect of payment obligations by banks, the overall procedures and transaction steps are mostly common. After a sales contract is concluded, in the case of L/C transactions, the basis for payment obligation is established as conditions are established, while in the case of BPO transactions, payment obligation is established according to the established baseline. Thereafter, in the case of L/C transactions, the payment obligation becomes valid when the trade documents have been presented to the issuing bank and the documents meet the conditions. In the case of BPO transactions, the payment obligation becomes valid when the data set matches with the established baseline. Both transactions have the common feature that payments are made by banks after the payment obligation becomes valid.

In addition, in the case of L/C transactions, the condition can be changed after established due to special circumstances, and in the case of BPO transactions too, the conditions can be changed after the baseline is established. In addition, in the case of L/C transactions, even if trade documents that do not meet the conditions are provided, the payment obligation will become valid if the bank renounces the right to refuse payment. In addition, in the case of BPO transactions too, the payment obligation will become valid if the bank approves the relevant discrepancy even if the data set does not match the conditions determined in the established baseline. In any transaction, if the bank responds as such, the payment obligation will become valid and then the payment will be made thereafter.

4.2.2. Comparison of Confirmation Procedures between the BPO and the L/C

A comparison of the payment confirmation procedures for BPO transactions and L/C transactions is as follows. In the case of L/C transactions, document matching is performed twice in total, once at the designated bank and once at the issuing bank, although the purposes are different. On the other hand, in the case of BPO transactions, the TMA automatically compares the data set and the established baseline to make a decision. Also, while BPO transaction involves sending results after matching, L/C transaction does not involve this step. In L/C transactions, each party who needs to know the result of the matching performs the matching by himself to find out the result of the relevant matching. On the other hand, in a BPO transactions, the matching is entrusted to the TMA and the relevant results are notified to the parties who should know the result of matching.

In addition, in L/C transactions, matching data are disposed of after the payment obligation becomes valid, while this step is not accompanied in BPO transactions because the bill of lading, which constitutes part of the trade documents, has a determined form of the right to shipped cargoes so that the issuing bank, which is a payment obligator, holds the trade documents, which function as matching data in L/C transactions, as a security.

An L/C is a payment obligation to the exporter who is the beneficiary of the issuing bank. The L/C is selected as a means of payment in sales contracts between the exporter and the importer, which are consensual contracts and is concretized thereafter when the importer requests the issuing bank to issue an L/C. In addition, as the payment obligation is supplemented in accordance with the 'principle of independence and abstraction', the L/C transaction exerts its true value. That is, the issuing bank makes payment to the exporter, who is the beneficiary, and any problems found under the sales contract are solved through a separate compromise between the exporter and the importer. This shows the form of pay first, confirm later. Meanwhile, since the 'principle of strict compliance' which should supplement L/C transactions is added, the performance of transactions based on the 'principle of independence' may be sometimes threatened. In L/C transactions, situations where whether trade documents meet the terms of the L/C or not is unclear between the parties occur from time to time, and most of the main reasons are that there is room in interpretation in determining whether trade documents are discrepant or not.

In L/C transactions, the payment is processed in accordance with the 'principle of strict compliance,' which does not mean determining whether there is a discrepancy by strictly comparing each wording of trade documents and L/C conditions. The 'principle of strict compliance' does not regard minor discrepancies that do not affect the consensual contract and recognizes the relevant payment as a payment based on the L/C. However, this may create an unclear intermediate zone and leave room for the parties' interpretation to be involved over the presence or absence of discrepancy. In addition, if a dispute arises due to differences in interpretation between the parties, a room for arguments will occur. In particular, disputes may arise between the designated bank and the issuing bank in cases where the payment was made by the designated bank to the exporter before the issuing bank determines whether there is a discrepancy because the designated bank must recover the payment from the issuing bank. Usually, when designated banks receive trade documents from exporters, they withhold their right of recourse and pay the export price. For example, if the payment was rejected by the issuing bank as the issuing bank determines that there are discrepancies, the designated bank can request the exporter for redemption. However, if the designated bank has made payment to the exporter without any discrepancy, the arrow may be turned to the issuing bank, not the exporter. Here, if the designated bank had decided to make payment to the exporter through a negotiation that did not take any risk, at least such a dispute would not have occurred between the designated bank and the issuing bank because the payment from the designated bank to the exporter is made after the issuing bank determined whether there is any discrepancy. In this case, even if the designated bank disagrees with the judgment that there is a discrepancy by the issuing bank, there is no need for the designated bank to raise an objection to the issuing bank unless it has made payment to the exporter.

Meanwhile, in BPO transactions, when the TMA has received the data set sent from the BPO recipient bank, it immediately begins to compare the data set with the established baseline and makes a decision of "data match" or "data mismatch." Since this matching is a mechanical comparison of each wording based on the 'principle of strict compliance' in its

original sense, there is no room for the interpretation of not only the BPO obligor bank but also the BPO recipient bank to intervene. The BPO obligor bank can avoid the obligation to pay the BPO recipient bank if it finds out that the matching results indicated discrepancies. However, if the data match decision has been reached, payment to the BPO recipient bank is mandatory and the BPO obligor bank must accept the result of the decision as a BPO party. If the BPO obligor bank refuses to pay according to the data mismatch decision, there is no possibility that the BPO recipient bank or exporter will object to the result of the decision and demand payment from the BPO recipient bank. That is, first, the BPO recipient bank knows the result of the data matching at the same timing as the BPO obligor bank, and the timing for the BPO recipient bank to pay the export price to the exporter is after the matching stage and does not precede it. Therefore, even if the BPO recipient bank receives the result indicating the data mismatch decision and disagrees with the result of the decision, there is no need to raise objections to the BPO obligor bank unless it has made payment to the exporter. From the beginning, the BPO recipient bank must accept the result of judgment as a party to the BPO.

In a strict sense, an exporter, who is not a party to the BPO, becomes knows the results of the judgment when he is notified of the results of the data matching, and even if the result indicates discrepancies, the exporter cannot raise an objection to the BPO obligor bank because he is not eligible to be a party in his relationship with the BPO obligor bank. Although the exporter is eligible to be a party in his relationship with the BPO recipient bank, it does not make sense for the exporter to raise objection to the BPO recipient bank, which cannot receive payment from the BPO obligor bank due to the discrepancies. In addition, the importer is eligible to be a party in his relationship with the BPO obligor bank but he is not a party to the BPO. Therefore, even if the importer receives the result of judgment on the data matching and disagrees with the result, his objection will not be acknowledged under the special agreement unless the BPO obligor bank imposes the obligation to pay on the BPO recipient bank. Therefore, the importer and the exporter cannot but compromise directly with each other to attempt to solve the problem. As such, in the case of BPO transactions, confrontation between the parties over the results of the matching between the dataset and the established baseline, and the solid basis for proof after prepayment is superior to that in L/C transactions.

4.3. Prospect of the BPO

It is important to understand that the BPO does not simply remain as a model centered on matching functions between information documents but contribute to strengthening corporate competitiveness through time saving and efficiency of customers. It is also a future task to create added value by converging the BPO with banks' payments or other trade service functions. The BPO is a powerful function of added value and has scalability. In addition, since it can be combined with existing services to do many things between banks and companies, it is important to add such functions.

Since the BPO has advantages in companies' development of overseas business in terms of speed, foreign exchange payment risk reduction, finance, rationalization, convenience, and costs, banks, companies, and SWIFT should be united to promote the BPO in various countries around the world. In the future, it is also necessary to increase the added value by cooperation between the digitalization of logistics and the BPO, which is the digitalization of trading, through partnership between trading companies or shipping companies. In addition,

how the linkage of the BPO with the Pan Asian e-Commerce Alliance (PAA), which is the digitalization of customs clearance in Asia, will fuse the digitalization of customs clearance with the digitalization of trade settlement is a big matter to be reviewed. The importance of the systematic fusion of the BPO and the PAA or an interface between the two in business is gradually increasing. In Japan and China, relevant studies have been already conducted with companies, banks and customs clearance, and South Korea should share information and jointly study so that companies can receive services that can be used more conveniently.

As the BPO is put into practical use, when the importer's payment will begin, and how the contents of goods will be checked in the current system where the payment is made when BPO data match with each other are tasks hereafter. Therefore, importers designate reliable specialized inspection companies and shipping companies or customs clearance companies in advance to secure the content or quality of the goods. In addition, studied to make the BPO more smooth by including the foregoing in the service added value of the BPO are important.

It is important to let trading companies that mainly make remittance payments know the convenience of the BPO because the BPO certainly have trade finance functions or incentives to reduce payment risks to exporters based on importer's credit. That is, the key is how to add incentives of using the BPO to trade transactions with the payment condition of remittance payments. In the case of import, the cost of the BPO is a little higher than the cost of remittance payments. However, the BPO has a great advantage of reducing the burden of alternative funds for export finance to exporters. It is thought that there is sufficient value of using the BPO to importers because it can make importers' position in business advantageous so that the importers can ask the exporters for some price reductions. In addition, it is necessary to increase the value of use by studying and reviewing whether the BPO will be added as a service in cash management service (CMS) for additional price reductions.

Banks have thus far handled bills of lading, commercial invoices, packaging lists, certificates of origin, etc. in addition to L/Cs but have not directly handled sales contracts or purchase orders (P/O), which are the sources of transactions. Banks should review the services using upstream information. The e-Commercial Invoice, which is a movement to standardize commercial invoices, is also becoming active, and along with a review of the unification of diverse commercial invoices of various countries, a review of the consistency of different regulations of different countries should be discussed. In addition, in terms of security, if the BPO is quantitatively expanded hereafter, 「electronic authentication and electronic signatures」 that guarantee identity verification, confirmation of one's intention, and prevention of denial will become necessary. Therefore, indisputable organization of a certification base internationally usable is also necessary.

Banks should also make proper management systems for BPO transaction history and access to customers. For example, although BPO transaction history management systems have already been made, the development of a system for interfaces between customers and banks that will leave out the procedure to enter customers' trade data into the BPO system at banks and rationalize the work is also a task hereafter. In addition, in response to the regulations for compliance of laws in foreign exchanges, which are increasing globally, it is necessary to ensure with system measures that there is no omission no matter how the BPO system is linked. It is also important for system development companies strong in foreign exchanges and banks to partner to create a foundation for promotion of more frequent use of the BPO.

Hereafter, banks' trade services should not just include BPO issuance, trade finance, trade settlements, and exchange rate reservations, but should develop products and systems in all sections ranging from signing sales contracts for imports and exports, which are the upstream of trade. The keyword for the development of foreign exchange systems in trade include quickening, automation, simplification, paperless, straight processing, low price realization, information sharing, compliance response to foreign exchange, and global response to supply chain management (SCM). As the BPO is made between countries, its business model should be able to become a global standard. Companies should continue to inform banks of products or services in response to changes in requirements or global trade. As such, companies, banks, and the SWIFT should partner to continue creating better global trade service products.

As examined above, the BPO is widely used among banks in the world and has already become a global standard. In addition, the number of participating companies is also increasing because it is demonstrated that the quickening, simplification, and safety of the BPO lead to innovation in trade service chains in import and export. In addition to supporting exporters with export finance and earlier fund collection, quickening of importers' payments, and early acceptance of cargoes, the BPO's effect for 'just in time' import to enable importing foreign products when necessary only in the quantity necessary is recognized. The ripple effects for business that enable import in accordance with product life cycles, extra inventory compression and office work rationalization are clearly great.

When various countries enter overseas markets, the amount of trade increases more than when they were producing in their home country due to imports of raw materials and parts and export of products, etc. Furthermore, the so-called 「division of labor among various countries」 to construct factories and produce parts at optimal locations in terms of wages, taxes, investment regulations, or quality is becoming active. As such, companies use 「the BPO as a key factor」, which plays the role of a leverage in the development of overseas business, because rapid and efficient trade management of the BPO is essential for trade.

With regard to companies' supply chain management, the innovation of movements of goods is accelerated thanks to the development of maritime transportation and cargo management. With regard to finance, remittance-based payments have increased compared to L/C-based payments in trade transactions because of simplification, cost saving, and rationalization. However, on the other hand, the trade finance and risk reduction functions that had been provided by L/C's have retreated. The BPO solved this shortcoming. The BPO fundamentally reduces the physical processing time of the paper L/C-based payments and provides quickening, simplification, cost-reduction, and rationalization through digitalization and standardization.

In addition, the BPO enabled exporters to make shipments with confidence without worrying about payment risks through negotiation or trade finance functions termed pre and post shipment finance as with L/Cs or payment obligation by importer's bank. With regards to payments, a combination of BPO and cash management service (CMS), which facilitates daily payment, is necessary hereafter. The provision of financial supply chain management (FSCM), in which payments, finance, and risk reduction are organically integrated as such, is a real demand of companies.

Companies can be united with banks to cope with trade digitalization to promote quickening, financing, risk reduction, simplification, and cost rationalization to enable advanced devices or systems for the entire trade in goods and finance so that companies can provide satisfactory services and exert sustained competitive advantages through timely sales

or development of products to end customers. This is a great merit for both large and small companies.

5. Conclusion

It is indisputable that recently, along with the development of information technology, e-trade systems have further developed to greatly contribute to trade facilitation. Therefore, individual countries and e-trade related organizations have been making great efforts for the development and spread of e-trade. In particular, the SWIFT has devised the open account-based TMA of SWIFT and provided services to make interbank settlements safe and provide accurate information through a single platform. In addition, the TMA compares data on trade documents to see whether they match and provides a workflow for the matching process. If this trend continues, a self-evident directivity can be derived indicating that systems for e-payments should be promoted to shift from the suppliers' perspective to consumers' perspective, from system infrastructures to service infrastructures, and from approaches by sector to integrated approaches. The BPO is a contract between an exporter and an importer as with the open account method, which is efficient in terms of cost and time, under which the exporter sends trade documents directly to the importer without going through banks and payment is guaranteed as with L/C by the payment obligation of the importer's bank.

Meanwhile, in the case of the BPO, the importer's and the exporter's bank send related data based on data received from the importer and the exporter, respectively, instead of documents to the computer system of the SWIFT so that the TMA, which is an application for data matching, can check whether the data match with each other. Consequently, in the case of BPO transactions, business handling can be faster than L/Cs because the examination of paper documents required by the L/C method is eliminated. That is, the BPO is an excellent transaction method that combines the certainty of L/C payments and the speed of remittance payments.

Concretely, when seen from the importer's viewpoint, BPO transactions have the advantages of reduction in the manpower required to prepare and review trade documents and being able to handle transaction negotiations with exporters advantageously thanks to the strengths of the BPO. When seen from the perspective of the exporter, BPO transactions have the advantages of enabling swift collection of trade payments and reducing the risk of importer's cancellation of transactions or content changes. When seen from the perspective of participating banks, BPO transactions can strengthen their relations with importer and exporters while enable them to obtain high commission incomes by increasing the proportion of the role of banks, which was reduced, by reducing L/C transactions.

In this study, along with an overview of the BPO, the methods and procedures of the BPO and the payment obligation of L/C transactions were compared and analyzed to examine future prospects. According to the results, first, unlike L/C transactions, the BPO data matching process validates the payment obligation based on only on the results of matching between the established baseline and the data set. As a result, no confrontation occurs between the parties over the relevant results of matching, and BPO transactions are superior to L/C transactions in that it is possible to carry out sure transactions based on the principle of payment first and proof thereafter. In addition, in the procedure for accepting data mismatch, unlike L/C transactions, a judgment on confirmation of payment obligation is

made in consideration of the intention of the importer. Therefore, BPO transactions can be said to be superior to L/C transactions in that flexible document disposition is possible in response to the situation after payment as long as trade documents are in the hands of the exporter.

Finally, the BPO fuses payments with other trade service functions with added value and has advantages in terms of speed, convenience, reduction of foreign exchange settlement risk, and cost savings. Therefore, cooperation between banks, importers, and the SWIFT should be strengthened for more convenient use in various countries. In addition, trade-related organizations should acquire knowledge on the Uniform Rules for Bank Payment Rules (URBPO) as soon as possible, and world-level efforts are needed to quickly spread the BPO institutionally.

The BPO enabled exporters to make shipments with confidence without worrying about payment risks through negotiation or trade finance functions termed pre and post shipment finance as with L/Cs or payment obligation by importer's bank. With regards to payments, a combination of BPO and cash management service (CMS), which facilitates daily payment, is necessary hereafter. The provision of financial supply chain management (FSCM), in which payments, finance, and risk reduction are organically integrated as such, is a real demand of companies.

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