跨境金融物流服务创新及保税物流园区个案分析

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Service Innovation in Cross Border Financing Logistics Management with a Case Study on Bonded Logistics Parks

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Abstract: In the middle of current finance tsunami, there demand measures from the governments across the border between Hong Kong and Mainland to alleviate the financing difficulties faced by the Hong Kong invested enterprises in Pearl River Delta (PRD). The paper describes the issues surrounding how innovative logistics techniques can be used to overcome border barriers to provide financing services to Hong Kong invested Processing Trade Enterprises (PTE) in PRD. The problems are identified for cross board financing. An analysis tool through risk transfer diagram is developed for service identification. Different financing instruments are reviewed using the tool developed in which the necessary financing logistics functions are identified. Service architecture is given for these financing logistics functions. A case study for cross border financing development in the context of bonded logistics parks shows that a cross border financing logistics park could be a viable approach to facilitating cross border financing development.

Key words: bonded logistics park; cross border; collateral management; financing logistics; service innovation

Processing trade, playing an important role in China’s economic development, accounts for 47% of her total foreign trade and creates an accumulated 30 million jobs[1]. Processing trade is also a major production mode for many Hong Kong small and medium sized enterprises (SME). In PRD region alone, about 45,000 Hong Kong invested PTEs account for over half of Hong Kong’s re-export trade[1]. Recently, China has decided to make adjustments to its processing trade policy in response to changing circumstances. PTEs therefore are forced to upgrade and transform in order to survive. This paper examines service-innovating financing logistics to help those SMEs to prepare for transform and upgrade in the middle of current finance tsunami.

1 Introduction

Facing current finance tsunami, main economy of major world powers already shows the sign of recession. Hong Kong, with economy heavily relying on international trade, growingly feels the pain. Due to trade oriented structural characteristics in its economy, Hong Kong is predicted to suffer economy drawback in 2009, said by its Chief Executive Sir Donald Tsang Yum-Kuen. Enterprises, especially small and medium sized ones, are hit and facing great difficulties in financing their operations. Hong Kong government recently announced \$100B loan scheme to cover all non-listed firms. However, further measures have to be undertaken by the Hong Kong government, working with the central government to alleviate the difficulties faced by Hong Kong PTE enterprises in PRD, which are struggling to upgrade and transform in order to survive responding to China's trade policy adjustment.

The paper describes the issues how innovative logistics techniques can be used to overcome border barriers to providing financial services to Hong Kong invested PTE enterprises in PRD. A tool for cross border financing analysis through risk transfer diagram is developed to identify essential financing logistics services, paving the way for service implementation of cross border financing.

The rest of the paper is organized as follows. In Section 2, background information is presented for cross border financing. In Section 3, risk and gap analysis is conducted. Risk transfer in different financing instruments is reviewed in Section 4. In Section 5, cross border financial logistics functions are identified. In Section 6, the service architecture of cross border financing is presented. After a case study in Section 7, Section 8 concludes the paper.

2 Background

PRD is a region where Hong Kong enterprises favor to do business as its close geographical proximity to Hong Kong. While Hong Kong enjoys the One China, Two Systems policy, it presents unique features in pursuing cross border financing. At present, very few Hong Kong PTEs are able to borrow money in the mainland because mainland banks do not hold their credit information and these PTEs often don't hold qualified collaterals. Cross border financing emerges to be a promising tool. However, prior to that, governments across the border have to work together to provide an enabling legal and regulatory environment to ensure enforceability of contracts and timeliness of dispute settlement across the border. This legal environment is crucial for the development of the cross border financing systems to Hong Kong invested PTEs in PRD. Based on that, market solutions for cross-border settlement such as ownership rights, bankruptcy, and transferability would start to develop.

With the signing and implementation of Closer Economic Partnership Agreement (CEPA) between Hong Kong and Mainland, it has been becoming smoother for cross border business and trade. However, the difficult situation of seeking financing from local Mainland institutions by the Hong Kong invested PTE enterprises in PRD has basically remained unchanged.

Most of the Hong Kong-invested PTEs in the PRD are small and medium sized and labor-intensive [1]. They are in low-end industries, with low capitalization, in relatively low technological conditions [1]. With the emphasis now on environmental protection and high technology development in China's trade policy, many of these Hong Kong invested enterprises have been losing their competitiveness, causing lending institutions hesitating in their financing decisions.

Compared to PTE, it is reported that it is easier for foreign-invested enterprises to borrow from Mainland banks. Conversion from this category of "processing with overseas-supplied materials" to "foreign-invested enterprises" seems an approach for PTE to consider. However, the conversion takes time and capital as well. And it has considerable impact towards current Hong Kong trade platform.

The Hong Kong government is now working with cross border counterpart seeking ways for Hong Kong invested enterprises for financing in the mainland. In early December 2008, the Chief Executive of the Hong Kong Monetary Authority (HKMA) said that officials are speeding up the process which allows firms to get collateralized loans across the border. Earlier in November, he already mentioned that lenders could use their assets in Hong Kong as collateral if they had no qualified assets in the mainland, and the HKMA could act as a custodian for the cross border counterpart [2].

3 Risk Analysis

There are technical problems regulators across the border need to sort out before the cross border financing scheme can be implemented. First, credit information on Hong Kong firms in Hong Kong is unavailable to mainland banks. Second critical issue is the risk associated with the collateral. "If a bank is not able to repay its loans, how can it give the money to the mainland bank after selling its collateral in Hong Kong?" said Mr. Yam of HKMA [2].

Thus, there has to be some mechanisms in place for borrowers, lenders and other market participants to identify and manage risk. The mechanisms should give them the capacity of managing risk. A selection of tools to efficiently and effectively manage their risk has to be provided. To meet this demand, a financing analysis tool through Risk Transfer (RT) diagram is developed to identify the gaps for cross border financing.

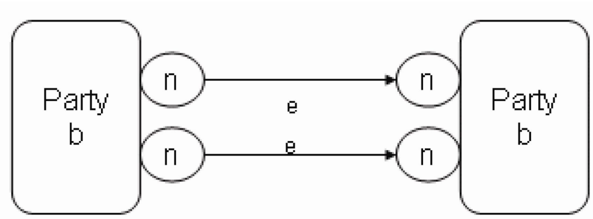

Fig.1 Risk transfer diagram

An RT diagram (shown in Fig.1) consists of a set of Blocks (B), Nodes (N) and Edges (E).

• A block b in B represents a party in the risk transfer analysis.

• A node n in N is connected to a block, representing a risk type.

• An edge e in E is connecting two nodes, which correspondingly connects with a block.

• Direction of each edge denotes the risk transfer direction.

• Block with starting node of the edge is the risk initiator. Block with ending node of the edge is the risk accepter.

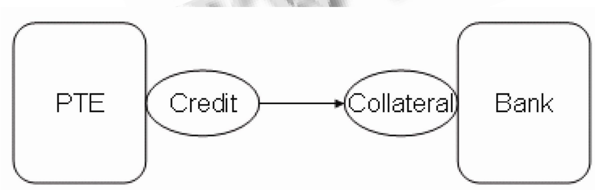

Fig.2 Risk analysis in PTE financing

As shown in Fig.2, a PTE enterprise in PRD is seeking financing from a local bank. However, due to lack of credit, a PTE is hard to get a loan from a local bank. Thus, this PTE has to transfer this credit risk to the bank in order to get financed. Towards this, a collateral scheme could be designed in which a PTE can reach a collateral arrangement with the bank. However, due to cross border financing problem, e.g. in cross border collateral management, this collateral in Hong Kong is often associated with risk which is difficult to be mitigated by the bank in the PRD. Thus, in the RT diagram, the collateral risk node in Fig.2 is intentionally marked as not solid. As illustrated, this RT diagram is able to show the risks in the cross border financing and risk transfer analysis could be conducted based on it.

4 Financing Instruments

The collateral based loan financing mentioned earlier is a traditional credit based financing instrument for risk transfer. The financing scheme would be more attractive and efficient if it considers the factor of cross border trade, although this would make it more complicated. Hong Kong is a city for cross-border trade on which many companies are based to source and distribute goods and services internationally. In the cross border trade, financing and settlement are handled through correspondent banking relationships across the border. Thus, it would be beneficial to understand the risk transfer in trade financing instruments before we move on to design an efficient and effective cross border financing scheme. The following is a risk review of typical financing instruments in literature and practice[3-5].

4.1 Warehouse financing

Warehouse financing is a collateral based financing wherein funds are secured by underlying commodities. It involves warehouse receipts including a certificate of pledge and a certificate of title Certificate of pledge, the crucial elements for risk mitigation. In warehouse financing, the commodities for collateral are kept in an independently controlled warehouse to secure financing.

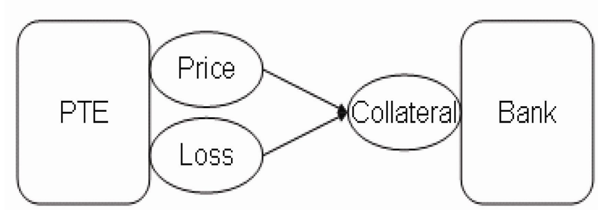

Fig.3 Warehouse financing risk transfer

In warehouse financing (see Fig.3), a PTE can potentially shift its risk in price fluctuation and potential loss in the warehouse asset to the bank.

4.2 Repurchase agreements

In a Repurchase agreement, financial security is used as collateral for financing. As shown in Fig.4, the PTE agrees to immediately sell a commodity based security to a bank and also agrees to buy the same security from the bank at a fixed price at some later date. In repurchase agreement (in Fig.4), a PTE can potentially shift its risk in commodity price to a bank.

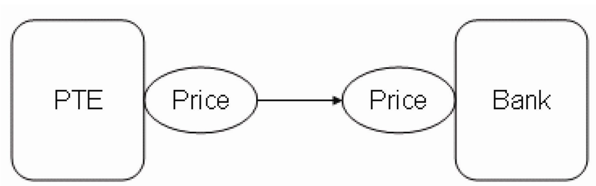

Fig.4　Repurchase agreements risk transfer

4.3 Export receivables financing

In export receivables financing, funds are paid out to an exporter against assigned import contracts of commodities from an importer. Bank will finance exporter's operation and take its export receivables at a discount. Meanwhile, the bank will enter into a contract with the import based on importer's import contract such that the import would remit the money in the condition set by the contract between the bank and the importer.

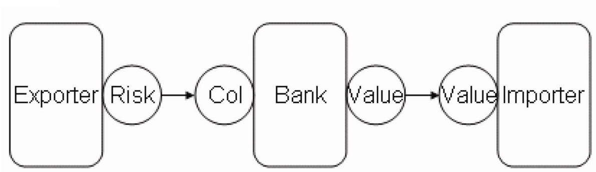

Fig.5　Export receivable financing risk transfer

In export receivable financing (see Fig.5), an exporter can shift its value risk in account receivable to a bank. The bank can then shift its value risk in collateral to the importer.

4.4 Factoring

In a factoring, a supplier sells its account receivables from sales contracts to a factor (i.e., a broker such as a bank)at a discount. The factor can provide finance for the supplier and wait for payment from the buyer.

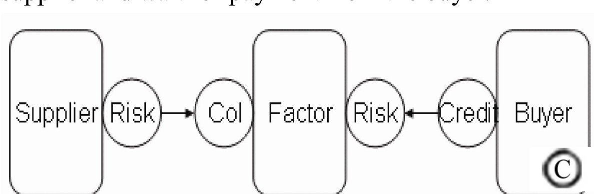

Fig.6　Factoring risk transfer

Similar to export receivable financing, in factoring (see Fig.6), a supplier can shift its value risk in account receivable to a factor. At the same time, the factor will also gain risk by offering finance to supplier based on Buyer's credit.

4.5 Islamic trade financing

Islamic trade financing recently emerges to be a good tool to develop in Hong Kong as economy power in Islamic area develops rapidly. In Islamic trade financing, a lender (e.g. bank) has to share potential profits and losses with the enterprise for which the money was lent. A typical financing case is that an Islamic bank would purchase the commodities in its own name and then sell them to the end buyer, often at an agreed mark-up in order to make profit. In Islamic trade financing (see Fig.7), an enterprise can shift its value risk in commodity to a bank. The bank then has to share the value risk in the commodity.

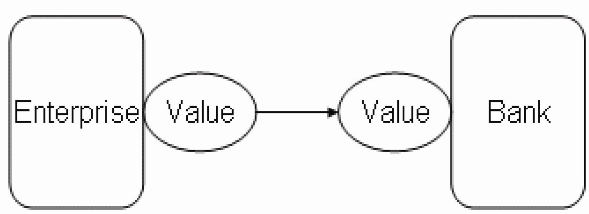

Fig.7　Islamic trade financing risk transfer

5　Cross Border Financing Logistics

Are these financing instruments relevant and applicable to Hong Kong invested PTE in PRD Based on the previous risk transfer analysis, those financing instruments generally require the following cross border financing logistics facilities in order to ensure a good financing environment in PRD for PTEs.

• Establishment of good historical credit information. Without good credit information, lender could face big credit risk in their financing operation. Result is observed that PTE in PRD is difficult to get financing from local banks.

• Market solution for risk transfer in collateral management. In some of the financing instruments, collateral is offered to help lenders to mitigate potential risks. However, lender, while being able to shift its risks to buyers in some cases (e.g. export receivable financing, factoring), has to seek market solutions to help manage the risks associated with those collaterals (e.g. warehouse financing, repurchase agreement).

• Mobilizing cross border collaterals. In some of these financing instruments, collaterals often are marketable assets since their value is much easier to determine. In cross border financing, very few non marketable assets are considered to be collaterals due to inefficiency in financing operations. Efficient mobilization of these collaterals helps establishment of cross border financing.

• Fraud prevention. Fraud poses serious problems in some of these financing instruments (e.g. factoring). Frequent fraud often involves bogus receivables and nonexistent customers.

It could be easily perceived that establishment of an efficient cross border financing environment relies on a good electronic cross border financing logistics infrastructure. The financing logistics shall help ensure efficient cross border financing operations under an enabling legal and government environment established across the border.

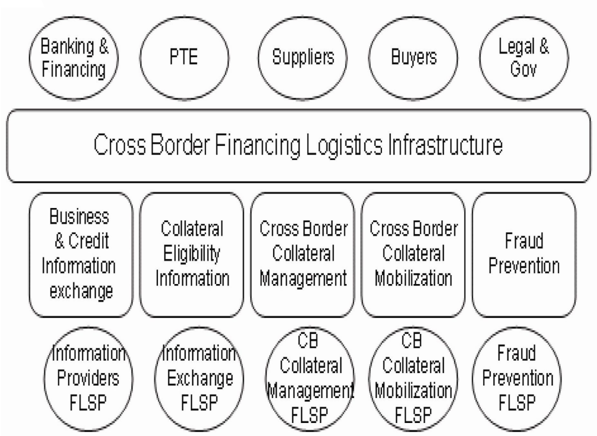

Fig.8　Cross border financing logistics architecture

6　Financing Logistics Service Architecture

The typical participants in cross border financing include PTEs, banking and financing institutions, traders, and logistics service providers. Current process trade in the PRD region is a typical SME-centric business environment, although there are a few big banking and financing institutions. Logistics service providers in PRD region are also SME dominated.

It can be seen although banking and financing institutions play dominating role in financing decision making, the financing logistics have to be supported by a new type of Financing Logistics Service Providers (FLSP) to offer their services to ensure cross border financing logistics. That is to say the cross border financing logistics have to consider these features and requirements towards designing an efficient e-infrastructure. This financing logistics service provider perspective helps establish the following e-infrastructure architecture (see Fig.8). As shown in Fig.8, there are the following components in the cross border financing logistics architecture:

• Participants: including banking & financing institutions, PTE, suppliers, buyers, legal and government entities.

• Service infrastructure: enabling infrastructure for cross border financing logistics including service provisioning and delivery.

• Business functions: including information and information exchange, cross border collateral management and mobilization, and fraud prevention.

• Financing logistics service providers.

This cross border financing logistics architecture allows flexible yet affordable financing logistics function provisioning as well as delivery capabilities fitting to business operation environment, with the following methods to be provided.

• Service identification methods. Methods will be developed through risk transfer analysis to identify cross border financing logistics service functions.

• Decomposition method of services identified. The services identified are classified and decomposed into different functional areas such that service function could be provided by a single financing logistics providers in that functional area.

• Method to identify appropriate ways to offer and provide cross border financing logistics functions.

7 Case Study-Bonded Logistics Park

7.1 Bonded logistics park

A Bonded Logistics Park (BLP) is an independent enclosed zone in which direct interactions between the bonded area and the port are allowed. This so called "zone-port interaction" allows the bonded logistics park to have embryonic functions of bonded warehousing, cargo-handling and transport to a linked port. In some places in China, a bonded logistics park is even merged with other free trade zones like export processing zone to further facilitate modern logistics development and international free trade. By integrating export processing, international trade, logistics, and port operations, and simplified customs declarations, BLP allow more convenient, efficient logistics and production activities including import, export, sourcing and procurement, transfer, consolidation and distribution. Furthermore, in the bonded logistics parks, Value Add Tax (VAT) export refunds could be granted to eligible enterprises.

7.2 BLP for cross border financing

In cross border financing, there needs a number of financing logistics service providers contributing to various logistics functions including information exchange, collateral management and mobilization, and fraud prevention.

Is BLP is a good place suitable for these cross border financing logistics operations? A straight answer is that BLP has several advantages over other normal industry parks, taking advantage of and subject to China trade policy and legal systems:

• BLP is created for international free trade. Enterprises in a BLP received special treatment regarding materials importing and exporting. Goods entering a BLP is considered as export. Thus theoretically, goods exporting to Hong Kong could be considered in Hong Kong already when it is a BLP, at least from Customs point of view. Similarly, goods importing from Hong Kong could be considered in the BLP already assuming goods is under good supervision. Thus, BLP can serve as a good collateral management platform across the border between Mainland and Hong Kong.

• Goods can be freely circulated in a BLP. This provides good foundation for efficient mobility of cross border collaterals. As BLP is supervised by China Customs, local banks would have more confidence when collaterals are managed in a BLP instead of in other places such as Hong Kong.

• BLP could serve as a good platform for fraud prevention as well. Bonded logistics parks are supervised zones. Supervision infrastructure tends to be better than other normal places in China.

7.3 Cross border financing logistics development

Let's show a how cross border financing could happen in a BLP. Towards this purpose, An RT diagram is developed for risk transfer analysis in a BLP for cross border financing, assuming all the enterprises, banking and financing institutions, and financing logistics service providers, etc. are either located in the BLP or have a proxy agent in it. The case, for easy illustration, is also limited to price risk transfer for suppliers to mitigate its risk on commodity price using collateral based financing. From the RT diagram, interactions among those participants could be documented as follows:

• Suppliers can potentially shift its commodity price risk to a bank.

• Suppliers can also potential shift its commodity price risk to a FLSP, if both of them entering into such a contract for FLSP to manage the cross border collaterals.

•The bank can potential shift its collateral risk to the buyer, if bank takes collateral from the buyer to finance the supplier.

• FLSP can also shift its risk of collateral being managed to a bank if both of them entering such a financing contract based on the collaterals managed by the FLSP.

•The buyer can potentially shift the value risk of the commodity to a FLSP if the FLSP is contracted by the buyers to transport the commodity and the FLSP takes the commodity transported as collateral.

BLP as a logistics park provides many logistics functions already. With support from both governments across the border, BLP would have the potential for further development into a cross border financing logistics park, evolving into a Hong Kong Industrial Park (HKIP). A Hong Kong Industry Park is said to be a new mode in consideration by Hong Kong government to support those Hong Kong invested enterprises in PRD for industrial upgrade and transformation. It would retain and support those enterprises that are willing to stay in the PRD region for their industrial upgrade and transformation. It would also assist them to sell their products in the domestic market.

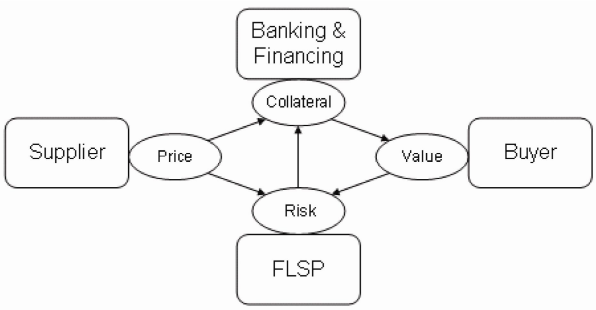

Fig.9 Risk transfer in BLP

8 Conclusion

Transformation and upgrade needs capital and time. Market potential and financial resources are the major two concerns for those Hong Kong invested enterprises in PRD. Thus, Hong Kong government is urged to take proactive role in helping them access financial resources, technology know-how, and market intelligence information. Some of these companies in PRD are considering relocation away from PRD. This would pose serious impact to current Hong Kong trading service platform including freight forwarding industry. Among them, a large number of enterprises have mentioned they would start shifting away their offices or downsizing their presence in Hong Kong if situations remain unimproved.

Now it is a critical moment to innovate technologies and solutions for Hong Kong invested enterprise to transform and upgrade while in consistency with China's new processing trade policy. Among them, cross border financing technology and solution innovation is particularly important as to improve the financing situations for Hong Kong invested enterprises in PRD and to help them retain the employment in the middle of current finance tsunami. This paper is one of such efforts in service innovating financing logistics for cross border financing:

• Through RT diagram in risk transfer analysis in cross border financing instruments, cross border financing logistics functions needed are identified. Those functions are further developed as financing logistics services.

• The services identified are classified and decomposed into different functional areas such that service function could be provided by a single financing logistics providers in that functional area.

• It is also explored that method to identify appropriate ways to offer and provide cross border financing logistics functions.

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