The Financing Role of Factoring in China Context

CHEN Shuzhen[a,*], LIANG Liang[a], ZHAO Zheng[a]

[a] School of Management, University of Science and Technology of China, Hefei, China.
*Corresponding author.

Supported by the National Science & Technology Pillar Program during China’s twelfth five-year plan period (2014BAH27F00).

Received 13 May 2014; accepted 10 July 2014

Abstract
Most enterprises in China face a severe challenge of financing, but have a large amount of receivables at the same time, trapped in a “receivable-payable double high” situation. Traditional factoring is the most advantageous solution in comparison with other policies in terms of management effect, but need to be remodeled to adjust to the particular context of China. The circulation of receivable creditor’s right (CRCR) is an innovative financing mode converting enterprises’ receivables into liquid assets, with pilot projects launched in Hefei and Tianjin City in China. Through CRCR, enterprises’ financing needs can be immediately satisfied by transferring a certificate to any other enterprises for cash. CRCR can also address the debt chain problem prevalent in China and improve the trading efficiency by transferring certificates directly through the supply chain. Going forward, there is a great need to develop pricing mechanism, appraisal system, and safety precaution for this circulation mode.

Key words: Factoring; Double high problem; Circulation of receivable creditor’s right (CRCR); Debt chain

1. THE “DOUBLE HIGH” PROBLEM IN CHINA CONTEXT

As trade credit expands in China, enterprises mostly cannot get the payments in time for making up for consumption in production or operation, and inevitably run into a shortage of funds. In order to maintain the continued production, they have to purchase material on credit from suppliers or depend on bank loan, suffering a great loss due to the heavy debt service cost. At the same time, they possess a large amount of accounts receivable which is not put to good use. As shown in Figure 1, average accounts receivable in enterprises in the city of Hefei amounted to 117 million in 2010 and increased by 30% during 2011 and 11% during 2012. And this increasement is accompanied by the augment of accounts payable, creating a “receivable-payable double high” situation.

![Figure 1](http://www.cscanada.net/index.php/ibm/article/view/5261)

The “Receivable-Payable Double High” Situation

The “double high” situation can cause a complicated debt chain and aggravate enterprises’ financing dilemma. As illustrated in Figure 2, the manufacturer (M) purchases material from the supplier (S) for manufacture, and the wholesaler (W) buys products from the manufacturer...
and then sells goods to the retailer (R). Suppose all transactions in the supply chain are carried out on credit, the wholesaler possesses a large amount of receivables from the retailer and owes massive payables to the manufacturer. In the continued production, the manufacturer has no funds to purchase or repay materials, and has to increase its debt level to keep on producing and operating. Therefore, the debt between wholesaler and retailer results in a debt chain corresponding to the supply chain, and renders the wholesaler and the manufacturer in a “receivable-payable double high” situation. And financial problems in downstream enterprises will also cause a financing dilemma in upstream enterprises which have substantial amount of receivables left unused.

![Figure 2: The Debt Chain Along the Supply Chain](image)

2. **THE ADVANTAGES OF FACTORING TO SOLVE THE “DOUBLE HIGH” PROBLEM**

To solve the “receivable-payable double high” problem, it is crucial to take full advantage of receivables to finance the production cycle. Mian and Smith (1992) assigned various responsibilities of the credit-administration process to the receivable management policies including general corporate credit, accounts receivable secured debt, captive finance subsidiary, factoring, credit-reporting firm, credit-collection agencies and credit insurance, and further analyzed policy-choice determinants empirically. Based on the receivable management policies in their study, we analyze the comparative advantages of factoring to solve the “double high” problem. As the “double high” problem affects enterprises’ working capital, liabilities and profit, the policies will be compared in these terms to investigate the management effects of various policies. The management cost and accessibility are also examined for most enterprises are constrained by their credit quality in the process of financing.

We classify the policies into two categories: principle management policy and ancillary management policy. The principle policies manage receivables in a comprehensive and holistic management way from financing, credit assessment and collection to credit risk bearing, and include accounts receivable secured debt, captive finance subsidiary and factoring. Captive finance subsidiary satisfies parent enterprise’s financing need by issuing debt, which cannot improve enterprise’s debt capacity but just permits a greater use of debt (Roberts & Viscione, 1981). Through accounts receivable secured debt, receivables are actually transformed into collateral which can be considered as a compensation for enterprises’ credit risk (Jiménez, Salas, & Saurina, 2009) and can facilitate their access to bank loan (Berger & Udell, 2006). Factoring is “selling” rather than “borrowing”, with factors providing professional service of financing, credit protection, collection and risk assumption (L. Klapper, 2006). And it is especially attractive to small and medium enterprises in developing countries for it does not rely on information about the “borrower”, but rather on the obligor (Beck & Demirgüç-Kunt, 2006).

The ancillary policies only provide support to the receivable management on certain aspects and include general corporate credit, credit-reporting firm, credit-collection agencies and credit insurance. General corporate credit is actually one of the policies widely adopted by enterprises in China. They keep regular operation in debt, mainly depending on bank loan which is associated with the fast growth of enterprises in China (Ayyagari, Demirgüç-Kunt, & Maksimovic, 2010). Credit-reporting firm supports enterprises’ credit assessment by providing credible and comprehensive information to enterprises, and this can also improve the collection of receivables (Brown & Zehnder, 2007). Credit-collection agencies help enterprises with credit collection by telephone, mail or even litigation (Gür-Ali & Wallace, 1995), which may stir up customers’ discontent (Chan, 2006), and cause adverse effects to the client relationship (Stueben, 2010). Credit insurance provides credit protection to enterprises’ receivable and can also help prevent moral hazard and improve their credit access (Camino & Cardone, 1999). Table 1 compares the advantages of various policies in terms of financing, liabilities, profit quality, management cost and accessibility. Captive finance subsidiary, accounts receivable secured debt and general corporate credit will increase enterprises’ liabilities because their financing sources come from subsidiary debt or bank loan, whereas factoring is related to “selling” receivables and is advantageous to control the level of liabilities. Moreover, factoring avoids the detrimental effect of debt service cost.
on the quality of profit. Captive finance subsidiary and factoring are more efficient than other policies in financing receivables or production cycle as both accounts receivable secured debt and general corporate credit can only provide financing after a complicated approval process which takes quite a long time. The other three policies have no direct relevance to financing or borrowing, but can contribute to the collection of receivables and thus enterprises’ financial situation, solvency and profit quality. Roughly speaking, factoring and captive finance subsidiary have the highest fee, followed by accounts receivable secured debt and general corporate credit. Factoring and accounts receivable secured debt are mainly based upon the credit quality of receivable, and are therefore accessible to all the enterprises regardless of enterprises’ credit standing. Captive finance subsidiary is generally adopted by credit-worthy enterprises with tremendous capital strength. The credit-collection agency is the most widespread policy but also the last one that enterprises would adopt. Both the cost and availability of credit-reporting firm depend on the openness and robustness of credit and information system. The credit insurance fee is comparatively low and can almost be neglected, but it also has strict requirements for policy holders. According to the overall management effect, it can be seen that factoring is the most advantageous solution in comparison with other policies.

### Table 1
Comparison of Various Policies in Terms of Management Effects

<table>
<thead>
<tr>
<th>Management policies</th>
<th>Financing</th>
<th>Liabilities</th>
<th>Profit quality</th>
<th>Management cost</th>
<th>Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principle Policies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captive finance subsidiary</td>
<td>+++</td>
<td>-</td>
<td>-</td>
<td>+++</td>
<td>-</td>
</tr>
<tr>
<td>Accounts receivable secured debt</td>
<td>++</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>++</td>
</tr>
<tr>
<td>Factoring</td>
<td>+++</td>
<td>+</td>
<td>0</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td><strong>Ancillary Policies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General corporate credit</td>
<td>++</td>
<td>-</td>
<td>-</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Credit-reporting firm</td>
<td>+</td>
<td>+</td>
<td>++</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Credit-collection agencies</td>
<td>+</td>
<td>+</td>
<td>--</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Credit insurance</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note: “+” denotes a high level or a positive influence, and the level becomes higher and higher or the influence becomes greater and greater from “+”, “++” to “++++”. “−” denotes a low level or a negative influence and “−−” denotes a lower level or more negative influence. “0” and “?” denote no influence and unknown respectively.*

### 3. CHALLENGES OF FACTORING TO SOLVE THE “DOUBLE HIGH” PROBLEM

Factoring has developed rapidly in China as shown in Figure 3. Data from Factors Chain International (FCI) show an increase in both factoring volume and its share in Asia and World. Factoring in China keeps growing steadily in volume from 2004 with a jump in 2010. This fast growth directly brings a huge expansion of factoring volume, making China one of the leading factoring markets worldwide. As it shows, China’s share of factoring operations has been rising constantly in Asia as well as in total world. Though factoring industry in China grows significantly, the factoring service is mainly provided by banks that favor trading with creditworthy large companies. Moreover, the incomplete credit information bureau and prudent monetary policy also bring challenges to the “double high” problem in China context.

Generally, factoring is only available for the firms that fit the specific profile (Soufani, 2000, 2002a, 2002b). Particularly, smaller and younger firms in manufacturing and associated industries are more likely to access factoring, and factoring services tend to be found in limited companies rather than partnerships or sole proprietorships (Soufani, 2001). And factoring is more likely to be used when firm’s producing goods have a collateral value, and product demand is stable (Summers & Wilson, 2000).

Though factoring business in different countries or areas develops in various ways (Bakker, Klapper, & Udell, 2004; Ioana, 2006; L. F. Klapper, Sarria-Allende, & Sula, 2002; Vasilescu, 2010), most developing countries share these challenges. And traditional factoring is no longer efficient under these challenging conditions and needs to be remodeled to adapt to specific contexts (Alferink, 2010; Klapper, 2006; Papadimitriou, Phillips, & Wray, 1994). Papadimitriou, Phillips, and Wray (1994) proposed community-based factor for developing countries based on the analysis of its specialization in comparison with that of megafactor and niche factor. And Klapper (2006) suggested reverse factoring as an advantageous factoring type for developing countries, which was further analyzed by Alferink (2010). And we present an innovative factoring technology—circulation of receivable creditor’s right (CRCR) which aims to solve financing problem under the particular context of China.
4. CIRCULATION OF RECEIVABLE CREDITOR’S RIGHT

The CRCR is an innovative financing mode to convert enterprises’ receivables into liquid assets, with pilot projects launched in Hefei and Tianjin city in China. This circulation mode is conducted by a state-owned company to help enterprises (especially small and medium enterprises) finance at a low cost and in an efficient way and settle the debt chain problem meanwhile. But the government will not be burdened by this circulation mode, because its key role is providing a platform rather than fund support for enterprises. This platform guaranteed by government enhances mutual trust between enterprises and provides a certificate for enterprises’ account receivable, and enterprises can transfer this certificate to other enterprises for cash or provide it as collateral for bank loan. Moreover, enterprises can directly invest in new production or pay material expense with this certificate. This transfer of the certificate is actually the “selling” transaction of receivables. Enterprises sell their rights of account receivable (i.e., the certificate) to investors or suppliers but at a lower cost than in traditional factoring. Therefore, the circulation mode not only avoids complex audit procedure and long auditing process in account receivable secured debt, but also complements traditional factoring transaction in the low-cost area.

However, this circulation mode may still be hampered by some risk events, and it needs a sound precautionary system to ensure its sustainability and stability. There are three main risks impeding the implementation of the circulation mode, including operation risk, liquidity risk, and credit risk. Operation risk is associated with internal or external fraud and deficient control system; liquidity risk refers to the certificate’s transferring risk and the collateral’s depreciation risk; and credit risk is the risk that the applicant fails to repurchase certificate. Among all of them, operation risk is the most disastrous one that may result in collapse of the circulation system, and requires a stringent control system to monitor the whole circulation process. While the liquidity risk is directly related to the credit quality of certificate, the credit risk may affect the amount applied for certificate.

4.1 The Mechanics of the CRCR

As mentioned before, most enterprises in China face a severe challenge of financing, but have a large amount of account receivable at the same time. The account receivable asset is difficult to be liquidated into cash before it is due, which may cause a shortage of funds and a complicated debt chain. The CRCR can address both the financing problem and the debt-chain problem in China context.

As shown in Figure 4, there are three procedures in the circulation mode, including issue, transfer, and repurchase of the certificate. In the issue procedure, the creditor (for instance, the wholesaler) applies a certificate for its account receivable from the state-owned management company, with guarantor or collateral provided for this application. The management company will accept or reject the application after assessing both the credit quality of account receivable and the value of collateral provided. Once the application is approved, the management company will charge a certain service fee, and issue a certificate for the wholesaler.
In the transfer procedure, the creditor can pay its debt (to the manufacturer) with this certificate, and the manufacturer can further use this certificate to pay material expenses or transfer it to other enterprises for immediate cash. They can also provide this certificate as collateral to apply bank loan. Therefore, if the certificate is transferred through the supply chain, the debt chain can be curtailed to only one obligatory relationship between the applicant and the holder.

When the certificate is due, the retailer receives the amount for goods, and pays off the amount in the certificate. However, if the retailer is not able to fulfill this payment, the applicant (i.e. the wholesaler) should still repurchase the certificate. And if the wholesaler cannot afford the repurchase, the management company will settle the repayment by disposing the collateral provided by the retailer or through insurance claims.

4.2 The Advantages of the CRCR

In the CRCR, the right of receivables is transferred by a trading certificate rather than in cash, and the trading is based on not only the credit quality of account receivable but also the value of collateral. It may be particularly beneficial in China context. As previously discussed, the traditional factoring is mainly based upon receivable’s credit quality which is difficult to assess in China due to incomplete credit information system. The CRCR has an additional guarantee of collateral, which makes small and medium enterprises more credible in the transaction and breaks down traditional factoring’s confinement to creditworthy large companies. And the CRCR is conducted on basis of right certificate which is free from cash limitation. Moreover, the transfer of certificates between debtors and creditors can help settle obligations and solve the debt-chain problem. The debt chain problem can be effectively mitigated by transferring certificate through the supply chain.

The CRCR is an advantageous financing technology for small and medium enterprises for a number of reasons. First, the small and medium enterprises are not constrained by their opaque credit information since the circulation mode is based on the credit quality of account receivable and the value of collateral rather than the creditworthiness of applicants. Second, small and medium enterprises’ financing needs are immediately satisfied by transferring the certificate. Since the certificate can be transferred to any other enterprises for cash or be
collateralized for bank loan, small and medium enterprises can easily and quickly obtain the funds needed for reproduction and operation. Third, the certificate can also be directly transferred to the supplier for merchandise purchase, which can eliminate many costly and time-consuming middle stages such as raising purchasing funds and avoid troublesome auditing procedure and the loss of trading opportunities. Therefore, the transfer of certificate not only expands small and medium enterprises’ financing channels, but also improves their trading efficiency. Fourth, the financing cost is comparatively low, including management fee, cash deposit and insurance premium.

The debtors of accounts receivable may benefit as well. They can negotiate better terms with their suppliers, demanding a longer credit period. The circulation mode is also beneficial for the enterprises that accept the certificate. In a certain sense, the certificate is a riskless investment, and provides an opportunity for enterprises’ spare money. Moreover, if the certificate is accepted as a payment method, the trade between enterprises and their customers can be greatly improved in efficiency.

And for banks, the advantage is that they can develop relationships with poor credit-quality enterprises or small and medium enterprises without taking additional risk. Thus, the banks are able to build a credit history on these enterprises, which may promote additional loan transactions. And the management company can also build a credit history on small and medium enterprises in the CRCR, which may lead to additional lending to small and medium enterprises and improve the credit and information system.

### 4.3 Potential Risks of the CRCR

The risks of circulation mode will be analyzed on basis of enterprise risk management (ERM). ERM is a framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to help businesses and other entities effectively identify, assess, and manage risk. ERM can manage not only the quantifiable risks, but also the non-quantifiable risks which are not incorporated in risk silo management, integrated risk management, and risk and value management (Mikes, 2005). Moreover, ERM avoids duplication of risk management expenditure by integrating decision making across all risk classes, and its implementation has a positive relation with firm value (Hoyt & Liebenberg, 2011). Therefore, ERM can provide a integrated analysis of the risks in the CRCR, and contributes to building a sound risk precaution system.

Based on the procedure of the CRCR, risk events in circulation mode are analyzed systematically in the risk framework (as shown in Table 2). The risks of the CRCR can be classified into three main groups based on sources: operation risk, liquidity risk, and credit risk. Liquidity risk refers to the certificate’s transferring risk and the collateral’s depreciation risk, credit risk is the risk that the applicant fails to repurchase certificate, and all the other risk events belongs to operation risk which is associated with internal or external fraud and deficient control system.

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Tasks</th>
<th>Risk events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>Assess account receivable</td>
<td>A certificate is issued for counterfeit account receivable due to internal or external fraud.</td>
</tr>
<tr>
<td></td>
<td>Assess collateral</td>
<td>Collateral is overvalued due to inappropriate assessment tools.</td>
</tr>
<tr>
<td>Charge service fee</td>
<td>Cash deposit is insufficient to support the repurchase of certificate.</td>
<td></td>
</tr>
<tr>
<td>Transfer</td>
<td>Determine the transferee</td>
<td>The transferee is not the authentic owner of the certificate.</td>
</tr>
<tr>
<td></td>
<td>Verify the ownership of certificate</td>
<td>There are no enterprises or other entities accepting the certificate.</td>
</tr>
<tr>
<td>Repurchase</td>
<td>Notify the applicant to repurchase</td>
<td>The holder is not the authentic owner of the certificate.</td>
</tr>
<tr>
<td></td>
<td>Dispose collateral for repurchase</td>
<td>The debtor has not paid back the account receivable, and the applicant is not able to repurchase the certificate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The collateral cannot be liquidated at the expected price.</td>
</tr>
</tbody>
</table>

As mentioned, operation risk involves various events, from system deficiency to intentional fraud and subjective mistake. Though operation risk event generally occurs at a low frequency, the consequence could be rather severe. For instance, if a certificate is issued based on counterfeit account receivable, this may make the certificate as well as the whole circulation process invalid, and have a negative effect on the credit quality of certificates. Therefore, it may even affect the liquidity risk and credit risk of the circulation mode, resulting in collapse of the circulation system. Besides, there are two other operation risk events in the application procedure: collateral overvalued by inappropriate tools, and cash deposit charged at a low level. These two events have an influence on the final repurchase of certificate, directly concerning the safeguard for holders’ interest. Moreover, the ownership of certificate may not be verified in both transfer procedure and repurchase procedure because there is no corresponding authentication mechanism or the staff may not pay attention to this matter. This may also influence holders’ interest since whoever gets the certificate may transfer it for immediate cash. Because operation risk is mainly associated with human attitudes and strategic choices are the ultimate source of operation risk, it could be more effective in managing operation risk by requiring internal controls in execution of corporate strategy, and accountability and transparency of corporate reporting (Acharyya, 2010).

Liquidity risk includes certificate’s transferring risk and collateral’s depreciation risk. The certificate may not
be widely accepted by enterprises or other entities, and the transfer procedure will be difficult to proceed. This is quite normal in the beginning since innovation is usually looked upon with some suspicion. And as the circulation transaction develops, the certificate should become widely accepted gradually. However, if the credit quality of certificate is not well guaranteed and holder’s interest is not effectively safeguarded, the certificate may still be difficult to transfer, which further brings a negative effect on its credit quality. As to collateral’s depreciation risk, it affects the final repurchase of certificate which is associated with the credit quality of certificate. As liquidity risk is closely related to certificate’s credit quality, it is important to pay a great attention to liquidity risk management in order to support the development of circulation mode. First, the management company should establish relationships with several financial institutions that are willing to purchase the certificate from enterprises or provide a loan for enterprises based on the certificate. Second, the management company should ensure the repurchase of certificate and holder’s interest, encouraging enterprises to employ certificate for payment. Third, the management company should keep monitoring the value of collateral and timely complement the collateral as required.

While the liquidity risk is directly related to the credit quality of certificate, the credit risk may affect the amount applied for certificate. When the certificate is due, the default may occur that the debtor does not pay back the account receivable, and the applicant does not repurchase the certificate. This risk event is connected with account receivable’s credit quality —- the lower the credit quality is, the higher the credit risk is, and the lower the certificate’s value should be. The certificate’s value is the amount that appears in the certificate, and it is determined by the management company based on the value and credit quality of account receivable. The repurchase of certificate is guaranteed by five sources including payment by debtor (the retailer), repurchase by applicant (the wholesaler), liquidation of collateral, insurance claims, and the whole margin. Firstly, in each circulation transaction, the management company will record all the enterprises’ credit information which may affect terms of subsequent transactions. This will encourage the enterprises to fulfill their obligations and repurchase the certificate. Furthermore, if enterprises fail to fulfill their obligations, the repurchase of certificate can still be guaranteed by the collateral and insurance claims. Lastly, the management company will charge service fee from the applicant, and a certain percentage of the fee is used as cash deposit ensuring the repurchase of certificate. Therefore, the credit quality of the certificate is guaranteed, and the transfer of certificate will not be impeded by default risk.

CONCLUSION
Factoring may be the most effective solution to the “receivable-payable double high” problem. However, no fruitful result has been achieved in the extensive development of factoring in China because the traditional factoring is not effective in all conditions with some particularities. CRCR is an innovative factoring technology presented to solve the financing problem in the particular context of China. The CRCR has an additional guarantee of collateral, which breaks the barrier of incomplete credit information system in China and breaks down traditional factoring’s confinement to creditworthy large companies. And enterprises’ financing needs can be immediately satisfied by transferring the certificate to any other enterprises for cash. The certificate can also be directly transferred to the supplier for merchandise purchase, which can eliminate many costly and time-consuming middle stages and improve the trading efficiency. Moreover, this technology is especially advantageous as a solution to the debt chain problem which is prevalent in China context. The transfer of certificates between debtors and creditors through the supply chain can help settle obligations and solve the debt-chain problem.

Despite the enormous advantages of the CRCR in China context, there are still several relevant problems deserving attention. At a micro-level, it should be identified what kinds of organizations are involved in ARRT, and how they share the benefits and risks in the transaction. On the pricing side, a reasonable equilibrium price of ARRT should be determined for reference in practical transaction considering each party’s profits and responsibilities. On the risk management side, more researches should focus on analyzing each party’s behavior such as adverse selection and moral hazard in order to keep the transaction proceeding smoothly and safely. Moreover, there is a necessity to develop a mechanism to help identify fraud problems such as bogus receivables and nonexistent customers. At the macro-level, it should be considered more broadly as the accumulative risks of chain debt is far from bearing by the economy. Therefore, it is of great importance to promote a sound precaution system to prevent fictitious trading and vicious competition and to guarantee the security of the CRCR system.

REFERENCES


