Concept Paper

Trade Receivables and Credit Exchange

for

Financing of Micro, Small and Medium Enterprises

(Available for comments up to 20th April 2014)

Reserve Bank of India

Department of Payment and Settlement Systems

Central Office, Mumbai

FINANCING OF MSMEs –	**RESERVE BANK OF INDIA**
TRADE RECEIVABLES AND CREDIT EXCHANGE	
CONCEPT PAPER	

PREFACE

The role of Micro, Small and Medium Enterprises (MSMEs) in the economic landscape of the country needs no reiteration. Given the potential of this segment to unlock growth, employment and inclusion in the economy and society, it is indeed the need of the hour to address concerns related to financing of this segment.

Despite efforts on multiple fronts as well as enabling legal and regulatory provisions, the MSME segment continues to be belaboured with the problem of delayed payments, mainly due to the dependency of the MSMEs on their corporate buyer/s as well their inability to take up the problem of delayed payments through appropriate institutional setup created for the purpose.

The matter has been addressed in the reports of the Committee on Financial Sector reforms (2008) as well as the Working Group on securitization of trade receivables (2009), which have recommended having an institutional infrastructure for creating necessary liquidity for trade receivables through a mechanism of efficient and cost effective factoring / reverse factoring process. The Governor, in his statement on September 04, 2013 had clearly stated the intention to facilitate Electronic Bill Factoring Exchanges in the country, whereby MSME bills against large companies can be accepted electronically and auctioned so that MSMEs are paid promptly. This has drawn the attention of many stakeholders in the country in offering their expertise and experience in this area to facilitate the building of suitable infrastructure for MSME financing.

One of the well-recognised models of such institutional arrangements is that of the Mexican Development Bank – the state-owned Nacional Financiera (NAFIN) - which operates the *Cadenas Productivas* program based on reverse factoring to facilitate the liquidity and financing requirements for MSMEs.

Accordingly, this concept paper has been prepared taking into account the interest expressed by few entities and in consultation with a few stakeholders. The proposed model outlined in the paper envisages both primary market segment (in which invoices first undergo a reverse factoring process to enable the first level of financing to the MSMEs) as well as a secondary market segment (where the financiers of the primary segment get an opportunity to trade these invoices).

Though it is desirable to implement such a model for the benefit of a vast section of business entities in the country, it is also imperative to understand and address the many issues and challenges outlined. To this end, RBI seeks views on the matter of implementation of the Trade Receivables and Credit Exchange in the country. Specific and actionable feedback would be highly valued.

1. INTRODUCTION

One of the key constraints impacting the Micro, Small and Medium Enterprises (MSMEs) is inadequate finance, particularly working capital. In the case of MSMEs, the need for quick conversion of trade receivables, an important component of current assets of business entities, into cash assumes great importance since the lack of opportunities affects their liquidity and thereby their business, quite significantly. It is, however, observed that at present not many avenues exist for these enterprises to convert their receivables before maturity except through availing bill finance facility from a bank. One of the principal instruments of working capital is trade finance including bill discounting and factoring. It is estimated that only 10% of the total receivable market is presently covered under formal bill discounting mechanism in the financial system, while the rest is covered under conventional cash credit/overdraft arrangements with banks.

The Factoring Regulation Act[1] 2011 (12 of 2012), addresses some of major concerns for low penetration of factoring in India viz. (a) high stamp duty on assignment (b) inadequate legal frame work (c) clarity on the roles and responsibilities of parties to the transactions etc.

The “Committee on Financial Sector reforms” [CFSR] (Chairman: Shri Raghuram G. Rajan) set up at the instance of Planning Commission, Government of India, had in its report “Hundred Small steps (December 2008)” suggested two alternative proposals for creating liquidity for trade receivables - one through an organized system of auctioning and secondary market trading, and another through securitization. The Working Group on securitization of trade receivables set up by the RBI in 2009 under the Chairmanship of Shri. M. D. Mallya, the then CMD of BOB, had also recommended the formation of Trade Credit Exchange. A brief outline of these two recommendations is given in Annex-I.

However, despite the initiatives taken by the Govt. of India and RBI to address the issue of delayed payments of MSMEs, the problem continues to persist primarily because of the dependency of the MSMEs on the corporate buyer and the inability of the MSMEs to take up the problem of delayed payments through appropriate institutional setup created for the purpose.

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[1] *The Act provides for and regulates assignment of receivables by making provision for their registration, as well as outlines the rights and obligations of parties to contract for assignment of receivables.*

Thus, there is a need to build a suitable institutional infrastructure which will not only enable an efficient and cost effective factoring / reverse factoring process to be put in place, but also ensure sufficient liquidity is created for all stakeholders through an active secondary market for the same.

Institutional Initiatives - developments

One of the most well-recognised models of such institutional arrangements is that of the Mexican Development Bank – the state-owned Nacional Financiera (NAFIN) - which operates the *Cadenas Productivas* program based on reverse factoring to facilitate the liquidity and financing requirements for MSMEs in that country. Brief details of the NAFIN model is given in Annex-II.

In India too, despite the numerous challenges, few entities have made sporadic efforts in facilitating the working capital finance to the MSME suppliers. One such initiative has been the SIDBI-NSE Trade Receivable E-discounting Engine (NTREES), whereby a web-based platform has been set up in December 2009 for e-discounting of receivables of MSMEs. This was set up on the lines of the Mexican NAFIN Mexican model of reverse factoring[2]. The transactions undertaken in NTREES are at present on a limited scale with single financier model, with plans to scale the model in subsequent phases which will involve multi financier, auction/bid arrangement with the benefit of finer rates and adequate liquidity reaching to MSMEs. For better risk management, the banker of the corporate buyer (the company or corporate who has purchased the goods and services from the MSME and has to make payment to the MSME) could also be involved as one of the stakeholders in the arrangement.

Despite this encouraging move, the need of the hour is to scale up the proportions of such initiatives and bring this agenda into the mainstream of financing by building necessary institutional infrastructure at the national level. Hence, recognising the importance of MSMEs in the economic landscape as well as the pressing need to address the issue of MSME financing,

[2] *Reverse factoring is an alternative financing solution where a supplier finances their receivables via a process started by the ordering party, in order to help their suppliers receive more favorable financial terms than they would have otherwise received for operational and other pass-thru costs incurred in providing services to the ordering party. Reverse factoring is seen as an effective cash flow optimisation tool for companies outsourcing large volume of services . The benefit to both parties is that the company providing the services can get the outstanding value of their invoices paid in 10 days or less vs. the normal 30-45 day payment terms while the ordering party can delay the actual payment of the invoices (which are paid to the bank) by 120-180 days thus increasing cash flow.*

the Governor, in his statement on September 04, 2013 had clearly stated the intention to facilitate Electronic Bill Factoring Exchanges in the country, whereby MSME bills against large companies can be accepted electronically and auctioned so that MSMEs are paid promptly. Subsequent to this announcement by the Governor, many entities have come forward evincing their interest in this area and sharing their experiences as well as proposals / ideas in this regard.

In order to give shape to this very critical aspect, it is necessary take the views of all stakeholders so that the appropriate infrastructure, preferably pan-India, is built taking into account the institutional, legal, technological, procedural and operational aspects of the matter. Accordingly, this concept paper has been prepared by the Reserve Bank of India seeking public comments so that concerted efforts can be initiated at the earliest to address the pressing need of efficient and effective financing for MSMEs.

Proposed Model – an outline

There are two distinct aspects to the model – (i) the primary segment where MSME bills are dematerialised and discounted through the electronic platform through the mechanism of reverse factoring (ii) the secondary market segment where the already factored / discounted invoices are further traded.

There are two options to achieve this – one is to take a big-bang approach and commence both segments simultaneously and second to take a phased approach where the model may start with the simplicity and straight-line approach of the NAFIN model in the first stage, and once the initial model stabilises, the second stage of secondary market trading of already factored invoices could be considered.

<u>First stage of Trade Receivables and Credit Exchange (TCE)</u>

<u>Proposed process flow:</u>

(i) Buyer corporate sends purchase order to MSME.

(ii) MSME delivers the goods as per the requirements along with Bill to be paid by due date.

(iii) Buyer corporate accepts the goods and based on instruction received from MSME, posts the accepted Bill on the Trade Receivables and Credit Exchange (TCE).

(iv) Receivables of MSME from buyer corporate become available to the financiers for bidding and financiers submit their online bids to the TCE.

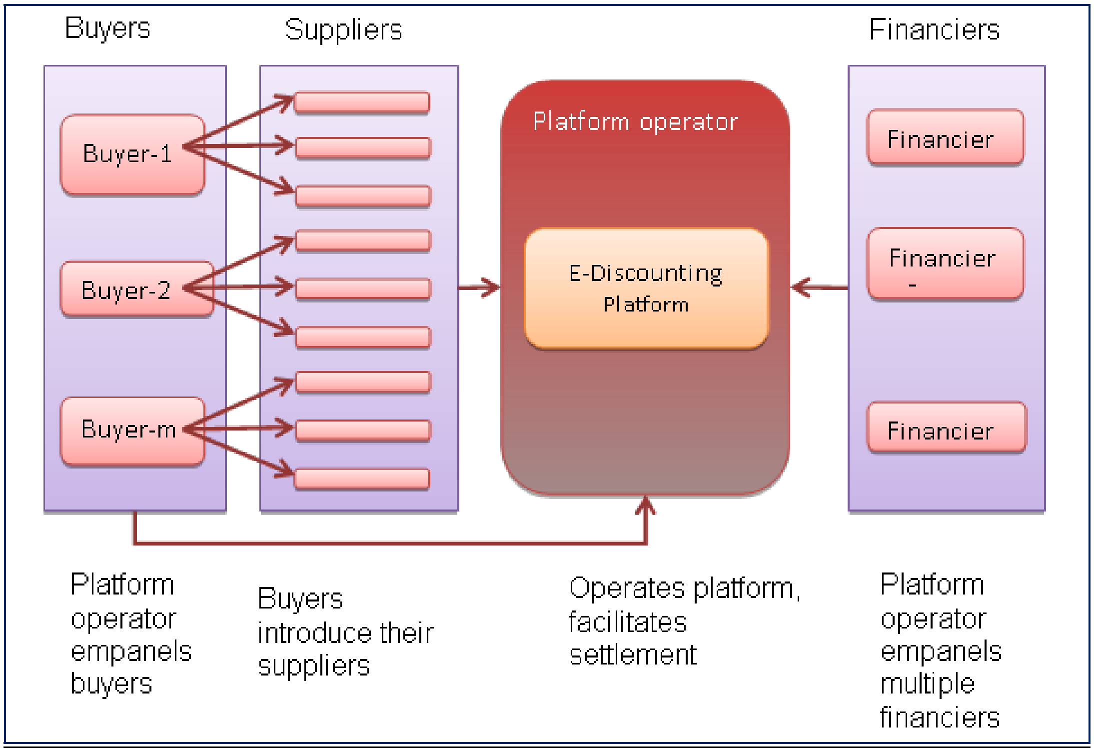
(v) Various bids submitted by financiers become available to the MSME.

(vi) MSME evaluates the options and accepts a bid. If it does not exercise its option, the auction closes at the expiry of specified period.

(vii) When MSME accepts the bid of a financier, an online intimation is sent by the TCE to all concerned parties viz, MSME, buyer corporate and Financier about the discounting of bill through the TCE.

(viii) Payment is made by the financier to MSME and intimation is given by financier and MSME about the same to TCE.

(ix) On due date, buyer corporate directly pays to the financier.



Pricing model:

There could be two pricing options in this model

- MSME Seller bears the discount (discounted value is paid to seller MSME)
- Corporate Purchaser bears the interest (100% face value is paid to the seller MSME and Corporate Purchaser pays face value + effective interest thereon on due date)

Settlement model:

Similarly, for funds settlement too, if the initial settlement between the financier and the MSME as well as the final settlement of funds between the buyer corporate and the financier in due course has to be effected outside the system, then the TCE has to put in place a robust MIS system to meet this requirement. If however, the TCE decides to facilitate this settlement through its own medium, then the TCE will have to offer appropriate clearing and settlement services.

Minimum expected Features and functionalities of TCE

- The TCE will be an electronic platform, operated by an independent, registered / authorised entity.
- The TCE will facilitate financing of MSME bills / invoices through the reverse factoring model –multi-financier model. The financiers could be banks (initially) as well as non-banks (may be at a later stage).
- The MSME suppliers, buyer corporates and financiers would have to sign agreements with entity hosting TCE.
- The TCE would provide facility for electronically presenting and accepting bills of exchange.
- Purchaser Company would post bona-fide instruments on the TCE.
- The financiers may decide about the exposure limit for particular buyer corporate.
- Besides providing the technical infrastructure for the exchange, the TCE will also look into aspects such as registration of MSMEs and buyer corporates, due diligence of corporates, on-boarding of financiers, technical requirements and business processes for dematerialisation of invoices, documentation requirements and legal formalities, messaging protocols / standards, business rules and regulations, other technical and operational aspects for processing the transactions including security/digital transactions, operating guidelines, MIS requirements, risk management (exposure norms, regulatory requirements) etc.

A. Comments sought:

1. Is the basic process flow for the first stage adequate or is there a need for any additional process?
2. Is there a need for additional features and functionalities or need for modifying the features and functionalities indicated above?
3. The stage at which dematerialisation of invoices should take place.
4. Suggestion for enhancing liquidity in the primary market ?

Minimum and Expected Features in secondary market phase of TCE

- In the present scenario, the financier who has discounted a bill / invoice has the option of holding the bill till its maturity or further rediscount the bill. In the proposed model, the financier who holds the factored invoice would decide whether or not to put up the invoice for further trading in the secondary market. In other words, secondary market trading would not be mandatory for any financier.

- To facilitate such rediscounting, as the market for factoring matures, with more and more MSMEs as well as buyer corporates seeing a value proposition in the model, the TCE could evolve a secondary market trading segment for the already factored invoices through this platform. This would entail the following:

  a) The TCE will develop a separate secondary market trading platform, either auction or order-matching, for facilitating the secondary market trading of such invoices.

  b) Necessary arrangements – technical, operational and procedural – have to be put in place by the TCE for facilitating secondary market trading including the facility for transfer of beneficial rights to the invoice which is being traded.

  c) At the time of maturity, if the final settlement of funds between the buyer corporate and the final financier in due course has to be effected outside the system, then the TCE has to put in place a robust MIS system to meet this requirement. If however, the TCE decides to facilitate this settlement through its own medium, then the TCE will have to offer clearing and settlement services.

B. Comments sought:

1. Should the secondary market platform be auction based or order-matching?

2. What are the additional features and functionalities required in the secondary market module?

3. Are there any changes to be suggested in the secondary market segment proposed above?

Issues that need to be addressed

It is expected that the proposed model will prove beneficial to all stakeholders in the system – MSME (suppliers), buyer corporates as well as financiers. The MSMEs would be able to obtain working capital finance at favourable rates as the platform would provide instant liquidity to their receivables portfolio, which, in turn would enable their businesses to grow. They would also save on collection costs of their receivables. For the buyer corporate entities, benefits would accrue in the form of savings on administrative and processing costs. Improved relationship with the MSME suppliers may also facilitate in negotiating better terms with them in future. Financiers, on the other hand, would be able to increase their lending operations without increase in risks as financing would be towards high quality receivables (gain from the lower risk weights of corporate), as also benefit from building up credit history on firms.

However, given the current legal and operational aspects related to the financing and trading of receivable, there are a few issues that need to be examined /reviewed more closely. Some of these relate to:

1. **Legal provisions:** The legal framework for supporting this model viz. MSME Act, Factoring Regulations Act, Depositories Act, PSS Act, needs to be examined and if required necessary amendments could be carried out.

2. **Type of factoring:** Factoring could be either without-recourse or with recourse to the MSME supplier. While 'without recourse' factoring would be easier to implement in the proposed model, the downside would be that the invoices of 'with recourse' factoring will remain outside the TCE platform. Further, invoices with recourse factoring may not be suited for secondary market trading as it would lead to uncertainties among the secondary market financiers. The pros and cons of both these types need to be examined to decide the type of factoring that is best suited.

3. **Notification to buyer-corporates:** The financier who holds the factored invoice would decide whether or not to put up the invoice for further trading. The financier may or may not find it convenient and necessary to notify the buyer corporate about the trading of the already factored invoice in the secondary market. Thus, the need for TCE platform

informing the buyer-corporate about the secondary market trading needs to be examined. If the TCE platform provides clearing and settlement services, then there may not be an operational need for TCE to inform the buyer-corporate about the secondary market trading. However, in the event of TCE is not providing clearing and settlement service, due notification and other associated information has to be given to the buyer-corporate for payment at the expiry of the invoice. Further, irrespective of whether TCE platform provides clearing and settlement service, there is merit in notifying the buyer-corporate about the secondary market trade so as to help it in managing its working capital advances and limits vis-à-vis a bank financier. Besides the buyer-corporate, the bank which is providing working capital arrangements to this entity may also need to have such information to assess the extent of utilisation of working capital limit and the liability towards other banking and non-banking entities by the corporate.

4. **Discounts:** Normally the MSME bears the discount; though there are buyer-corporates who bear the discount and ensure full payment to MSMEs. The most suited model of discounting needs to be identified.

5. **Registration requirements:** The registration requirements to be mandated for all types of MSMEs participating in the TCE need to be examined vis-à-vis the provisions of the MSME Act.

6. **Default handling:** In the event of any default by the buyer-corporate to make payment by the due date, the role of TCE platform needs to be identified. One related issue which needs consideration is whether the TCE ought to publish the list of default/defaulting buyer-corporate entities.

7. **Dematerialisation of receivables:** The process of dematerialisation of invoices, preservation of records, principles for dematerialisation, the entity/entities carrying out the dematerialisation etc. need to be examined.

8. **Requirements of secondary market trading:** Development of TCE platform presupposes clarity on following aspects -

a. *Invoice standardisation*: The need for standardisation of invoice to facilitate trading needs to be looked into.

b. *Timeline for acceptance*: The acceptance period for the buyer-corporate for dematerialisation of the invoices has to be decided.

c. *Securitisation:* In order to facilitate secondary market trading, it needs to be examined whether securitisation route of the factored invoices needs to be adopted.

d. *Working Capital:* Implications of this proposed model on the extant working capital guidelines.

e. *Taxation/registration issues*- The related taxation, registration fees, stamp duty etc. issues need to be examined.

9. Service related issues: The level of due diligence of buyer-corporates, MSMEs, and the invoices to be undertaken by the TCE; the level and nature of safeguards to be provided by the TCE in respect of verifications, notified collections etc.; whether these activities can be outsourced and to what extent; etc. need to be examined and identified.

10. Settlement and risk management related issues: The need for TCE to undertake clearing and settlement activities has to be examined. The scope and framework of risk management activities of the TCE has to be examined.

11. Other issues: These may include study of the cost implications (both in terms of transaction costs and financing costs) on MSMEs and its impact on secondary market operations; degree of anonymity of transactions; rights and legal recourse of financiers in case of non-payment of invoices; etc.

12. Payment System: Lastly, based on the functionalities that would be vested finally in the TCE, it also needs to be examined whether it would constitute a payment system and as such needs to be authorised under the Payment and Settlement Systems Act, 2007.

C. Comments sought:

1. Any specific comments/suggestions/feedback on the issues identified above?
2. Any other issues that need to be examined?

Annex-I

A. Extract from the Report on Financial Sector Reforms - 2008

1. As yet, corporate accounts receivables (trade credit) are not securitized. The existing RBI guidelines do not make it clear whether revolving assets such as trade credit or working capital loans etc. can be securitized. However, trade credit is a critically important source of finance for Indian firms across the board. For all firms together, the share of trade credit in total corporate financing has grown steadily from 7.25 per cent to almost 16 per cent during 2001–05.

2. In 2005, it was the biggest funding source. Further, the proportion was much higher (26 per cent) for SME's. SMEs could reduce their investment in working capital, and thus their need for finance, significantly if the receivables due to them from large firms could be securitized.

3. In principle, such receivables, if accepted, are essentially commercial paper with the high credit ratings of the large firms. Further, if the SME can securitize and sell its receivable claim, its resulting smaller and better capitalized balance sheet would improve its credit worthiness.

4. Though the securitization process is similar to factoring, it could be more cost effective than bank funding, factoring, and letters of credit. A negotiable Bill of Exchange (BoE) issued by a buyer against goods received provides a form of securitization of trade credit. The supplier can have the BoE discounted with any financial intermediary in a private transaction. The supplier and the intermediary can also endorse the bill in favour of any other party. Currently, mostly banks deal in BoEs, and usually the acceptance and discounting are kept under the credit limit set up for the buyer. However, the nature of the transactions and the physical format of BoEs rules out a sizable secondary market in them.

5. The Mexican development bank, NAFIN, created an electronic system where any small firm could present receivables on a number of large firms to it. NAFIN had set up arrangements with these large firms beforehand to have these receivables presented and accepted electronically. The accepted receivables, now full-fledged claims on the large firms, were then auctioned off in the market, and the proceeds paid out to the small firms. Nothing prevents a private sector entity in India from setting up this exchange, but the government could provide significant encouragement, as well as any needed legislative support. Therefore, the Committee proposes

measures that will dematerialize trade credit receivables and enable them to trade in a similar way to commercial paper.

6. Specifically, we propose that:

- An organization like NSDL should provide dematerialization capability.
- An intermediary along the lines of NAFIN could tie up with large buyers and an authorized list of their suppliers to have automatic bill presentment and acceptance facilities. Such bills could then be auctioned, and the existing exchanges and reporting mechanisms (NSE/BSE/ CCIL) should be used to trade and settle these instruments.
- Additionally, since most of these instruments are not rated, a formal rating programme along the lines of commercial paper could be instituted to enhance secondary market tradability.

B. Extract from the Report of the Working Group (Nov 2009) under the Chairmanship of Mr. Mallya, then CMD, Bank of Baroda.

A national level infrastructure may be established to provide for an online platform for auctioning and financing of trade credit receivables on the lines of reverse factoring. The model envisages establishment of a central system and provides for web based access to all the users viz., MSME supplier, Purchaser Company and Financiers. Banks / financial institutions who acquire the trade credit receivables of MSMEs through the auction mechanism can securitise the receivables so acquired, by creating an SPV. The existing infrastructure of the depository system can be used to issue the securitised instruments to the account of the investor in dematerialised form.

Three alternatives were recommended:

1. Receivable exchange model – MSME directly uploading receivables and financiers take up.
2. Reverse Factoring Model – NAFIN model
3. Trade Credit Exchange – similar to NAFIN Model – excepting there is provision of fee for purchasers for posting in the TCE shall also provide for options of single or multiple financiers allowing them to compete to factor suppliers' receivables. Thus there is flexibility compared to NAFIN which provides for multi bank model for all transactions. This model will facilitate a buyer to interact with only a preferred bank.

Annex - II

Reverse Factoring: the NAFIN Cadenas Productivas Program[3]

In recent years, the use of factoring has increased dramatically on a global scale as an effective and relatively low-risk and low-cost means of expanding access to working capital finance. In developing countries, however, traditional factoring, whereby a supplier firm sells all of its accounts receivables to a factor in exchange for immediate liquidity, faces two key challenges: (i) the lack of readily available credit information and (ii) insufficient protections against fraud. In the absence of credit information on each of the supplier's customers, it is difficult, if not impossible, for the factor to adequately assess the risk of a customer failing to pay an invoice. Additionally, fraud, in the form of fake receivables and customers is not uncommon. In Mexico, however, the state-owned development bank, Nacional Financiera (NAFIN) has demonstrated how traditional factoring can be successfully adapted to the characteristics of developing countries.

Since September 2001, NAFIN has provided SME suppliers with automated (reverse) factoring services through its *Cadenas Productivas* (Productive Chains) program, which links small suppliers to "big buyers." Through the program, small, risky enterprises that lack access to formal credit are able to use their receivables from big buyers to secure working capital finance. In effect, their credit risk is transferred to their lower-risk customers.

Background and Environment

MSMEs account for roughly 99 percent of registered enterprises in Mexico (or approximately 600,000 firms), with an estimated 1.8 million more operating in the informal sector. SMEs contribute 64 percent of employment and 42 percent of gross domestic product (GDP). Despite the clear importance of MSMEs to the Mexican economy, Klapper cites statistics indicating that the typical Mexican SME receives only 1 percent of its working capital from banks (Klapper, 2005, p. 15).

[3] *egateg.usaid.gov/sites/.../VCF%20Case%20Study%202%20Mexico.doc*

Objectives

NAFIN was created in 1934 to promote Mexico's industrial development. Today, it has two principal objectives: to promote the development of SMEs by providing financial services, training, and TA; and to develop financial markets to better serve SMEs. To achieve these objectives, in 2000 and 2001 NAFIN introduced new programs oriented toward SMEs — including the *Cadenas Productivas* program — as well as a strategic information technology (IT) plan to facilitate a dramatic expansion in the number of SMEs served by the entity. The *Cadenas Productivas* program leverages NAFIN's phone- and Internet-based systems to link SMEs with large enterprises in productive chains and provide SMEs with electronic factoring services to provide them with needed liquidity.

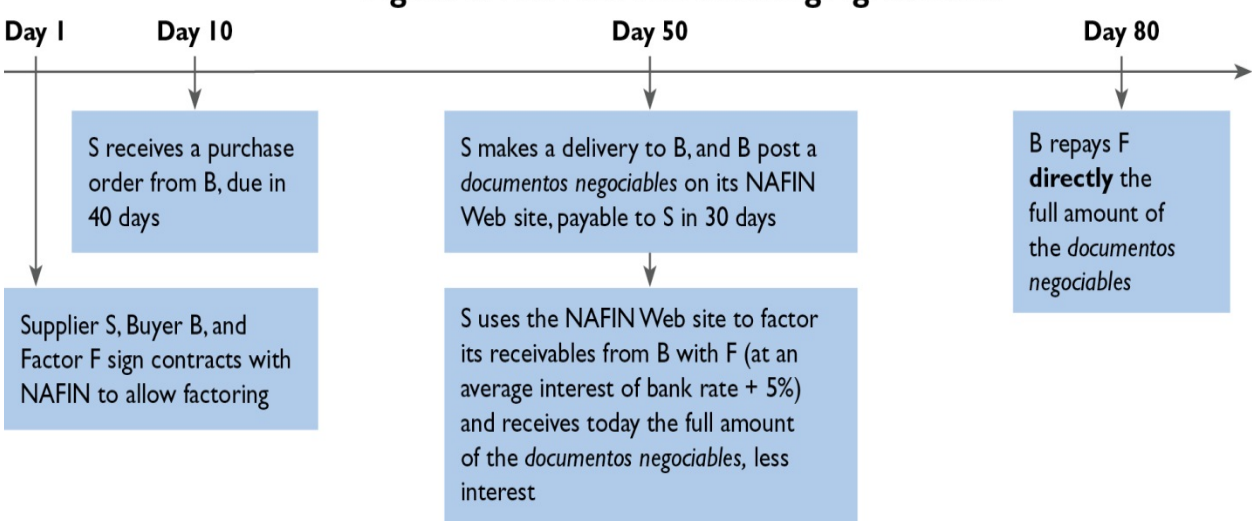
Approach

In traditional factoring, the small supplier transfers its accounts receivable from all of its buyers to a factor. The factor must then analyze and assume the risk of non-payment for each account receivable. While this can be an effective way of financing small businesses — shifting the risk analysis from the riskier small supplier to larger, less risky buyers — it requires the factor to collect credit information on a large number of buyers. This can be a difficult and costly task in environments lacking robust credit bureaus. Weak legal systems that make collection in case of non-payment difficult further increase the risks of traditional factoring in developing countries. As a result, factors generally buy accounts receivables "with recourse," meaning the small supplier is held accountable for a buyer's non-payment.

In contrast, under NAFIN's reverse factoring program, factors purchase the accounts receivables of only the larger, most creditworthy buyers. Large buyers, registered with the *Cadenas Productivas* program, provide NAFIN with lists of their suppliers (i.e., the small firms holding their accounts receivables), who are then invited to register for the factoring service for their respective large buyer. Working with only the large, established buyers reduces both the cost of assessing accounts receivable risk and the risk of non-payment itself. As a result, all factoring services facilitated through NAFIN are provided “without recourse.”

Factoring transactions are completed through NAFIN’s electronic platform, which reduces transaction costs and improves security. The platform also facilitates the participation of all commercial banks in the program and introduces the element of competition for suppliers’ receivables. NAFIN covers all costs associated with the electronic platform and legal expenses, such as document preparation, signing, and transfers, out of fees paid by lenders for their services. As a result of this subsidy, banks only charge interest, no fees, for the factoring service. Until July 2004, NAFIN capped the interest rate at seven percentage points above the central bank rate (“five percentage points on average”), which was roughly eight percentage points below commercial bank rates (Klapper, 2005, p. 15). However, NAFIN planned to allow banks to compete on interest rates starting in July 2004, roughly three years after the program began (Klapper, 2005, p. 15).

Figure 6: The NAFIN Factoring Agreement



NAFIN promotes the *Cadenas Productivas* program and other services for SMEs through its regional centers. Suppliers contact a call center to develop relationships with big buyers. In turn, the buyer provides a list of all their suppliers to NAFIN, which contacts the suppliers to introduce the program and collect information on the SME. Interested SMEs register online or by telephone and open an account with a bank or factor that has a relationship with its buyer. The supplier and NAFIN sign a pre-agreement allowing electronic sale and transfer of receivables;

other documents establish buyer/NAFIN obligations, including the buyer's obligation to remit factored receivables to the banks directly.

As illustrated in Figure 6, once goods have been delivered and the buyer has been invoiced, the buyer posts a negotiable document online. The supplier accesses the buyer's Web page on the NAFIN Web site (www.nafin.com), and locates his or her receivable, along with a list of lenders with a relationship to the buyer and supplier who are willing to factor the receivable, with their corresponding interest rate quotes. Once the supplier clicks on the preferred lender, the amount to be factored — generally 100 percent of the value of the receivable — is transferred electronically to the supplier's bank account. When the invoice comes due, the buyer pays the lender/factor directly.

Key Findings and Lessons Learned

The success of the *Cadenas Productivas* program demonstrates that it is possible to successfully provide factoring without recourse, even to SMEs without credit histories, giving these enterprises the opportunity to increase their cash stock without increasing their indebtedness. It also demonstrates how electronic channels can be used to reduce costs and provide SMEs with greater access to financial and non-financial services.

The use of an electronic platform was a critical success factor, allowing NAFIN to achieve economies of scale and provide more affordable, faster services. It is important to note, however, that the subsidy provided by NAFIN is a key factor in making this program cheaper than commercial factoring.

The existence of a supportive legal and regulatory environment was also a key success factor. Mexico has electronic signature and security laws that should serve as models for other countries (Klapper, 2005, p. 17).