# **RECEIVABLES MANAGEMENT AND SUPPLY CHAIN FINANCE FOR MSMES: ANALYSIS OF TREDS**

# Niti Nandini Chatnani, Indian Institute of Foreign Trade

## ABSTRACT

Micro, Small and Medium Enterprises (MSMEs) are important contributors to the balanced growth and equitable development objectives of the Indian economy. Firms in the MSME sector are important suppliers of product and services to large corporates, but face liquidity constraints due to delayed payments of receivables by the large buyers. Efficient working capital management is crucial as well as challenging for smaller companies. In 2016, the Reserve Bank of India (RBI) rolled out the Trade Receivables Discounting System (TReDS) to facilitate the financing of trade receivables of MSME firms. Under TReDS, three entities received permission from RBI to set online trade receivables exchange platforms for MSME sellers, buyers and financiers. These exchanges have started operations in 2017, but globally, the experience of such online platforms before them has not been very encouraging. This review paper analyses the context for setting up such exchanges in India, their working and potential and the future prospects for such platforms in India.

**Keywords:** MSMEs, Working Capital Management, Trade Receivables, TReDS, Receivables Exchange.

### **INTRODUCTION**

For the Indian economy, the Micro, Small and Medium Enterprises (MSMEs) have emerged as important and vibrant contributors to its overall economic performance. MSMEs have brought about a culture of entrepreneurship and business innovation, contributing significantly to the socio-economic development of India. They produce a diverse range of products and services catering to the demands of the local as well as global markets. Units in the MSME sector serve as ancillaries to the large industries and have become their pillar of support. MSMEs have assumed a crucial role in providing large scale employment opportunities at comparatively lower capital cost than large industries and also in the development of rural and backward areas. They hold an exceptional place for the Indian economy, contributing 6% in GDP, 33% in manufacturing and 45% in exports. The MSME sector in India today is a network of 51 million enterprises providing employment to 117.1 million persons and contributing 37.5 per cent of India's GDP (Ministry of MSME, 2015-2016).

## LITERATURE REVIEW

For any business firm, working capital is as crucial for day-to-day operations as longterm capital. Working capital is often referred to as the lifeblood of any business and managing working capital is a significant part of corporate financial management. The liquidity, survival, solvency and profitability of a business, depend, to a very large extent, on good working capital management. Smith (1980) had emphasized the trade-off between liquidity and profitability, arguing that working capital management can play an essential role not only in a firm's profitability and risk, but also in its value.

There exists a vast body of literature that examines the relation between working capital management and profitability and the studies have focused on firms from different countries during various time periods. Deloof (2003) studied the relation between working capital management and corporate profitability by investigating a sample of 1,009 large Belgian non-financial firms for the 1992-1996 period. Eljelly (2004) also researched on the relationship between working capital management and corporate profitability using 27 Saudi companies from three non-financial sectors for the period 1996-2000. Their findings suggested that managers could increase corporate profitability by reducing the number of day's accounts receivable and inventories. Odi & Solomon (2010) examined whether efficient working capital management was crucial for corporate survival and growth and their study confirmed the dependence of corporate financial performance on efficient working capital management.

Blinder & Maccini (1991) have argued in favor of maintaining high working capital investments as high inventory levels reduce the cost of possible interruptions in the production process and bring down loss of business due to the scarcity of products, reduce supply costs and protect against price fluctuations. Studies by Nazir & Afza (2009); Eramus (2010); Mohamad & Saad (2010) found that if a firm can minimize its investment tied up in current assets, the resulting funds can be invested in value-creating projects, thereby increasing the firm's growth opportunities and shareholders' return. The studies also found that if capital invested in cash, trade receivables or inventories is not sufficient, the firm may have difficulty in carrying out its daily business operations, which may lead to declining sales and, in the end, a reduction in profitability.

An accepted measure of working capital management is the cash conversion cycle. Nobanee, Abdullatif & AlHajjar (2011) examined the relation between the firm's cash conversion cycle and its profitability for a sample of Japanese firms for the period from 1990 to 2004. They found a strong negative relation between the length of the firm's cash conversion cycle and its profitability. Napompech (2012) examined the effects of working capital management on profitability. The regression analysis was based on a panel sample of 255 companies listed on the Stock Exchange of Thailand from 2007 through 2009. The results revealed profitability of firms can be increased by shortening the cash conversion cycle, inventory conversion period and receivables collection period.

Most studies however focus on large enterprises. Garcia-Teruel & Martínez-Solono (2007) work provides empirical evidence about the effects of working capital management on the profitability of a sample of small and medium-sized Spanish firms. In the case of SMEs, most of these companies' assets are in the form of current assets. In their sample of a panel of 8,872 SMEs covering the period 1996-2002, the current assets represent 69.48 percent of their assets and at the same time their current liabilities represent more than 52.82 percent of their liabilities. They also find that decisions regarding an increase in profitability are likely to involve increased risk and risk-reducing decisions are likely to result in a reduction in profitability.

Brennan, Maksimovic & Zechner (1988); Petersen & Rajan (1994) find that granting trade credit to SMEs can act as an effective price cut, as firms with ties to financial institutions have easier and cheaper availability to credit. Emery (1987) has found that extension of trade credit incentivizes customers to acquire merchandise at times of low demand and allows customers to check that the merchandise they receive is as agreed (quantity and quality). Smith (1987) finds that by offering trade credit, a seller can identify prospective defaults more quickly

than if financial institutions were the sole providers of short-term financing. Peel & Wilson (1996) showed that efficient working capital management is particularly important for smaller companies. The greater the investment in current assets by such firms, the lower the risk, but also the lower the profitability. Also, current liabilities or vendor financing are one of their main sources of external finance in view of their difficulties in obtaining funding in the long-term capital markets. Petersen & Rajan (1997) show that small and medium-sized US firms use vendor financing when they have run out of debt.

## THE MSME CONTEXT

For most of their value-added inputs, large firms depend on suppliers, which are mostly MSMEs. The viability of these MSMEs is closely tied to their ability to access and manage working capital.

Two clear challenges that smaller firms face in arranging and managing working capital is their limited access to working capital loans from banks and even when there is access, the interest rates are high. A third major challenge these small supplier firms face is delayed payments from their large buyers. In order to keep their own cash conversion cycle in good health, large buyer firms delay payments to their small supplier firms.

Large corporates are able to keep their working capital days in control by delaying payments to their smaller suppliers (PWC, 2017). These problems disadvantage only the small firms that bear the brunt of these higher working capital costs. By stretching the time for payments, such large firms place pressure on the supply chain.

In fact, however, because both the smaller and larger firms are linked through the supply chain, the situation represents a more general market failure that affects every firm in the chain and this may not be sustainable in the long term. Additional focus on the asset side of the balance sheet (receivables and inventory) may be warranted as a means of releasing cash and efforts to optimize payables should consider the impact on the supply chain. Financial assistance in India for MSME units is available, both in the form of term loans as well as working capital loans. Long-term and medium-term loans, needed to fund purchase of fixed assets like land, construction of factory building/shed and for purchase of machinery and equipment, are provided by State Financial Corporations (SFCs), State Industrial Development Corporations (SIDCs), Small Industries Development Bank of India (SIDBI). Other commercial, regional rural and co-operative banks also finance term loans. The short-term loans, required for working capital, to fund the purchase of raw materials and consumables, payment of wages and other immediate manufacturing and administrative expenses, are generally available from commercial banks. The commercial banks also sanction composite loans comprising of working capital and term loans with defined limits, normally up to Rs.10 million.

In spite of the above, India's MSME sector faces a major problems in terms of getting adequate credit for expansion of business activities (Economic Survey, 2018). Latest data on credit disbursed by banks shows that out of a total outstanding credit of Rs.26,041 billion as in November 2017, 82.6% of the amount was lent to large enterprises. The MSME sector received only 17.4% of the total credit outstanding. The financial markets, despite their size and growth in India, do not penetrate deeply enough to meet the needs of MSMEs. In India, the total demand for finance for the MSME sector is about Rs.26 lakh crore. The amount provided currently by banks and other non-bank institutions is about Rs.14 lakh crore. There is still a gap of Rs.11-12 lakh crore.

For a long time now, the expectations of MSMEs from the Union Budget, therefore, constitute a mix of initiatives that would address both the short and medium-term challenges. For the short term, initiatives could focus on helping SMEs access a greater pie of the domestic market, leaving a little more cash in their hands and reducing some irritants in taxation; and the medium-term measures could address the perpetual problem of access to funds, by looking beyond the existing banking structure.

# FIXING THE CREDIT GAP

Trade credit is one critically important source of finance for MSMEs across the board. MSMEs frequently faced with delays in receivables from their large buyers, face major challenges in repaying their own creditors and in paying salaries on time. The MSME Development (MSMED) Act, 2006 addresses the issue of delayed payments to MSMEs by specifying that the buyer of goods or service will have to make payment to the (MSME) supplier within 45 days from the day of acceptance (or deemed acceptance). In reality this period stretches to an average of about 65 days and in some cases even up to 120-150 days. (Knowledge and News Network, 2015). About 90 per cent of MSMEs rely on informal sources for credit, as per government estimates. A significant part of the working capital requirement of an MSME arises due to long receivables realization cycles.

Recognizing the challenge of gearing up the financial sector to address the requirements of the growing needs of a promising MSME sector in an emerging economy, in August 2007, the Planning Commission of the Government of India constituted a High Level Committee on Financial Sector Reforms. The committee came out with a report in 2009, called "A Hundred Small Steps".

One of the recommendations in this report was to take steps towards securitization of trade credit, so that MSMEs could reduce their investment in working capital and thus their need for finance. This would be similar to a model established by the Mexican development bank, NAFIN (Nacional Financiera). NAFIN has an electronic system where any small firm can present receivables on a number of large firms to it. The receivables are presented and accepted electronically and the accepted receivables, amounting to full-fledged claims on the large firms, are then auctioned off in the market and the proceeds paid out to the small firm. This securitization process is similar to factoring and more cost effective than bank funding, factoring and letters of credit.

If MSMEs can securitize and sell receivable claims, the resulting smaller and better capitalized balance sheet would improve their creditworthiness. A negotiable bill of exchange (BoE) issued by a buyer against goods received provides a form of securitization of trade credit, which the supplier can discount with any financial intermediary in a private transaction. The supplier and the intermediary can also endorse the bill in favor of a third party. Currently, mostly banks deal in BoEs and a limit is set up for the acceptance and discounting. However, the nature of the transactions and the physical format of BoEs rules out a sizable secondary market in them.

With the objective of developing supply chain financing options for MSME firms, the report also floated the idea of setting up an electronic exchange as a platform where these firms could sell their receivables at a discount, freeing up liquidity for their day-to-day operations. The approach suggested in the report was based on dematerialization of trade credit receivables of MSMEs, so as to make them tradable. This platform would require participation from:

1. A depository to provide dematerialization.

- 2. An intermediary, like NAFIN, to 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.
- 3. A rating programme to allow for secondary market tradability.

Securitization as a means of raising finance or transferring credit risk had existed in India since the early 1990s. However, corporate accounts receivables (trade credit) were not securitized as the RBI guidelines till 2016 did not make it clear whether revolving assets such as trade credit or working capital loans could be securitized.

In March 2014, the Reserve Bank of India published a concept paper on "Micro, Small & Medium Enterprises (MSME) Factoring-Trade Receivables Exchange" and based on its recommendations for filling in financing gaps in the MSME ecosystem, in 2016, RBI rolled out the Trade Receivables Discounting System (TReDS).

#### TREDS

The TReDS was designed, under the Payment and Settlement System (PSS) Act 2007, as a system to facilitate the financing of trade receivables of MSME firms from corporate and other buyers, including government departments and Public Sector Undertakings (PSUs), through multiple financiers. The objective was to enable a platform to bring MSME sellers, corporate buyers and financiers-both banks and non-bank (NBFC factors together for facilitating uploading, accepting, discounting, trading and settlement of the invoices/bills of MSMEs. TReDS was designed to facilitate the discounting of both invoices as well as bills of exchange and could deal with both receivables factoring as well as reverse factoring so that higher transaction volumes come into the system and facilitate in better pricing. The transactions processed under TReDS will be "without recourse" to the MSMEs. TReDS would develop the necessary ecosystem for this purpose by bringing together technology providers, system integrators and entities providing dematerialization services for providing its services. The bankers of MSMEs and corporate buyers would get access to the system, where necessary, for obtaining information on the portfolio of discounted invoices/bills of respective clients.

Ultimately, TReDS would create Electronic Bill Factoring Exchanges which could electronically accept and settle bills so that MSMEs could encash their receivables without delay. TReDS will be the first attempt in the country to introduce factoring without recourse and help not only quick realization of receivables but also appropriate price discovery. Three entities received permission from RBI to set up under TReDS an online trade receivables exchange platform for MSME sellers, buyers and financiers. These automated platforms were designed to benefit MSMEs by facilitating them to auction their trade receivables at competitive market rates through transparent bidding process on the platform by multiple financiers.

### **EXCHANGES IN INDIA UNDER TREDS**

TReDS is a system for MSMEs to upload invoices, which the financiers bid to buy, on the basis of the creditworthiness of the buyer company. The financier that offers the lowest discount pays the discounted amount of the invoice to the MSME seller and later receives the payment from the buyer company. If the buyer defaults, the financier has no recourse to the MSME seller. Between December 2016 and July 2017, three receivables exchanges were launched in India.

- 1. Receivables Exchange of India (RXIL): This was the first exchange to be launched in December 2016. Promoted by SIDBI and NSE, RXIL began its operations on January 9, 2017.
- 2. M1 Exchange: This was the second one to be launched in April 2017 and is promoted by Mynd Online National Exchange.
- 3. Invoice art Exchange: This was the third exchange launched in July 2017, as a joint venture of MJunction services, a B2B e-commerce company and Axis Bank.

These exchanges provide an online platform for discounting under factoring (discounting initiated by the seller and cost borne by the seller) and reverse factoring (discounting initiated by the buyer and cost borne by the seller/buyer) and ensuring payment to the MSME sellers. They also have the responsibility of on boarding as many MSME sellers, buyers and financiers as possible. A large number of buyers would ensure a competitive bidding for the invoices.

The exchanges have managed to provide a transparent trading platform, with increased transparency, minimal paperwork and reduced operational costs. For the MSME Sellers, the biggest advantage is that they can discount their invoices at the best discount rate due to a competitive bidding made possible through the participation of multiple financiers in the auction. For the buyers, besides compliance with the MSMED Act of 2006, participation in the auction on the exchanges leads to better payment cycles and efficient cash flow management. Financiers participating on the exchanges get access to a wider market with qualified instruments and better portfolio diversification. In this process the exchanges also provide various useful reports to the MSME sellers, buyers and financiers, thereby bringing transparency into the trade credit market.

However, in July 2017, it was reported that RBI will revisit and possibly review the TReDS platform. It was observed that large companies were uncomfortable uploading invoices online, mainly for two reasons:

- 1. Since TReDS is a transparent system, they necessarily would have to settle the suppliers' invoices within 45 days of acceptance of goods/services rendered.
- 2. Through their online invoices, their competitors will identify their MSME suppliers from whom they source their inputs.

The MSME sellers have no assurance about the time it will take for the invoice to be discounted and due to the "without recourse" method of discounting, there is more likelihood that invoices to unknown buyers may not find acceptance of the financiers. The financiers may find it difficult to authenticate small business invoices and the secondary market will be small till volumes develop.

# THE GLOBAL EXPERIENCE

Exchanges as online platforms for auction of invoices became a novel and innovative idea about a decade back. In 2007, The Receivables Exchange (now LiquidX), designed an invoice auction exchange for small business invoices, as an alternative to factoring for single or multiple invoices. Based in New York, The Receivables Exchange operated as a subsidiary of The New Orleans Exchange, Inc. The focus was small businesses, as larger firms have supply-chain financing options developed by banks or other financial sector firms.

In 2011, NYSE Euronext acquired a minority stake in The Receivables Exchange. The exchange business was then split in two, the original small business "SMB" program and another

one that focused on a "Corporate Receivables Program" for sellers in the Fortune 1000 category. The SMB program proved difficult to scale and was closed down. From 2016, the platform is rebranded as LiquidX and is only for large corporates.

Market Invoice, which started in 2010 as a U.K. based invoice financing company, also struggled to attract volumes. Therefore, it expanded its offering beyond the original mandate and in November 2017, announced an expansion of its portfolio. The Market Invoice portfolio now includes extension of business loans as a peer-to-peer (P2P) platform and like other P2P lenders, its online platform also connects lenders to borrowers.

Platform Black was created in 2012 in the United Kingdom to offer innovative new financing options, such as invoice trading and supply chain finance, for SMEs to manage their cash resources and invest in growth. In 2017, Platform Black changed its name to Sancus Finance Limited and expanded its offerings to embrace short, medium and long term finance to SMEs. The products offered include invoice trading, supply chain finance, education finance, vendor partner programs and secured loans.

Aztec Exchange, founded by former Morgan Stanley and HSBC executives, was set up as an online exchange to allow finance providers to bid for unpaid invoices. In 2016, Aztec reported 6,000 SME clients, a growing position among European SMEs and featured on Forbes list of the most promising firms in the fintech sector. However, the exchange in 2017 was reported to be going into liquidation.

#### CONCLUSION

For most online exchanges for trade receivables, the biggest challenge has been getting the volumes and developing a vibrant and liquid marketplace. The exchanges in India are up to similar trials. Creating a liquid marketplace is always demanding, but this does not imply that the TReDS platform cannot be successful. The challenge for the exchanges today is to build a scalable, profitable business. For example, in order to attract participants on its platform, RXIL had waived registration fee and transaction charges twice from January 6, 2017 to April 30, 2017 and from May 1 to June 30, 2017. The Indian exchanges have the advantage of firm government backing. For one, Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 mandates all Central Government Departments and Central Public Sector Undertakings (CPSUs) to mandatorily make 20 per cent purchases from Medium, Small and Micro Enterprises (MSMEs). They are also required to be compulsorily registered with a TReDS exchange. The Budget of 2018 has also proposed to take steps to on board public sector banks and corporates on to the TReDS platform. These steps should lead to a growth in volumes and a transparency in the payment and discounting of trade receivables.

While prior global experiments may not be very encouraging, the Indian approach appears to be heading on a more sustainable path and the Indian experience may well become a model for other economies with reliance on the MSME sector to emulate.

#### REFERENCES

- Blinder, A.S. & Maccini, L.J. (1991). The resurgence of inventory research: What have we learned? *Journal of Economic Survey*, 5(4), 291-328.
- Brennan, M., Maksimovic, V. & Zechner, J. (1988). Vendor financing. Journal of Finance, 43(5), 1127-1141.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*, 30(3-4), 573-588.

- Eljelly, A.M. (2004). Liquidity-profitability tradeoff: An empirical investigation in an emerging market. *International Journal of Commerce and Management*, 14, 48-61.
- Emery, G.W. (1987). An optimal financial response to variable demand. *Journal of Financial and Quantitative Analysis*, 22(2), 209-225.
- Mohamad, N. & Saad, N. (2010). Working capital management: The effects of profitability in Malaysia. International Journal of Business, 5(11), 140-147.
- Napompech, K. (2012). Effects of working capital management on the profitability of Thai listed firms. International Journal of Trade, Economics and Finance, 3(3).
- Nazir, M.S. & Afza, T. (2009). Working capital requirements and the determining factors in Pakistan. *The IUP Journal of Applied Finance*, 15(4), 28-38.
- Nobanee, H., Abdullatif, M. & AlHajjar, M. (2011). Cash conversion cycle and firm's performance of Japanese firms. *Asian Review of Accounting*, 19(2), 147-156.
- Odi, N. & Solomon, O.G. (2010). An empirical analysis of corporate survival and growth: Evidence from efficient working capital management. *International Journal of Scholarly Intellectual Academic Diversity*, *12*(1).
- Eramus, P. (2010). The relationship between working capital management and profitability for South African listed industrial firms. *The Business Review*, 15(1), 183-188.
- Garcia-Teruel, P.J. & Martínez-Solono, P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, *3*(2), 174-177.
- Peel, M. & Wilson, N. (1996). Working capital and financial management practices in the small firm sector. *International Small Business Journal*, 14(2), 52-68.
- Petersen, M.A. & Rajan, R.G. (1994). The benefits of firm-creditor relationships: Evidence from small business data. *Journal of Finance*, 49(1), 3-37.
- Petersen, M.A. & Rajan, R.G. (1997). Trade credit: Theories and evidence. *Review of Financial Studies*, 10(3), 661-691.
- Smith, K. (1980). *Profitability versus liquidity tradeoffs in working capital management*. Readings on the Management of Working Capital. New York: West Publishing Company.
- Smith, K. (1987). Trade credit and informational asymmetry. Journal of Finance, 42(4), 863-72.