

NIBM WORKING PAPER SERIES

**Revolutionizing Supply Chain Finance for MSMEs:
Is TReDS the Next Breakthrough?**

**Rajesh Ramakrishnan
Gargi Sanati**

Working Paper
(WP50/2024)



NATIONAL INSTITUTE OF BANK MANAGEMENT
Pune, Maharashtra, 411048
INDIA
December 2024

The views expressed herein are those of the authors and do not necessarily reflect the views of the National Institute of Bank Management.

NIBM working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review for Journal or Book Publication

© 2024 by Rajesh Ramakrishnan and Gargi Sanati

Citation Guideline:

Ramakrishnan, Rajesh and Gargi Sanati (2024), "Revolutionizing Supply Chain Finance for MSMEs: Is TReDS the Next Breakthrough?". NIBM Working Paper Series WP 50/December.

https://www.nibmindia.org/static/working_paper/NIBM_WP50_RRGs.pdf

**Revolutionizing Supply Chain Finance for MSMEs:
Is TReDS the Next Breakthrough?**

Rajesh Ramakrishnan and Gargi Sanati

NIBM Working Paper No. 50

December 2024

ABSTRACT

Despite the significant contribution of the MSMEs they face critical funding issues in the entire supply chain process and are often at the mercy of the large corporates or the big manufacturers. MSMEs are not only financially weaker with difficulties in sourcing capital but they are charged heavily by the banks for the working capital fund. In this context, the introduction of TReDS as a price discovery mechanism for MSMEs is of paramount importance to ensure financial stability in the supply chain. The process flow and the usage of TReDS have been explored here to understand its viable role in providing timely and adequate finance at competitive rates and thus its role as a potential game-changer.

Key Words: Supply Chain Finance, MSME Financing, Bill Discounting, Bank Credit, Vendor Financing, TReDS

Rajesh Ramakrishnan (Corresponding Author)

National Institute of Bank Management

r.rajesh@nibmindia.org

Gargi Sanati

National Institute of Bank Management

gargi@nibmindia.org

Revolutionizing Supply Chain Finance for MSMEs: Is TReDS the Next Breakthrough?

1. Introduction

Trade Receivables Electronic Discounting System (TReDS), is an online platform that has been introduced in the Indian Financial system as a mechanism to enable the micro, small, and medium enterprises (MSMEs) in India to access working capital by discounting their trade receivables¹. Traditionally the MSMEs have been the backbone of the economy of the country with significant contributions to the manufacturing process and employment generation. At the same time, they have also continued facing capital and liquidity constraints. The Reserve Bank of India (RBI) had published a concept paper on “Micro, Small & Medium Enterprises (MSME) Factoring-Trade Receivables Exchange”² in March 2014 to delve into this issue. Subsequently based on the public comments received on the concept paper the RBI issued Guidelines for the TReDS. Under TReDS MSMEs can avail financial assistance based on invoices raised on large corporate buyers and without providing additional collateral security.

Historically the availability of finance has always been a constraint for the growth of the MSME sector in India. It is estimated that only 10% of the total receivables market is presently covered under the formal bill discounting mechanism in the financial system (RBI, 2014), while the rest is covered under conventional cash credit/overdraft³ arrangements with banks. This is because the bill discounting mechanism has its own challenges in terms of documentation requirements and operational procedures. Consequently, the MSMEs face challenges in converting the trade receivables into cash which directly impacts their liquidity and thereby their business. MSMEs find themselves vulnerable to larger corporations that often prefer to postpone their payments, allowing them to benefit from prolonged credit, which harms the interests of the MSMEs. Despite many policy initiatives, the issue of delayed payments experienced by MSMEs continues to persist, primarily because of the lack of appropriate institutional set up which helps with price discovery for MSME finance and is also independent of the corporate buyer's payment system. So, the need for an institutional infrastructure set up was required to build an efficient and cost-effective financing process to ensure sufficient liquidity for all stakeholders.

It is in this context, that the Trade Receivables Discounting System (TReDS), an initiative of the RBI aims to improve the gap between demand and supply for finance by

¹ Account receivables refers to the funds of the manufacturing concern invested in the business that is represented by goods sold on credit which are yet to be realised. It a prime component of the current assets of the company .

² (https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=3504)

³ Cash credit is a credit facility sanctioned to the customer on the basis of security (inventory) provided by the customer. Cash credit is unique to India , in most of the other countries it is referred to as overdraft. It is a perpetual credit with the loan amount remaining with the customer subject to interest payment and commensurate cash flow routing through the account. It is a costlier method of working capital finance.

MSMEs and provide a level playing field using price discovery and non-recourse mechanisms. TReDS is an electronic platform that facilitates the financing/discounting of trade receivables of MSMEs through multiple financiers i.e. banks, NBFCs, etc. It facilitates shifting the financing of MSMEs from the individual banks to the marketplace structure driven by the MSMEs. These receivables can be dues from corporates and other buyers, including Government and Public Sector Undertakings (PSUs). The factoring regulation act (2012) provided a regulatory framework for financing of receivables as well as payables and has emerged as an alternative method of provision of working capital finance. Using the factoring products TReDS has also gained significant volumes. In this context we explain first the operational framework of Supply Chain Finance (SCF) in terms of a) the product model in which the MSMEs depends on banks for their finances, b) the anchor-based model where MSMEs get the advantage of bill discounting depending on the creditworthiness of the large corporate and c) the market place model which is renowned for its price discovery mechanism with the usage of TReDS. Also, we represent a few facts to understand if TReDS is considered to be a success in terms of its usage.

2. Exploring the Operational Framework of SCF a Comprehensive Overview of TReDS

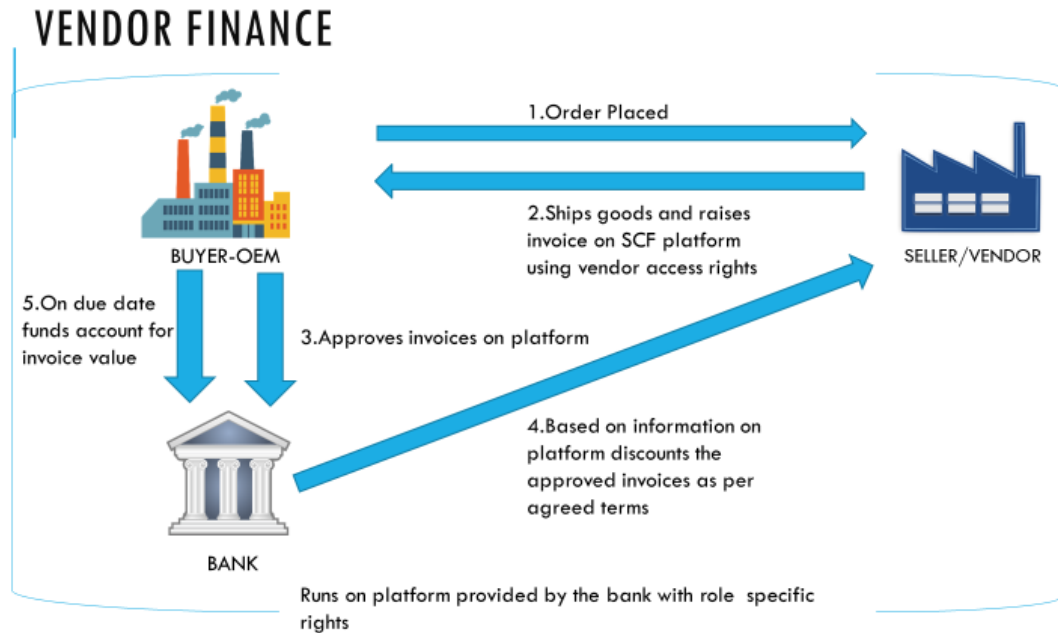
SCF refers to structures and products used for financing either the receivables or payables of an enterprise. In this study, we restrict our discussion to the financing of the receivables of an MSME vendor (the supplier) under SCF based on the payment confirmation by the buyers who are often large corporates. The large corporates ie, the Original Equipment Manufacturers (OEM) depend on the MSMEs for an uninterrupted supply of components for manufacturing the final product. On the other hand, the MSMEs depend on a timely and adequate supply of capital to fulfill their commitments. The supply of capital is usually by way of financing of the receivables by the MSMEs bank. The bank, in turn, has the responsibility of ensuring the authenticity of the underlying transaction in addition to credit appraisal and monitoring of the end use. In this backdrop of cyclical dependency in supply chain finance, we delve into three primary modes of delivery of SCF in the banking sector: a) the product model involving the MSME and the financiers (banks), b) the program model or anchor-based model where the financing is dependent on the creditworthiness of the OEM, and c) the marketplace model which provides the MSMEs a market where the financiers can bid on the receivables as per their risk appetite with the associated advantage of price discovery.

The product model requires an MSME Vendor to submit the invoices accepted by the OEM (say Tata Motors) to its financier (bank). The bank discounts the bill upfront as per the limits sanctioned to the MSME vendor and credits the proceeds to the MSME's account. On the due date, the bill is liquidated by receipt of proceeds from the OEM. This model primarily uses traditional trade finance products, like bill discounting, bill negotiation, export finance, etc.

On the other hand, the program model is built around the OEM (for example, a large corporate like Tata Motors) which is designated as the anchor of the program. Here the OEM leverages its credit rating and invites the financiers or banks to finance all the MSMEs that are part of its supply chain. The banks set about completing the credit assessment and onboarding of the MSMEs into its system and sanctions receivables finance limits to the MSMEs. Here in addition to the collateral/security available from the MSMEs, there is a commitment on the part of the OEM to honor its payment commitment.

This flow of finance is popularly known as Vendor Finance. The workflow of the program model using the proprietary portals of the financiers is described below:

Flow Chart 1
Program Model -Anchor or OEM-led Model



Source: Compiled by the Authors

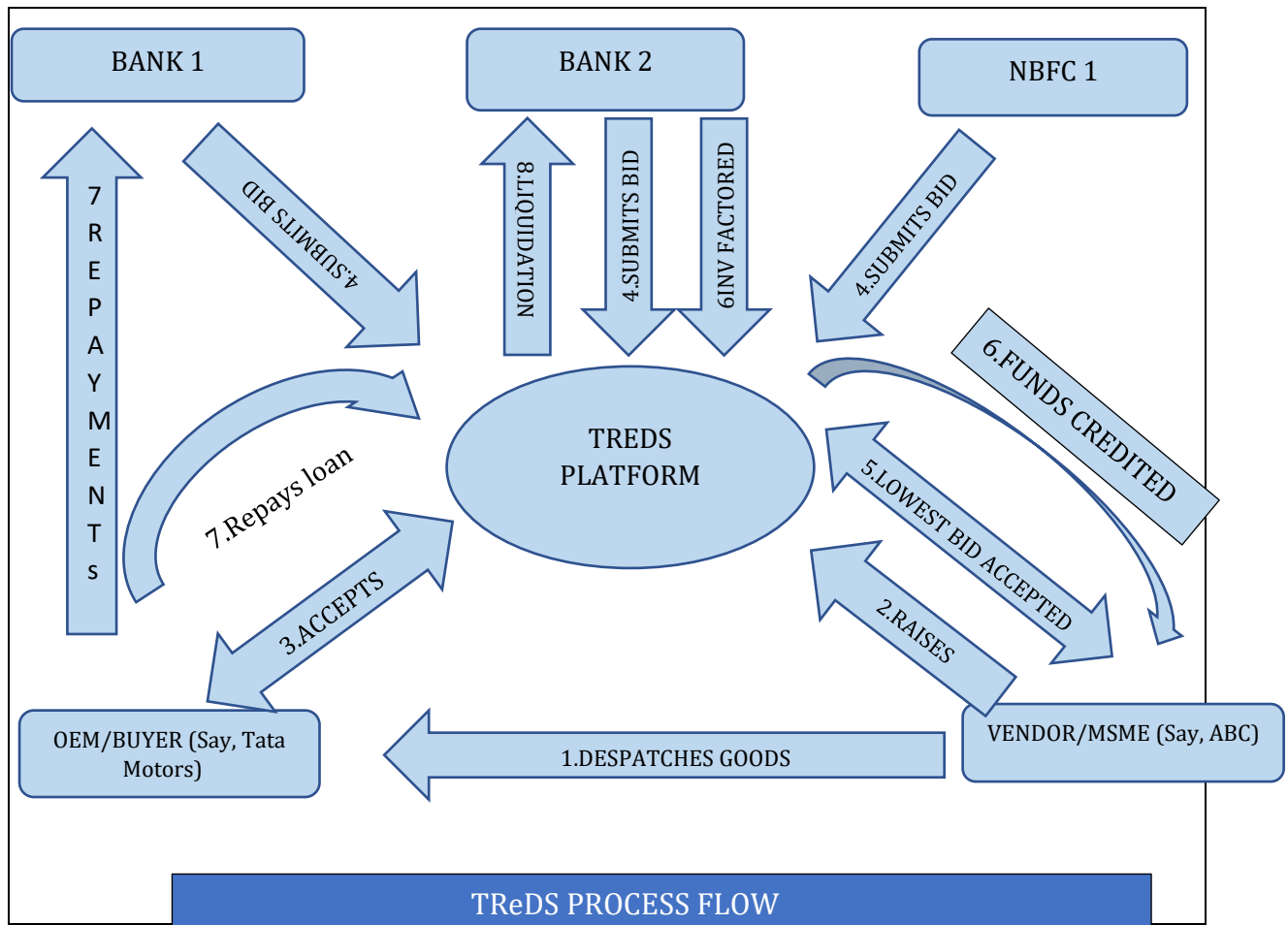
In Flow Chart 1, we can see three stakeholders i.e. the vendor/MSMEs, the buyer/anchor (OEM), and the financiers or banks who are registered on the portal⁴ under their respective roles. The vendor dispatches the goods to the OEM and raises an electronic invoice on the portal. The OEM checks the invoices with its own ERP and either rejects it or approves it for payment with a 90-day (for example) credit period. Once the OEM approves the invoice on the portal, the invoice becomes available to the financier for discounting. Based on its sanction terms the financier will block the limit of the vendor in its core banking system and credit the proceeds net of margin, interest, and charges to the working capital account of the vendor. Thus, the vendor based on its cash flow requirement, can get its sales financed instead of depending on the OEM to pay on say the 90th day. On the 90th day, the OEM remits funds to the financier and thereby completing the transaction. In India large companies such as Tata Motors Ltd, Mahindra and Mahindra, Bajaj Auto etc partner with banks like HDFC, Kotak, SBI etc. under the program model.

The third model is known as the marketplace model in the industry. It has been operationalized through TReDS which is an online exchange set up to facilitate the discounting of bills and invoices through a bidding process. The buyers, sellers and financiers are the participants in the platform and factoring is the underlying trade product that is used for operationalizing the transaction. In this model, authorized

⁴ Portals refer to electronic proprietary platforms hosted on the Banks internet portals. The MSMEs and OEMs are given access rights as per their roles and the data flows to the bank for financing.

operators, for example, A.TREDS Limited, Mynd Solutions Private Limited, Receivables Exchange of India Limited, etc. host platforms under the TReDS program. These operators are responsible for the operational aspect of the platform and charge a fee for their services. These operators are additional stakeholders vis-à-vis the other two SCF models discussed above, ensuring the efficient functioning of the marketplace model by way of institutionalizing the process of bill discounting. The detailed structural flow is described below:

Flow Chart 2
Market Place Model: TReDS-led Model



Source: Compiled by the Authors

Flow Chart 2 reveals that under TReDS, the MSME vendors are registered as sellers. The OEMs are registered as buyers and multiple banks and NBFCs are registered as financiers. Unlike the program model or OEM-led model, here multiple buyer-seller combinations are registered for their respective businesses. For example, if one MSME sells its products to Tata Motors as well as to Mahindra and Mahindra, he can raise invoices for different trade transactions under TReDS. The above chart explains the TReDS flow for the seller ABC. Once ABC dispatches goods, it raises invoices on the TReDS platform which flows to the mapped buyer (Say, Tata Motors) for acceptance. Once Tata Motors accepts the invoice, the said invoice becomes available on the platform for financing. Once the accepted invoice is presented on the platform the financiers (Bank 1,

Bank 2, and NBFCs) who are already registered start bidding by quoting the best rate that they can offer for financing the invoice. The bids are visible only to the ABC (the MSME in Flow Chart (2) who has the freedom to choose the best bid. Once ABC chooses the bid, the operator takes the onus of ensuring fund transfer from the financier (Say, Bank 2) to ABC and repayment on the due date from Tata Motors to Bank 2. The entire structure is without recourse to the ABC which means if there is non-payment from Tata Motors to Bank 2, ABC is not asked to pay back to Bank 2. This model provides a price discovery mechanism and frees the MSMEs from the shackles of traditional banking arrangements while addressing the risk and credit aspects of the structure. RBI has further permitted insurance companies as the 'fourth participant' to enable the other participants to insure against default risks, thereby further strengthening the structure⁵.

3. TReDS for MSME – Is It a Success?

The objective of establishing an institutional infrastructure like TReDS has facilitated the price discovery mechanism for trade receivables through an efficient and cost-effective factoring and reverse factoring process as the financiers are the ones who bid for the bills raised by the MSMEs represented by the Factoring Units (FUs). We examine the effectiveness of the usage of TReDS through recent trends of the buyers (Corporates), sellers (MSMEs), and financiers (Banks and NBFCs). It helps us to understand the ease of access to adequate funds by MSMEs, especially concerning their limited ability to convert their trade receivables into liquid funds. However, it may be noted that the volume handled by the platforms under TReDS has taken some time to gather momentum due to various reasons related to technology availability, unwillingness to change existing arrangements, etc. To improve the participation of buyers the Ministry of MSME vide notification S.O no. 5621(E) dated 2.11.2018 instructed Central Public Sector Enterprises (CPSEs) and all companies with the turnover of Rs. 500 crore or more to get themselves onboard the TReDS platform which has resulted in increased participation (Figure 1) While the MSME Sellers are increased from 30,000 approximately to above 50,000 between March 2022 to June 2024, the number of buyers are still meaningfully low. Also, considering the total number of MSMEs which is more than 1.75 crores we can surely that the success of using TReDS is still out of the reach of the significant number of MSMEs. While the response from the large corporate whose creditworthiness helps the financiers to discount the bill or bid for the bill of the MSMEs, is extremely low.

[Figure 1]

Factoring Regulation Act (Amendment) was passed on 09th August 2021, thereby, permitting Non-Banking Finance Companies (NBFCs) also to undertake factoring business and participate on the TReDS platform for discounting the invoices of MSMEs⁶. Figure 2 shows that incorporation of NBFCs have helped improving the number of

⁵ <https://timesofindia.indiatimes.com/rbi-expands-scope-of-treds-includes-insurers-as-participants/articleshow/100828329.cms>

⁶ <https://sansad.in/getFile/loksabhaquestions/annex/1711/AU4206.pdf?source=pqals>

financiers in the platform. However, considering the requirement of the MSMEs there is still scope for improvement.

[Figure 2]

The demand for bill financing via the TReDS platform among MSMEs shows a noticeable upward trend from August 2022 to May 2024, as illustrated in Figure 3. However, it is important to note that the actual number of bills raised through the TReDS platform remains relatively low. This is particularly significant considering that the total number of MSMEs in India exceeds 1.70 crore. So, it may be noted that with an extensive awareness program, the bill financing for MSME may take a sharp rise. Interestingly, Figure 4 reveals that for majorly more than 80-85% of the total bills raised by MSMEs through TReDS platform are financed. At the same time the more than 90% of invoice values raised through TReDS platform are financed. Overall, we can say that the monthly data available since 2022 shows a steady usage in the number of buyers and sellers and financiers.

[Figure 3]

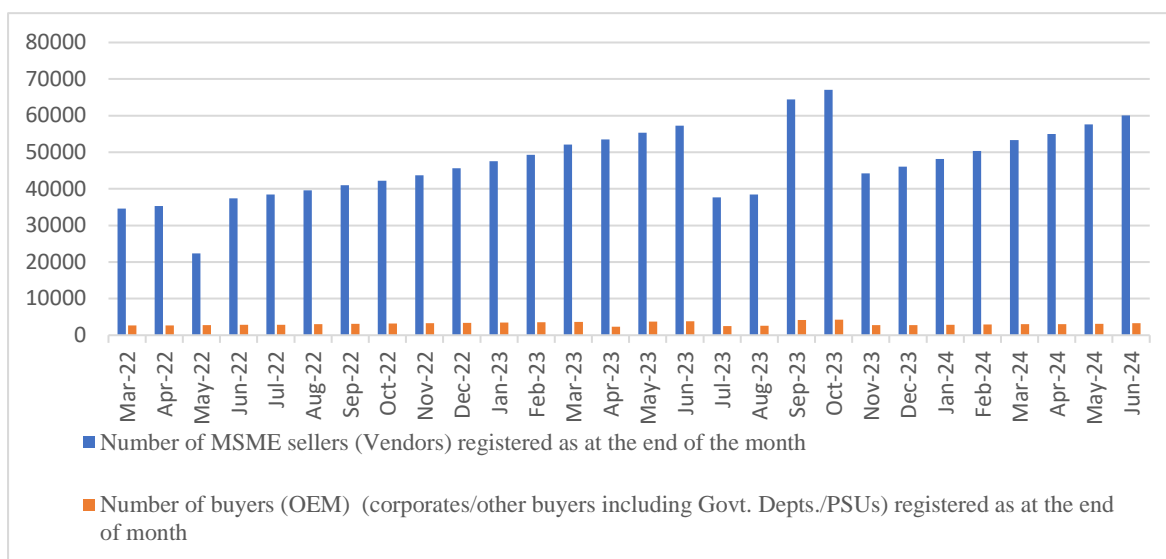
[Figure 4]

We conclude that the TReDS has strengthened the flow and access of supply chain finance as well as provides a level playing field by allowing a market-driven price discovery mechanism. Our analysis reveals that on average 83% in number and 91.4% of the total amount of bills raised on TReDS platforms are financed. However, this may represent just a mere percentage of the total requirements of the MSME sector considering that there are close to 1.75 crores MSMEs registered on the Udayam Registration Platform as of 18.07.2023. Further, the credit outstanding of the MSMEs with Scheduled Commercial Banks as on 31.03.2023 was Rs. 2260135.28 crores.⁷ Thus there is significant scope for bringing about cost and operational efficiency in the area of MSME finance. Especially when commercial banks otherwise may charge very high interest rates for MSME bill finance, TReDS is a platform that allows price discovery mechanism in a competitive market condition.

We conclude that more awareness about the TReDS may enhance the ease of access to finance. This has been given further impetus in the budget of 2025 wherein the reduction of the turnover threshold of buyers for mandatory onboarding on the TReDS platform from Rs. 500 crores to Rs.250 crores. We expect the participation of the buyer-seller-financer to increase slowly but steadily which will accelerate the path toward ease of access of funds for the MSMEs.

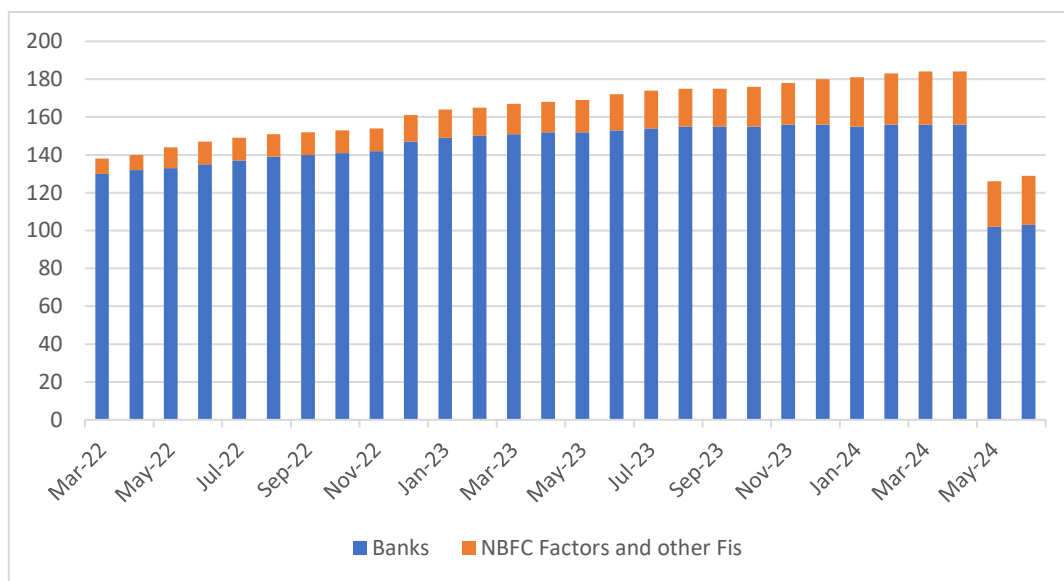
⁷ <https://sansad.in/getFile/annex/260/AU443.pdf?source=pqars>

Figure 1
TReDS – Number of MSMEs and OEMs Utilizing the Market based Platform



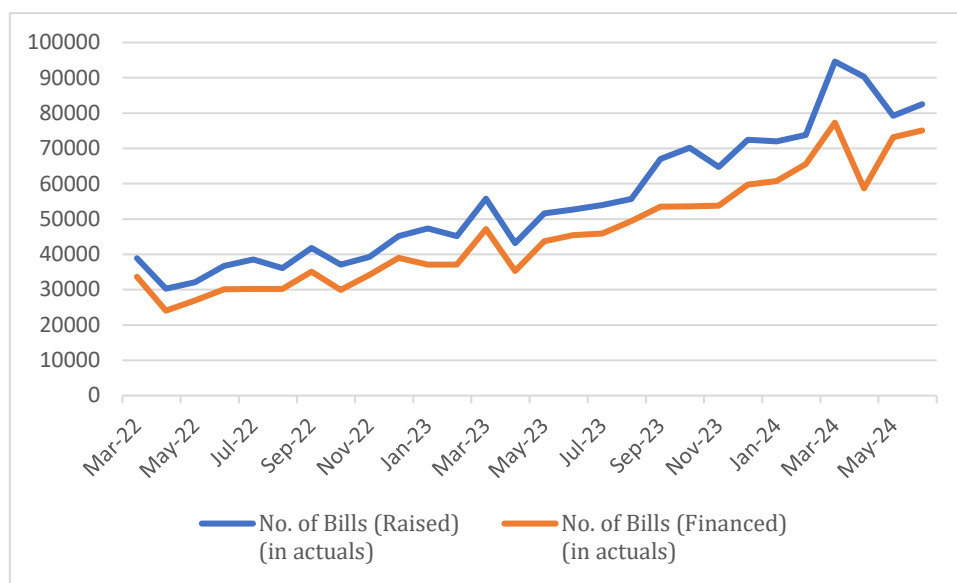
Source: Authors' Compilation using RBI Database.

Figure 2
Financiers in TReDS: Banks and NBFCs



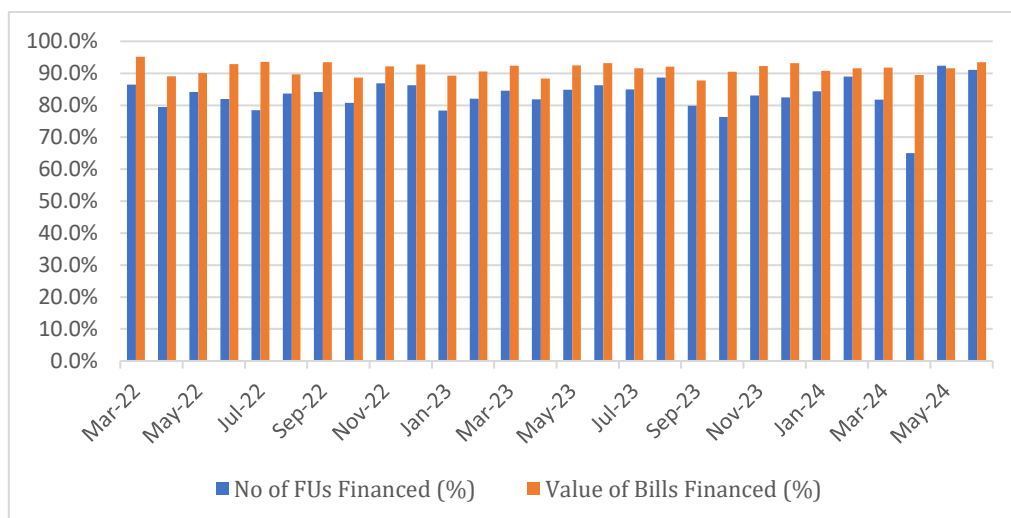
Source: Authors' Compilation using RBI Database

Figure 3
Demand and Supply of Bill Finance for MSMEs through TReDS



Source: Source: Authors' Compilation using RBI Database.

Figure 4
Financing of Factoring Units (FUs) Or Bills through TReDS



Source: Authors' Compilation using RBI Database.